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OIL FOR DEVELOPMENT 2005–2024

Oil for Development summary report



Oil for Development 2005–2024

Norad

The Norwegian Agency for Development Cooperation

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Cover photo: Drilling rig at the banks of Lake Albert in Uganda. | Photo: Trond Simensen, Norad
→ Ofu workshop environment component, Uganda. | Photo: Johnny Auestad, The Norwegian Environment Agency





List of abbreviations

API	American Petroleum Institute
CSO	Civil Society Organisation
DAC	Development Assistance Committee
EACOP	East African Crude Oil Pipeline
EGPS	Extractives Global Programmatic Support
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
ESIA	Environmental and Social Impact Assessment
GIS	Geographic Information System
GNPC	Ghana National Petroleum Corporation
HSE	Health, Safety and Environment
IAIA	International Association for Impact Assessment
IMF	International Monetary Fund
INP	National Petroleum Institute, Mozambique
ISO	International Organisation for Standardisation
LNG	Liquefied Natural Gas
MNRW	IMF, Managing Natural Resource Wealth
NCEA	Netherlands Commission for Environmental Assessment
NEMA	National Environment Management Authority, Uganda
NOK	Norwegian Krone
NERSA	National Energy Regulator of South Africa
OECD	Organisation for Economic Co-operation and Development
OfD	Oil for Development
PAU	Petroleum Authority of Uganda
PC	Petroleum Commission, Ghana
PFM	Public Financial Management
PSA	Production Sharing Agreement
SEA	Strategic Environmental Assessment
SOP	Standard Operating Procedure
TADAT	Tax Administration Diagnostic Assessment Tool
UBOS	Uganda Bureau of Statistics
UNEP	United Nations Environment Programme
UNOC	Uganda National Oil Company
WWF	World Wildlife Fund for Nature





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Executive summary

Oil for Development (OfD) was a flagship of Norwegian development cooperation from 2005 to 2024. The programme aimed to help partner countries manage petroleum resources in ways that promote sustainable economic growth, welfare and environmental protection.

Over 20 years, Norway's OfD programme supported about 35 countries with institutional cooperation. The cumulative funding was around NOK 3.5 billion. OfD was a governance programme targeting public institutions, focusing on four interconnected areas: resource management, revenue management, environmental management and safety (HSE and emergency preparedness), with transparency and accountability integrated throughout.

The assessments presented in this report draw on extensive documentation of the programme's performance and results over many years, including programme guidelines, annual reports, reviews, evaluations and final reports from successive phases of country programmes, as well as the observations and experiences of the Norwegian advisers engaged in OfD. The report aims to sum up results and experiences of OfD, with a particular focus on capturing and sharing lessons learned with other Knowledge Bank development programmes within Norad.

The core modality of OfD was long-term, peer-to-peer institutional cooperation. Norwegian public institutions worked alongside partner institutions on concrete tasks, including drafting and applying laws and regulations, organising licensing and supervision, building data and statistical systems, designing fiscal frameworks and budget processes, conducting environmental assessments and permitting, and strengthening HSE regulation and emergency preparedness. The programme was demand-driven and selective:

cooperation required a formal request, relevant petroleum potential and clear partner commitment, along with governance and capacity needs.

OfD's design was guided by a simple theory of change with three interdependent outcome areas: sound legal and regulatory frameworks; capable public institutions that perform to clear standards; and transparency and accountability that allow sector information, decisions and performance to be scrutinised. These outcomes were expected to contribute to more efficient and transparent petroleum development, better environmental protection, more stable and integrity-based public finances, and more inclusive decision-making. Poverty reduction was the overarching objective, while recognising that broader policies and systems determine whether petroleum revenues translate into welfare gains and whether countries avoid the so-called "resource curse".

On the Norwegian side, the programme had a clear institutional architecture. An interministerial Steering Committee set the strategy, approved major country engagements and provided quality assurance. Six Norwegian directorates, often supplemented by consultants, delivered technical assistance, while Norad's





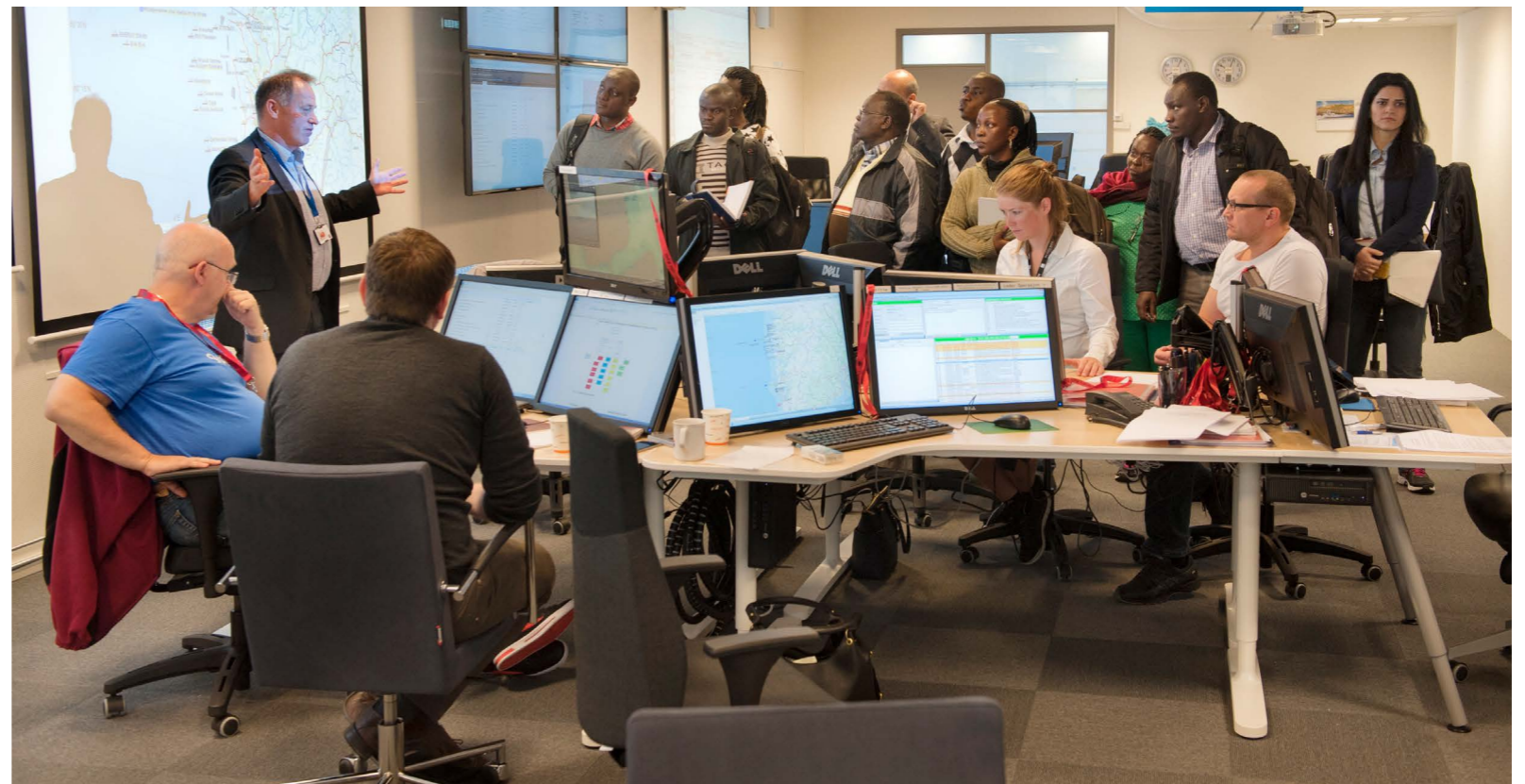
OfD Secretariate coordinated the programme. Bilateral cooperation was complemented by partnerships with multilateral actors such as the IMF, World Bank EGPS, UNEP, IAIA and EITI, and by support for civil society, media and parliaments to strengthen oversight. Anti-corruption, climate, environment, gender equality and inclusion were treated as cross-cutting issues, and integrity boundaries were clearly maintained.

The country portfolio evolved from a broad geographic footprint to a more concentrated set of comprehensive programmes, particularly in Africa. Long-term, whole-of-sector engagements in Uganda, Mozambique and Ghana illustrate the approach. Uganda built the full governance framework as a first-time producer: modern petroleum legislation and institutions; petroleum-related statistics; a fiscal rule and petroleum fund arrangements; stronger environmental legislation and oil spill preparedness; and improved petroleum taxation and audits. Mozambique strengthened petroleum regulation, metering, safety oversight and oil spill response. Ghana advanced a robust regulatory framework, established a petroleum data centre, developed a coastal environmental sensitivity atlas and improved macroeconomic modelling to assess petroleum's impact.

Independent evaluations and country reviews found OfD highly relevant and valued, with the strongest results where ownership was stable and practical tools and routines became part of institutional workflows. At the same time, outcomes were uneven. Limited

institutional receiver capacity, political resistance to transparency, instability and conflict, restricted civic space, overlapping mandates, high staff turnover and delays in approving core legal instruments often slowed or constrained reform. In countries without commercial discoveries or with stalled projects, incentives for comprehensive institutional development weakened, underscoring the need to calibrate ambition

↓ Oil for Development arranged an information visit for delegations from Uganda and Lebanon, where oil spill response equipment was demonstrated. A number of lectures on the oil sector were also held. | Photo: Ken Opprann, Norad





to sector realities. Lack of insight and experience in local contexts by Norwegian partners may also have been a limiting factor.

Over time, OfD refined its delivery and focus. The portfolio was consolidated to prioritise depth and quality: digital and hybrid modalities were adopted when travel was restricted due to Covid, and energy transition concerns such as climate risk, methane and gas flaring were integrated into sector governance work. Some key lessons for Norad's Knowledge Bank include the importance of:

- leading with political economy insight and realistic ambition
- integrating components and designing for implementation
- institutionalising competence through systems and procedures
- treating all components as core governance functions
- making transparency and accountability integral
- having data and decision-support systems in place
- coordinating bilateral and multilateral partnerships
- managing fiduciary risk and integrity proactively
- preserving portfolio flexibility
- planning exit and transition strategies from the outset

In sum, OfD demonstrated how long-term, hands-on institutional cooperation can strengthen public institutions to govern complex sectors in the public interest. Its combination of disciplined design, practical

delivery and accountability support provides a useful template and set of lessons for future Knowledge Bank programmes operating in demanding contexts and an evolving development landscape.

↓ Public information meeting with local community on the banks of Lake Albert in Uganda. | Photo: Isaac Ntujju, NEMA, Uganda





OfD key facts & numbers





20 years

35 countries

3.5 billion NOK

11 Norwegian government authorities

4 components

-  Resource
-  Revenue
-  Environment
-  Safety

3 sub-goals

-  Laws and regulations
-  Institutional capacity
-  Transparency & accountability

Key takeaways for the Oil for Development programme

- Sharing the Norwegian experience
- Public governance and administration
- Petroleum sector management
- Responsible and transparent
- Long-term institutional cooperation
- Demand-driven
- Country programmes
- Flagship programme





1. Introduction

← Street picture, Kampala, Uganda. | Photo: Norad





1. Introduction

The Oil for Development (OfD) programme was a flagship international development initiative that promoted responsible and sustainable management of petroleum resources in developing countries. Initiated by the Norwegian government in 2005 and terminated in 2024, the programme was grounded in Norway's decades of experience in the oil and gas sector. OfD's overarching goal was to reduce poverty and deliver economic, social and environmental benefits for partner countries through sound governance of petroleum resources.

This report provides a comprehensive review of OfD's approach, portfolio and partnerships, and synthesises experiences and results from 2005 to 2024. The assessments draw on extensive documentation of the programme's performance and results over many years. This includes programme guidelines, annual reports, reviews, evaluations and final reports from successive phases of the country programme, as well as the observations and experience of the Norwegian advisers engaged in OfD. Its purpose is to distil lessons learned to inform other Knowledge Bank programmes, with particular attention to effective governance, partnership models and the management of development programmes.

→ Senior adviser Ole Kristian Bjerkemo from the Norwegian Coastal Administration's emergency response division instructs in the cleaning of shoreline areas outside Dar es Salaam, Tanzania. | Photo: Ken Opprann, Norad





A key objective for OfD was to reduce the risk of the phenomenon known as the resource curse, or the paradox of plenty. This refers to the failure of many resource-rich countries to benefit from their abundance of natural resources, and instead experience corruption, conflict, weak economic growth and less democracy than countries with fewer natural resources.

Overcoming the resource curse typically requires a legal and regulatory framework, competent and accountable institutions and transparency in revenue management. All these governance areas were at the core of the OfD programme.

The OfD modality was long-term, peer-to-peer institutional cooperation. Norwegian public authorities worked with counterpart institutions to build capacity across four interconnected areas of petroleum sector governance shown on the right.

Support included policy and legal frameworks, practical tools and systems and the skills needed for implementation. Transparency and accountability were included throughout, with targeted engagement of civil society, parliaments and the media to strengthen accountability.

Four components



1. **Resource** management



2. **Revenue** management



3. **Environmental** management



4. **Safety** management, i.e. HSE and emergency preparedness





The programme was administered by Norad, in close cooperation with the Ministry of Foreign Affairs, and delivered through collaboration between several Norwegian ministries and subordinate agencies with mandates relevant to petroleum governance. Key ministries included:

- The Ministry of Energy
- The Ministry of Climate and Environment
- The Ministry of Finance

Participating agencies included:

- The Norwegian Offshore Directorate
- The Norwegian Ocean Industry Authority
- The Norwegian Coastal Administration
- The Norwegian Environment Agency
- Statistics Norway
- The Oil Taxation Office

Bilateral work was complemented by associated partnerships with organisations such as the International Monetary Fund (IMF), the United Nations Environment Programme (UNEP) and the International Association for Impact Assessment (IAIA), and by engaging with global platforms such as the World Bank Extractives Global Programmatic Support (EGPS) initiative and the Extractive Industries Transparency Initiative (EITI).

Over its two decades of implementation, OfD reached 35 partner countries, with an accumulated

programme funding of around NOK 3,5 billion and annual disbursements on a plateau of approximately NOK 250 million. These amounts do not include the programme administration costs by Norad and the Norwegian embassies. The annual disbursement distribution by country is summarised in Annex 1. A chart showing the relative component split of disbursements in the period 2015 to 2024 is also included in the annex.

While the programme's foundation remained consistent, its content evolved in response to global and local developments. In later years, work on environmental governance and the energy transition was strengthened, including climate risk assessment, methane emissions and gas flaring reduction, and delivery methods were adapted to make effective use of digital collaboration where appropriate.

In 2021, the Norwegian government decided to phase out the OfD programme, with a planned discontinuation by 2024. The termination was driven by a strategic shift in Norwegian development policy to accelerate the global transition to renewable energy and address climate change.

OfD was one of several Norwegian knowledge programmes that, from 2018, were organised within Norad's Knowledge Bank, the superstructure for technical assistance provided by Norwegian authorities and associated partners.



Following this introduction, [Chapter 2](#) presents the fundamentals of the OfD. [Chapter 3](#) describes the country programmes, illustrating their breadth, evolution over time and examples of results achieved. [Chapter 4](#) provides a more in-depth examination of results from the three largest OfD country programmes: Uganda, Mozambique and Ghana. [Chapter 5](#) discusses key programme challenges and constraints, while the [final chapter](#) summarises the lessons learned and offers insights that may serve as a reference for other development programmes within the Knowledge Bank.





The Knowledge Bank

In many countries where Norway provides development assistance, public administration is weak, and knowledge is needed as much as funding. In response, Norwegian public institutions contribute and share their experience where requested. The Knowledge Bank currently comprise the following programmes:

- Agriculture for development
- Digitalisation for development
- Energy for development
- Fish for development
- Gender equality for development
- Oceans for development
- Statistics and registry cooperation
- Tax for development

Norad's Knowledge Bank facilitates the exchange of experiences between Norwegian public institutions and offers customised training for knowledge cooperation.

→ Field exercise in oil spill response, Dar es Salaam Tanzania.
| Photo: Ken Opprann, Norad





2. Fundamentals of the OfD programme

← Lake Albert geological fault, Uganda. | Photo: Norad





2.1 Origin and rationale

OfD was launched in 2005 as a demand-driven programme to help partner countries manage petroleum resources responsibly. One of the initial objectives was to improve knowledge and competence, enabling relevant authorities to obtain a stronger and more equal position in negotiations with international oil companies.

Norwegian petroleum development assistance related to resource management had a relatively long history before the establishment of the OfD programme in 2005. Already in the late 1980s, Norwegian authorities established Petrad, a petroleum management training institution in Stavanger. The Norwegian Offshore Directorate and other agencies, operators, engineering companies, consultants, universities and research institutions contributed with petroleum expertise and experience. The background for establishing Petrad

was an increasing number of requests from developing countries seeking insight into how Norway managed its petroleum resources.

Petrad arranged its first workshop in October 1989 and later developed the popular 8-week programmes. In 2009, after 20 years of operations, Petrad had arranged

450 knowledge-sharing activities with altogether more than 14,000 participants from 103 countries. When the Norwegian government established OfD in 2005, Petrad became one of the programme's main contributors.

↓ Visit to the Norwegian Clean Seas Association for Operating Companies. | Photo: Ken Opprann, Norad





Hence, OfD drew on decades of earlier technical cooperation, primarily by the Norwegian Offshore Directorate, and broadened Norway's assistance to cover not only resource management but also revenues, environmental governance and safety. The programme's rationale was straightforward: petroleum can contribute to long-term welfare when governance is robust across the entire value chain, and when accountability mechanisms ensure that decisions and outcomes are transparent and contestable. Assistance was designed to share practical public-sector expertise built up in Norway, tailored to each country's context, needs and capacity.

An OfD programme guide was developed in 2013-2014 and subsequently updated. The guide covers essential aspects of the programme and explains key processes related to planning and implementing country programmes. The purpose of the programme guide was to ensure that OfD's efforts are planned, implemented and concluded in accordance with adopted principles for Norwegian development cooperation and standardised guidelines. This chapter 2 is primarily based on the OfD programme guide.



→ Photo: Norad





2.2 Approach and principles

At the core of OfD was long-term, peer-to-peer institutional cooperation within the mandates of the respective Norwegian and partner authorities. Work with counterpart agencies focused on key functions, for example:

- drafting and applying laws and regulations
- petroleum resource assessment and management
- licensing, supervision and permitting
- data and statistical systems
- public financial management
- environmental assessments, permitting and compliance monitoring
- health, safety and emergency preparedness

This was shoulder-to-shoulder practical cooperation, where Norwegian practitioners and their counterparts undertook real tasks together, held joint working sessions to develop legal and regulatory texts, ran realistic exercises and inspections, and built sustainable systems and routines. The practical work was supplemented by theory seminars.

Engagements were initiated following formal requests from authorities in partner countries and proceeded only where there was ownership

and commitment on the partner side. Scarcity of resources in Norwegian institutions, as well as the goal in Norwegian development policy to concentrate aid on fewer countries, meant that new requests for cooperation had to be assessed strictly. Demand for OfD partnership typically exceeded the available programme capacity on the Norwegian side. The programme criteria for selecting partnership countries were:

1. The cooperation had to be demand-driven.
2. The country had to be classified as an OECD DAC country.
3. There had to be significant petroleum production or resource potential in the country.
4. Norwegian experience and expertise should be relevant.
5. There had to be an identified need for capacity and competence building.
6. The country had to commit to implementing programme activities.

In addition, the applicant country's governance indicators and poverty challenges were assessed. The final decisions to initiate country programmes were addressed in the OfD Steering Committee and ultimately subject to political decisions by the Norwegian Ministry of Foreign Affairs.

The sector was treated holistically: resources, revenues, environment and safety were addressed as a coherent whole, recognising overlaps in law and regulation, data, supervision and coordination. A simple governance logic ran through the programme design: sound frameworks, capable institutions and meaningful transparency and accountability were the pathways through which responsible petroleum management aimed to contribute to poverty reduction, welfare gains and a reduced risk of the resource curse.





2.3 Theory of change

The theory of change linked what the programme did to how changes occur in complex governance systems. The immediate focus of support was on three interdependent outcome areas.

First, legal and regulatory frameworks were developed, updated and applied to ensure the sector was governed by clear, coherent and enforceable rules. Second, public institutions were strengthened with competence, tools and routines to fulfil their mandates effectively. Third, transparency and accountability were strengthened so that sector information, decisions and performance could be scrutinised by parliament, civil society, the media and the public.

Progress in these outcome areas was expected to lead to more efficient and transparent development of petroleum resources, better environmental protection and risk reduction, more stable and integrity-based public finances, and more inclusive decision-making. The theory of change acknowledged that OfD contributed to, but did not determine, wider development outcomes. The use and distribution of petroleum revenues were not part of the OfD programme. Assumptions – such as sustained political commitment, sufficient budgetary space, access to

data and workable coordination among agencies – were made explicit in programme documents and tested throughout implementation. Risks arising from politics, security, institutional turnover or market conditions were identified and mitigated, and cross-cutting priorities such as climate, anti-corruption and inclusion were built into outcomes and outputs. The theory of change was

treated as a living hypothesis: annual work planning, mid-term and near-end reviews were used to adjust activities, targets and assumptions as contexts evolved.

↓ Workshop at Statistics Norway offices with Ugandan partners. | Photo: John Åge Haugen, Statistics Norway





2.4 Programme components and sub-goals

Work was organised around four components.



1. The **resource** component supported the legal, regulatory and organisational frameworks for upstream and, where relevant, midstream petroleum activities, as well as resource assessment and classification, licensing, data management, development planning and operational oversight – including fiscal metering – and decommissioning. The resource component was the origin and backbone of the OfD programme.



2. The **revenue** component strengthened fiscal regime design and administration, macro-fiscal analysis, national statistical systems and management of petroleum funds and supported transparent reporting.



3. The **environmental** component helped authorities plan and regulate, with environmental considerations integrated at each stage – from baseline surveys and strategic assessments through permitting, compliance monitoring and enforcement, to preparedness and response against acute emissions.



4. The **safety** component focused on health, safety and environmental (HSE) regulation and supervision, risk management, inspections and auditing, incident learning and preparedness – including emergency preparedness – related to petroleum operations.





Many activities spanned components: legal drafting, contract and regulatory interpretation, data systems, and supervisory practices were cross-cutting by nature. Regional programme activities and South-South cooperation between authorities in different OfD countries were vital elements of the programme.

Petroleum exploration, development and operational activities in many developing countries are regulated by Production Sharing Agreements (PSAs). These are legal agreements negotiated between a host government and a foreign petroleum company. PSAs typically regulate investments, risks, cost recovery, profit sharing, taxation, arbitration and other terms relevant to petroleum field development. Although the Norwegian petroleum concessionary system is not based on PSAs, the resource component of the OfD programme included legal assistance with PSAs in countries with such a licensing system.

Poverty reduction was the overarching objective of the OfD programme, and all efforts through the programme were aimed at contributing to the economic, social and environmental sound management of petroleum resources. Three sub-goals were defined for the partner country's authorities:



Legislation and other framework conditions for petroleum management were established.

Sub-goal 1, in short "**laws and regulations**", means that the political, legal and administrative framework that clarifies goals, roles and responsibilities in the sector is in place.



The authorities manage petroleum resources according to their mandates.

Sub-goal 2, in short "**institutional capacity**", means that institutions have sufficient knowledge, capacity and competence to perform and implement their tasks in accordance with their mandate.

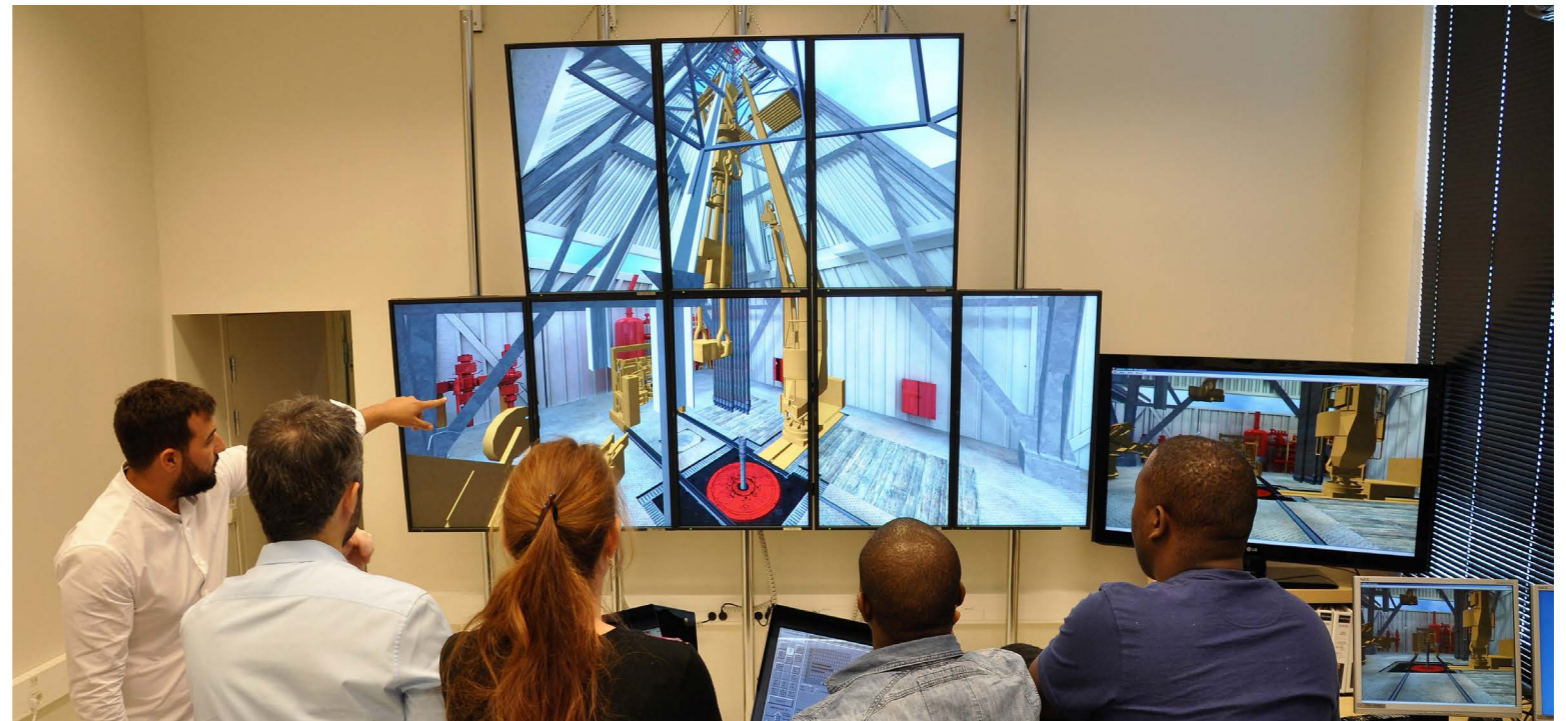




The authorities practise transparency in managing petroleum resources, and the public holds them accountable.

Sub-goal 3, in short “**transparency and accountability**”, means that the authorities, through publication of information, facilitate an informed public debate and that the population, through civil society actors, media and elected representatives, holds the authorities to account for sector management.

Sound petroleum management can be an important contribution to the poverty-reduction objective. There is solid evidence of a correlation between poverty reduction and the strengthening of institutional capacity and implementation ability, as well as increased political inclusion and



accountability. However, the OfD programme could not achieve the overarching objective of reducing poverty on its own. Such an objective also depends on many factors outside the OfD’s scope, including whether the country pursues a development-oriented policy over time and how revenues from the petroleum sector are used.

Through its respective components, the OfD programme assisted relevant authorities in partner countries in developing legislation and other framework

↑ Oil well drilling simulation with partners from Mozambique. | Photo: Gunlaug Leirvik, Norwegian Ocean Industry Authority

conditions, building competence and capacity within institutions, and practising transparency in the management of petroleum resources. To achieve this, the OfD programme assisted with tasks such as:





Examples of tasks within OfD components and sub-goals

Resource component

Laws & regulations	Institutional capacity	Transparency & accountability
Petroleum and exploration policy	Resource mapping and management	Publication of legislation
Institutional organisation	Licensing	Public consultations
Upstream petroleum legislation and PSAs	Data management	Information strategy
Guidelines and regulations	Planning for development	Facilitation and publication of sector information
	Development, operation and decommissioning	

Revenue component

Laws & regulations	Institutional capacity	Transparency & accountability
Fiscal framework	Tax economic analyses	Public consultations
Framework for petroleum fund	Petroleum tax administration	Dissemination of economic and petroleum-related statistics and macroeconomic analyses
National economic and petroleum statistics	Macroeconomic analyses and budget processes	The state budget includes petroleum revenues
Framework for government take	Petroleum fund management	Publication of supervision and audit reports
Institutional organisation	Production of economic and petroleum-related statistics	Publication of petroleum fund management





Examples of tasks within OfD components and sub-goals

Environment component

Laws & regulations	Institutional capacity	Transparency & accountability
Environmental aspects in relevant policy areas	Acquiring and publishing environmental data	Publication of legislation and other framework conditions
Legislation and underlying regulations	Strategic and environmental impact assessments	Publication of environmental data and permits
Standards and guidelines	Environmental licensing and monitoring	Public consultations
Institutional organisation	Environmental pollution preparedness and response	Information strategy
National oil spill contingency plans		

Safety component

Laws & regulations	Institutional capacity	Transparency & accountability
Safety considerations in policy, law and underlying petroleum regulations	Drilling, well and pipeline technology	Publication of regulations and standards
Institutional organisation	Process integrity and structural safety	Publication of risk analyses and supervision results
Safety regulations	Emergency preparedness	Facilitation of tripartite cooperation
Safety standards	HSE management and working environment	





2.5 Institutional architecture

On the Norwegian side, the programme was led by an inter-ministerial Steering Committee, a tailor-made governance structure for the broad OfD programme with many participating institutions. The purpose of this structure was to ensure coordination, quality assurance and resource utilisation across the participating ministries and directorates. The Steering Committee, which met quarterly, discussed and clarified strategic issues and priorities, approved long-term cooperation proposals and monitored progress. Four ministries provided strategic guidance and quality assurance within their mandates: Foreign Affairs, Energy, Climate and Environment, and Finance. Six directorates delivered most technical cooperation: the Norwegian Offshore Directorate, Norwegian Environment Agency, Norwegian Ocean Industry Authority, the Oil Taxation Office, Norwegian Coastal Administration and Statistics Norway. In certain disciplines, the available Norwegian institutional resources were supplemented by consultants. This was primarily the case for legal and financial expertise. However, the professional responsibility and follow-up of the consultants remained with the respective Norwegian institutions.

Norad's OfD Secretariat served as the programme secretariat, prepared discussion and decision notes, and coordinated the overall effort. Embassies managed agreements with partner authorities, anchored programmes in local political contexts, and facilitated donor coordination at the country level. The OfD programme often served as a door-opener for Norwegian embassies in their dialogue with authorities in partner countries. Some country programmes, typically in Asia and South America, were managed by Norad.

Each directorate appointed project managers to secure resources, plan and report on agreements, and keep coordination bodies informed. Country groups – comprising directorates, the embassy and

the OfD country coordinator – met regularly to ensure integrated planning and delivery.

The OfD programme involved a number of civil servants on the Norwegian side, from contributing agencies, ministries and Norad. During the plateau period in 2015-2020, with around 10 active country programmes, the annual man-years for programme administration at Norad and the embassies were approximately 15-20. The corresponding number of man-years for Norwegian agencies and consultants involved in implementing programme activities was approximately 30-40. However, the number of civil servants and consultants involved was higher due to part-time engagements.

The OfD programme was led by an inter-ministerial Steering Committee that ensured coordination, quality assurance and resource utilisation.





2.6 Programme management and governance

OfD followed a clear programme cycle to avoid common aid pitfalls. The process began with a formal request from the relevant government authorities in the applicant countries. Norad then prepared a position note that assessed the request against selection criteria and summarised the context, needs and risks. Provided the request was supported, a deeper analysis of the institutions, mandates, capacity, risks and political economy was carried out, involving the Norwegian implementers who would later deliver support. Planning was a co-creation process with partner institutions, resulting in a comprehensive programme document, an agreement structure, a results framework and a risk matrix. Agreements formed the backbone of management between the parties. Implementation centred on annual meetings to approve work plans and budgets, and on regular coordination to monitor progress and adjust activities. Closing phases included near-end or end reviews to inform the next iteration of cooperation.

Decision-making and quality assurance followed Norway's grant management rules. Decision documents accompanied programme proposals, and OfD programmes were quality-assured by the OfD Secretariat and the Steering Committee, with sector

ministries kept informed through a network group and participation in country groups. The goal was transparency and traceability in programme selection, design and management, and clarity on who was responsible for what.

↓ Ofu workshop environment component, Mozambique.
| Photo: Johnny Auestad, The Norwegian Environment Agency





2.7 Partnerships and the accountability ecosystem

Bilateral cooperation was complemented by strategic partnerships. OfD supported collaboration between partner institutions and multilateral actors, thereby expanding reach and thematic depth – particularly in fragile contexts. Notable partnerships included the IMF’s Managing Natural Resource Wealth (MNRW) thematic trust fund on macro-fiscal frameworks and its Tax Administration Diagnostic Assessment Tool (TADAT) trust fund on tax administration, the World Bank’s EGPS on value chain governance, and the International Association for Impact Assessment (IAIA) and UN Environment Programme (UNEP) on environmental governance. OfD also engaged with transparency platforms, such as the Extractive Industries Transparency Initiative (EITI), and with peer learning through the New Producers Group. Synergies were reinforced, for example, through regular dialogue between OfD institutions and multilateral actors and by sharing planned activities. UNEP engagement was an integral part of the OfD programme. In some country programmes, training and technical advice on environmental impact assessment (EIA) were coordinated with activities organised by the Netherlands Commission on Environmental Assessment (NCEA).

Approximately 50% of OfD disbursements were spent on partnerships and associated programmes.

For Norad, the hands-on OfD activities provided valuable insights into the challenges and modes of operation of institutions in partner countries. This experience provided a solid foundation for understanding and following up on multilateral programmes supported by Norway in the same sectors and countries.

Accountability was treated as a core factor in sector governance. Support was provided to civil society

organisations, the media and parliaments to strengthen oversight, data use and meaningful engagement in policy and regulatory processes. Alongside annual reviews, dialogue meetings with civil society were planned to share relevant transparency elements of the work plan, enabling oversight actors to track progress and propose improvements. Coordination with supreme audit institutions supported the audit side of governance, aiming to strengthen integrity across the sector.





2.8 Cross-cutting considerations and integrity boundaries

Anti-corruption, climate, human rights and gender equality were treated as cross-cutting issues and mainstreamed across OfD's design and delivery. Climate and environmental considerations included support for greenhouse gas emissions measurement and reporting, flaring and methane management, and scenario analysis for transition-aware planning. Human rights and gender equality were reinforced through legal frameworks, consultation practices and access to information, as well as through OfD workshops and seminars with a gender-balance objective.

Clear integrity boundaries were maintained. The programme did not promote Norwegian commercial interests or use resource persons from petroleum and supply companies. Embassies kept OfD roles distinct from trade promotion tasks, and confidential information was protected. Advisory inputs focused on public regulatory functions and did not extend to participation in commercial negotiations. Where state oil companies had regulatory responsibilities, advisory support was confined to those functions.

→ From a reporting trip in Nigeria. | Photo: Fredrik Naumann, Norad





2.9 From design to delivery: methods and sequencing

Experience indicated that technical depth and political economy realism should be paired, and that practical, problem-centred work should be emphasised. Methods included drafting sessions, licensing and permitting workflows, inspections and simulations, data pipelines and dashboards, joint field missions, and realistic preparedness and response exercises. Sequencing aligned ambition with feasibility, taking into account approval chains, institutional capacity, staff turnover and cross-agency coordination. Joint workshops with several institutions fostered cooperation and oversight, reducing silo-driven sub-optimisation.

Programmes included flexibility clauses to adjust activities and targets as assumptions changed. Documentation – laws, guidelines, standard operating procedures (SOPs), job aids and data standards – anchored institutional changes within systems rather than individuals, strengthening sustainability and resilience.

The [next chapter](#) shows how this design and delivery model was applied across a diverse country portfolio and how OfD evolved over time.



↑ Field inspection exercise, Lake Albert, Uganda. | Photo: Albertine Graben, Norad





3. Country programmes

← Murchison Falls National Park, Uganda. | Photo: Norad





The OfD programme assisted 35 countries over two decades. The portfolio was diverse, encompassing long-term, intensive partnerships (for example, Uganda, Mozambique, Ghana, Lebanon, Sudan) as well as shorter-term, more targeted engagements lasting a few years (for example, Afghanistan, Bangladesh, Cambodia, Ecuador and South Africa).

Progress and challenges related to the country programmes were regularly reported in line with the respective grant agreements and compiled into annual reports for the OfD programme. The annual reports provide a running account of how the programme evolved and performed over time, and document how OfD responded to changing contexts and demands.





Over OfD's 20 years of operations, the country portfolio shifted from a broad geographical footprint to a more concentrated set of engagements, with greater emphasis on comprehensive country programmes covering all four components. The early years were characterised by a wide spread of bilateral engagements across regions. The middle years saw deliberate consolidation, driven by the desire to strengthen results management, deepen institutional partnerships and prioritise countries where traction was greatest. Towards the end of the period, energy transition concerns – particularly climate risk, methane and gas flaring – were embedded in sector governance work, while maintaining the peer-to-peer cooperation that was the programme's hallmark.

Africa remained the principal focus, reflecting demand and the development case for petroleum governance support. The portfolio evolved dynamically: some country programmes were completed or terminated, while others were extended into new long-term agreements. Alongside bilateral programmes, resources were consistently allocated to multilateral platforms and civil society, recognising that sector change depends on both state capacity and an informed, engaged public.

The annual reports show a thoughtful balance between country-level depth, global reach through partnerships, and targeted transparency and accountability support.

Partnerships with international institutions were a vital complement to bilateral peer-to-peer cooperation. Cooperation with multilateral actors broadened reach and thematic depth, aligning macro-fiscal support, sector governance and environmental management with bilateral work. Transparency initiatives and peer networks provided standards, exchanges and collective learning that complemented institution-to-institution cooperation. These relationships were integral to the OfD programme.

OfD systematically used regional activities to promote South–South cooperation and peer learning among partner countries. Rather than working only bilaterally, OfD often brought several countries together to address shared challenges in petroleum governance. Examples

include numerous regional technical workshops, the 8-week Petrad programme in Stavanger, the African petroleum data management forum regularly organised by the Norwegian Offshore Directorate, and the regional workshops on oil spill response organised by the Norwegian Coastal Administration.

Below are examples of results across the three sub-goals. These examples are reproduced as reported in the OfD annual reports at the time of submission. Challenges and difficulties regarding the long-term results and effects are addressed in Chapter 5.

↓ [Examples of OfD annual reports.](#) | Photo: Fartein Rudjord, Norad





3.1 Establishing sound legal and regulatory frameworks

- **Timor-Leste**, with support from the OfD programme, established a Petroleum Fund with transparent revenue management under parliamentary oversight. Amendments to the Petroleum Fund Law, adopted in 2011, further strengthened its investment framework and helped make the Fund an important international reference point for petroleum revenue management.
- **Ghana** advanced a comprehensive regulatory architecture: The Parliament passed the General Petroleum Regulation, the Regulation for Health, Safety and Environment, and the Regulation on Data Management, following extensive legal assistance from OfD.
- **Ghana** also continued to refine environmental controls: a regulation on pollution control from petroleum exploration and exploitation was finalised and submitted to the Attorney General's Office.
- **Uganda** developed the necessary petroleum sector and environmental laws and regulations to facilitate the development of oil resources and the establishment of an oil revenue management policy, including a petroleum fund. These steps were

accompanied by reforms to the chart of accounts to improve the integration of sectoral revenue reporting.

- **Lebanon** completed key elements of its offshore legal framework. An English version of the Lebanese Offshore Petroleum Resources Law was finalised, petroleum activities regulations were drafted and revised, and a model Exploration and Production Agreement was prepared with OfD support.
- **Myanmar** advanced its core environmental regulation. The final draft of the EIA Guideline for Onshore and Offshore Oil and Gas Developments was submitted for approval, along with checklists and templates to streamline EIA reviews.
- **South Sudan** enacted a petroleum law and presented a draft revenue-management bill to parliament. OfD advisers supported the drafting of both bills, which included standards for public reporting, contract allocation and revenue management in line with international best practice.
- **Tanzania/Zanzibar** embedded a Strategic Environmental Assessment (SEA) at the policy level,

strengthening the legal basis for environmental governance. Possible environmental consequences of petroleum activities are mapped through an SEA process prior to awarding exploration and production licences.

These examples of legal and policy milestones collectively reduce governance risks, clarify mandates, and set enforceable standards across the sector's lifecycle – prerequisites for responsible governance of the petroleum sector.

↓ Examples of OfD partner reports. | Photo: Fartein Rudjord, Norad





3.2 Building institutional capacity to manage the sector

- **Mozambique** strengthened safety auditing and operational oversight through hands-on simulator training at Stavanger Offshore Technical College and workshops with the Norwegian Ocean Industry Authority. Officials practised well control, integrity and emergency roles, including offshore safety training modules.
- **Iraq** enhanced its capacity to tackle gas flaring through the “Flare Reduction in Iraq” project. OfD built technical and policy capacity within the Ministries of Oil and Environment to assess flare levels, analyse utilisation options and investment cases, and review international financing opportunities aligned with climate objectives.
- **Tanzania** developed a coastal Environmental Sensitivity Atlas, supported by the Norwegian Environment Agency and the National Environmental Management Council, to create decision-support tools and baseline data for spill response and environmental planning, drawing lessons from Uganda’s earlier atlas.
- **Uganda** improved environmental compliance management with an OfD-supported database to register incoming Environmental Impact Assessments (EIAs) and compliance monitoring reports, enhancing regulatory workflow and tracking.
- In countries with comprehensive cooperation extending beyond the petroleum authorities, e.g. **Uganda, Mozambique** and **Tanzania**, introductory petroleum value chain courses with simulation exercises were offered to key staff of the environmental authorities to enhance their understanding of the sector.
- **Ghana, Mozambique, Uganda** and **Kenya** strengthened their national statistics systems and offices through cooperation with Statistics Norway. This included improvements to the national accounts, oil and gas investment statistics, and other petroleum statistics that support macroeconomic analysis, revenue forecasting and transparent reporting.
- **Kenya** upgraded resource data governance: the Ministry launched an online map with detailed technical and financial information on awarded petroleum licences, and systematised data recording and analysis.
- **Angola** strengthened the Ministry of Mineral Resources and Petroleum’s capacity in core operational and technical safety disciplines. A three-step programme, combining training and supervisory activities, improved competence in drilling, well technology and process safety.
- **Myanmar** bolstered revenue administration. Inter-ministerial teams increased capacity to forecast petroleum revenues over five years and completed tax audits of oil and gas companies, with support from OfD and digital training from the World Bank.
- **Somalia** built early institutional capacity through comprehensive training and technical support. In 2020, officials participated in resource and data management webinars, a national training course on the environmental management of oil and gas exploration and production, and an e-learning programme covering petroleum economics, fiscal regimes, taxation and transparency.

These initiatives exemplify OfD’s peer-to-peer model, pairing practical training with systems development to translate laws into implementable routines and capabilities.





3.3 Enhancing transparency and accountability

- **Lebanon** took a milestone step towards transparency: the Lebanese Petroleum Administration published its finalised Exploration and Production Agreements on its website, improving public access to contractual information.
- **Myanmar** advanced public financial transparency: budget documents presented five-year petroleum revenue forecasts to parliament, disaggregated by project, type and source. The country also published its EITI report, which included detailed reconciliations of oil and gas payments, launched a beneficial ownership register for extractive companies and convened a cross-institutional dialogue on transparency and accountability in sector management.
- **Angola** demonstrated how civil-society support could translate into concrete accountability outcomes. Norwegian Church Aid partners combined social monitoring, media campaigns, public debate and advocacy, which contributed to the reopening of a primary school and a medical centre in 2017.
- **Kenya's** online licence map increased public visibility

of licensing terms and status, supporting external scrutiny and informed discourse.

- **Tanzania** institutionalised stakeholder participation through SEA guidelines that mandate CSO consultation, contributing to more inclusive decision-making.
- **Ghana, Mozambique, Uganda and Kenya** enhanced the dissemination of economic and petroleum-related statistics and macroeconomic analyses.

Transparency and accountability, anchored in accessible information, formal oversight channels and empowered civil society, are essential for mitigating the resource curse and ensuring public benefit from extractive revenues.

The results emphasise practical, task-centred delivery. They document how laws and regulations were drafted and applied, licensing and supervision routines were established, data and statistics systems were built, and permitting, compliance and preparedness capacities were strengthened. They also highlight a learning orientation, with annual meetings agreeing work plans and budgets, regular coordination to monitor progress, and reviews that feed directly into programme redesign. Over time, results reporting became more structured, with clearer articulation of outcomes and sub-goals aligned with the programme's theory of change.

When Covid-related travel restrictions in 2020 disrupted in-person delivery, work moved rapidly to digital collaboration, including e-learning, webinars, remote workshops and joint online drafting. The effectiveness of these modalities depended on pre-existing trust and institutional capacity, but also showed how hybrid approaches sustained momentum and, in some cases, widened participation. In parallel, energy-transition-related governance was sharpened: climate risk analysis, flaring and methane measurement and reduction, and Paris-aligned scenario thinking were integrated into sector work.





Political economy factors such as approval chains, staff turnover and civic space, were recognised as decisive for pace and sustainability. Fiduciary risks and governance failures were addressed through appropriate management actions where necessary. Volatility in global markets and domestic politics affected programme activity, underscoring the importance of flexible sequencing, realistic critical paths and documented assumptions and risks in planning and delivery.

Experience from 35 OfD country programmes over 20 years has shown that:

1. Concentration and long-term cooperation paid off: comprehensive, integrated programmes, anchored in strong institutional partnerships, were more likely to deliver durable change.
2. Accountability was a core strand, not a peripheral one: transparency requirements embedded in law and systems, together with support for civil society, media and parliaments, helped reforms stick.
3. Energy-transition-aware governance became mainstream: the sector's future resilience depends on integrating climate considerations into the frameworks, capacities and oversight that were built over the years.

In short, the country programmes were flexible and

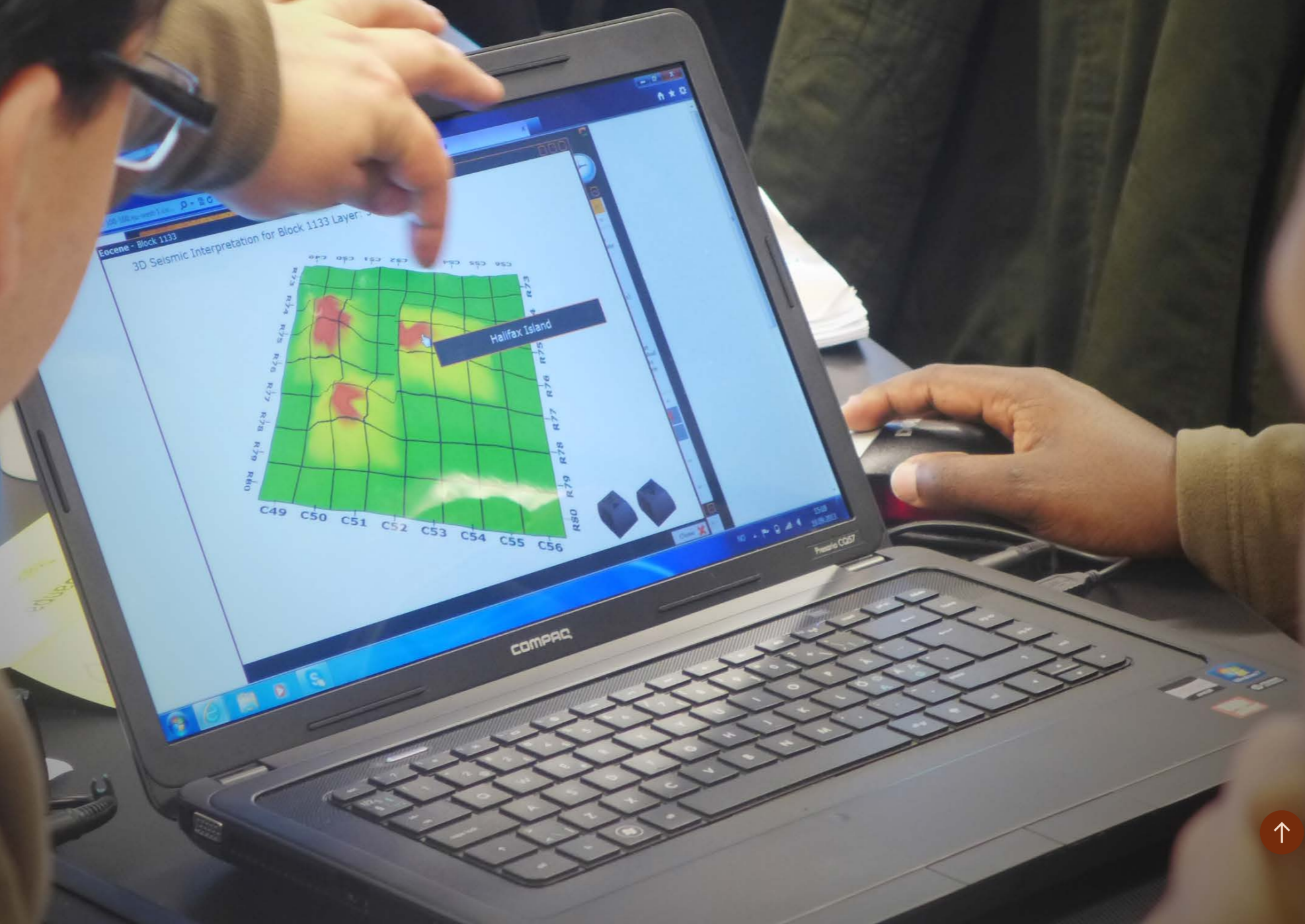
adapted to changing circumstances and requirements without losing sight of their core values: long-term, hands-on cooperation that strengthened public institutions to govern complex sectors in the public interest.

↓ Civil society workshop. | Photo: Norad

The [next chapter](#) zooms in on three large country programmes for a more detailed illustration of how this approach translated into concrete, country-specific results.



Interpreting seismic data at Petrad 8-week course. | Photo: Norad





4. Key country achievements

← Preparing to produce a film about the OfD programme in Ghana. | Photo: Marit Hverven, Norad





This chapter presents high-level accounts of the three largest OfD country programmes – Uganda, Mozambique and Ghana – followed by expanded examples of reported results for each. Together, they illustrate how OfD's whole-of-sector, peer-to-peer approach translated into concrete improvements in rules, institutions, data and operational practice, all central to responsible petroleum governance.

A summary of key country facts is provided in the table below. The petroleum sector has reached different levels of development in these countries.

Uganda is an emerging oil producer. Two oil fields, Tilenga and Kingfisher, are under development, with exports via the 1,443 km EACOP pipeline to the Tanga harbour in Tanzania. Production is expected to start in 2026-2027.

Mozambique is an emerging LNG (liquefied natural gas) exporter. Significant natural gas reserves have been

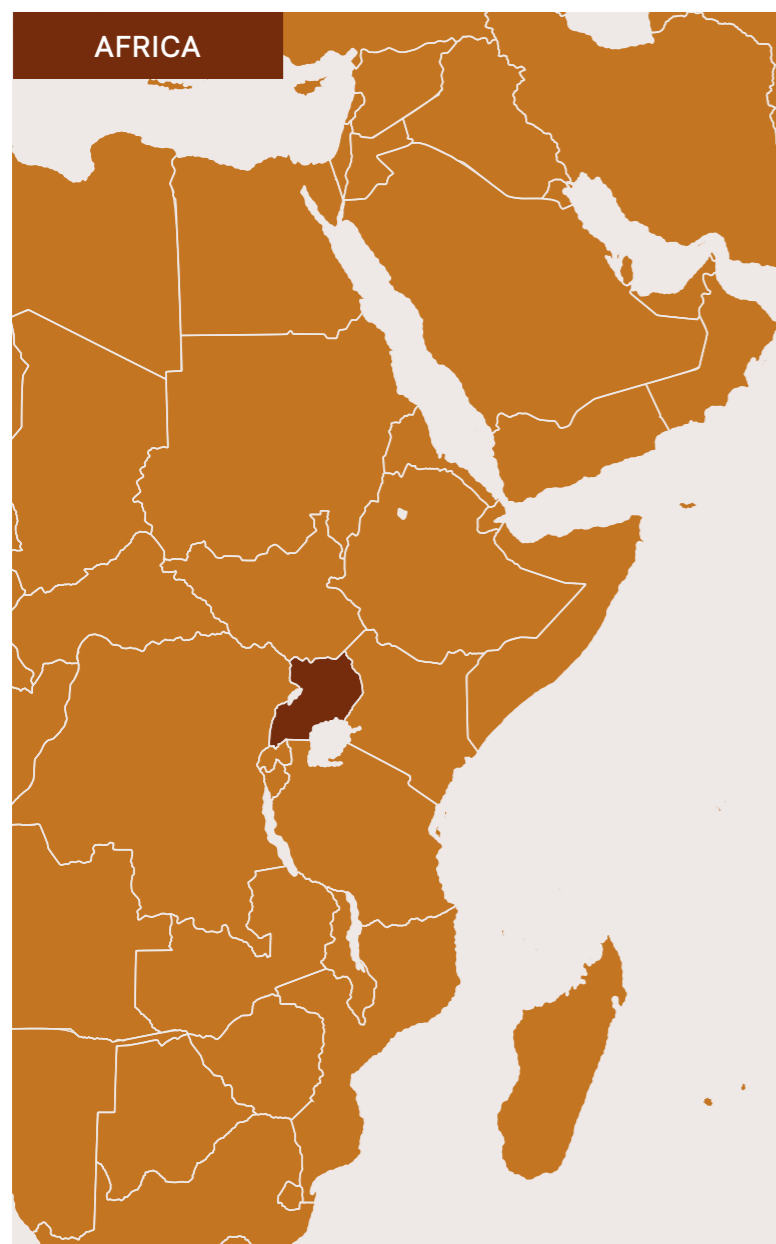
discovered off the coast of Mozambique. The country recently began LNG exports, and further development of gas resources is underway.

Ghana is an established producer with offshore operations. The country has several offshore fields producing oil and gas, with an average production of around 200,000 bbl/day. Further exploration and development are ongoing.

		Uganda	Mozambique	Ghana	Norway
Capital city		Kampala	Maputo	Accra	Oslo
Land area	000 km ²	241.6	799.4	285.5	385.2
Population	millions	50.0	34.6	34.5	5.6
Median age	years	16.4	17.4	21.6	41.0
GNI per capita	USD	3,190	1,520	7,720	106,830

Sources: World Bank Open Data and WorldData (for median age)





4.1 Uganda: Whole-of-sector cooperation for a first-time producer

Uganda's OfD cooperation was comprehensive and long-term, designed to help the first-time producer build a full public governance framework before production. The cooperation began in the 1990s and expanded into a full OfD programme in 2006. OfD has, for example, provided advice on drafting Uganda's two new petroleum laws and a finance law. Under the legislation, the Petroleum Authority of Uganda (PAU) and the state oil company, Uganda National Oil Company (UNOC), have been established.

From the outset, support was demand-driven and anchored in counterpart mandates. OfD worked shoulder to shoulder with authorities on practical tasks, including drafting and applying laws and regulations, organising licensing and supervision, building petroleum-related statistical and data systems, designing and administering fiscal regimes, conducting environmental assessments and issuing permits, and strengthening health, safety and emergency preparedness.

Over successive phases, the programme emphasised the "last mile" of implementation, translating legal

texts into practical procedures, routines and skills within institutions. Regulators were prepared for inspections and audits, and capacity in petroleum taxation, including cost recovery and transfer pricing, was strengthened. Petroleum statistics were integrated into national accounts and business registers, and transparency was operationalised through publication of sector information. As projects moved towards final investment decisions, this combination of clear rules, documented processes and trained teams provided a platform for credible, fact-based decision-making.

The delivery architecture mirrored OfD's holistic scope: resource management, revenue management, environment and safety were treated as interdependent functions, coordinated across ministries and agencies. Norwegian expertise was brought in through peer institutions with defined roles, while the embassy and the OfD Secretariat coordinated activities. As conditions evolved – including the shift to digital collaboration during the pandemic – work plans remained flexible, ensuring continuity of mentoring and verification.





Key programme facts

Implementing partner institutions: Ministry of Finance, Planning and Economic Development; Ministry of Energy and Mineral Development; Petroleum Authority of Uganda; National Environmental Management Authority (NEMA); Uganda National Oil Company; Uganda Revenue Authority; Uganda Bureau of Statistics.

Norwegian implementing institutions: Norwegian Offshore Directorate; Norwegian Environment Agency; Norwegian Ocean Industry Authority; Oil Taxation Office; Norwegian Coastal Administration; Statistics Norway.

Civil society organisations supported: Platforms and organisations focused on transparency and accountability in the extractive sector, complemented by parliamentary engagement and public information initiatives (including Publish What You Pay, Natural Resource Governance Institute, Oxfam, WWF and others), with support aligned with Uganda’s EITI implementation.

International organisations supported: IMF (natural resource wealth and macro-fiscal work); World Bank EGPS; UN Environment Programme; cooperation aligned with EITI.

The OfD completion report from the authorities in Uganda concludes that the programme has significantly contributed to the management of the country’s oil and gas sector and building a transparent, accountable and sustainable oil and gas sector. The achievements under OfD would not have been possible without extensive support and collaboration with Norwegian and Ugandan Government institutions.

The report further states that Uganda has built a strong foundation through this partnership and is exploring new opportunities for continued

collaboration in the future development of Uganda’s oil and gas industry. The Ugandan authorities also state that they “are confident that the knowledge and systems established through this programme will continue to shape Uganda’s path towards becoming a resource-ready nation, ensuring that the benefits of our natural resources are realised by all Ugandans”.

↓ The Norwegian Coastal Administration and OfU arranged an information visit for delegations from Uganda and Lebanon, where oil spill response equipment was demonstrated. | Photo: Ken Opprann, Norad





4.1.1 Uganda result example: Improved environmental legislation

The project arose from the expansion of Uganda’s petroleum sector, which necessitated a comprehensive review and update of environmental legislation, particularly for oil and gas exploration and production. It began with a broad evaluation of the existing legal framework, identifying gaps and the need for updates, and ultimately produced a new national environmental law and several regulations that were adopted in 2019 and 2020.

Some examples of new environmental legislation developed under this project include:

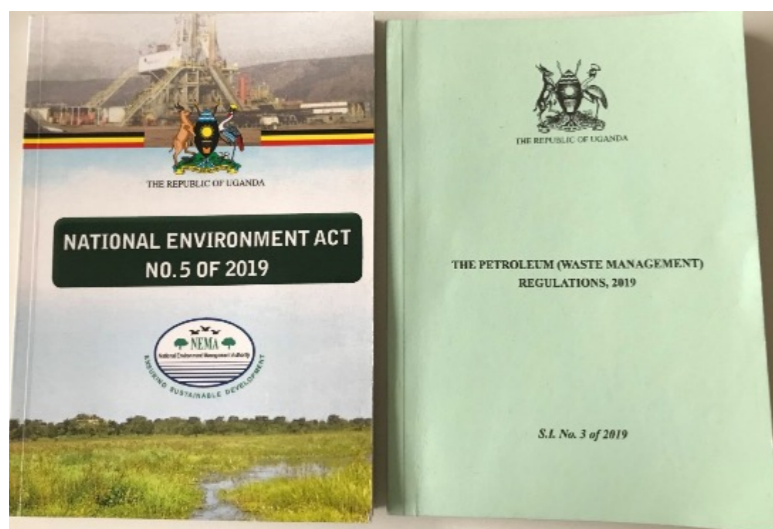
- National Environmental Law 2019
- Petroleum Waste Regulation 2019
- Environmental and Social Impact Assessment (ESIA) Regulation 2020
- Regulation on Discharges to Water and Soil 2020
- Oil Spill Response Regulations 2020

Competence development for environmental authorities and the implementation of the regulations have accompanied the legislative work, with a focus on environmental conditions in ESIA certificates for petroleum projects. This has notably strengthened the National Environment Management Authority’s (NEMA) capacity to monitor and regulate the oil sector.

The new legislation, together with increased competence among environmental authorities, primarily aims to improve regulation of the petroleum sector and reduce environmental harm, in line with international best practice. The new framework also benefits other industries and large development projects.

The project was extensive and time-consuming, relying on local leadership and engagement, as well as assistance from the Ugandan Ministry of Justice and Constitutional Affairs. Developing a new law and multiple regulations in parallel worked well, resulting in a consistent legal framework, though it required exceptional coordination. Successful implementation will require authorities to develop and maintain strong knowledge and ownership of the laws, as well as the expertise to enforce them.

← The team behind the new environmental legislation in Uganda. | Photo: Norwegian Environment Agency





4.1.2 Uganda result example: National oil spill contingency plan

A project to develop a national oil spill contingency plan in Uganda began in 2012. The work started with an Environmental Risk Assessment, an Oil Spill Contingency Analysis, and the clarification of initial emergency response responsibilities, followed by capacity building and, finally, drafting the plan. The completed national oil spill contingency plan was launched in March 2022, followed by further capacity building and exercises.

The project addressed the need for oil spill preparedness in Uganda’s developing petroleum sector, as operations could lead to acute spills into the Nile or large lakes, or onto land. Environmental risk and contingency analyses identified spill risks and the potential impact on vulnerable natural areas.

The plan was also linked to the development of national environmental laws and regulations, including those on oil spill response and waste management. Together with enhanced competence among national and local authorities, the plan aimed to improve preparedness to handle oil spills from petroleum activities and reduce environmental damage in accordance with international standards. Alongside other capacity-building under the OfD programme, this will enable authorities to oversee the oil industry effectively.

Capacity-building and implementation activities included training and exercises for key personnel from NEMA, the Petroleum Authority of Uganda (PAU) and local authorities, with courses provided by UNEP for East African countries and tailored hands-on oil spill response exercises for Ugandan staff. These efforts have significantly improved skills and readiness, strengthening Uganda’s oil spill preparedness and reducing the risk of environmental harm.

The new environmental law and oil spill regulations were developed in parallel, resulting in strong

coherence between legislation, regulations and the national oil spill contingency plan.

The main challenge ahead is implementing the plan through desktop exercises and full-scale drills in Uganda. Achieving this will require authorities to develop and maintain strong knowledge and ownership, and to regularly test what has been established.

↓ Oil spill response exercise in Uganda. | Photo: Ole Kristian Bjerkemo, Norwegian Coastal Administration





4.1.3 Uganda result example: Fiscal rule for integrating future oil revenues

Between 2018 and 2022, OfD supported the Ugandan Ministry of Finance in developing a fiscal rule to gradually integrate petroleum revenues into the economy, tailored to the country's macroeconomic structure and the anticipated scale and volatility of oil revenues. This work culminated in a Charter for Fiscal Responsibility, adopted in 2022, which formalised the rules into law.

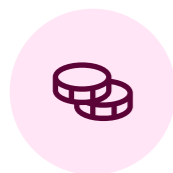
The rule guides the measured integration of petroleum income into the state budget over time, anchors medium-term fiscal targets and incorporates analyses of oil price uncertainty and climate-related risks.

The process combined international practice with context-specific design choices, involved broad stakeholder discussions and iterative drafting, and culminated in the government and Parliament adopting the law, with a public presentation in Kampala. Peer-to-peer collaboration was central: workshops and targeted technical sessions – conducted in person and, during the pandemic, via webinars – supported the Ministry of Finance in evaluating rule options, modelling implications and aligning the framework across key actors. Beyond the law itself, the Ministry strengthened internal

capacity in fiscal policy analysis and macroeconomic modelling, positioning Uganda to manage petroleum revenues prudently as production commences.

↓ Signing of charter for Fiscal Responsibility. | Photo: Ministry of Finance, Planning and Economic Development, Uganda





4.1.4 Uganda results example: National accounts and statistics

The primary aim of this part of the OfD programme in Uganda was to enable the Uganda Bureau of Statistics (UBOS) to produce and disseminate petroleum-related statistics. The project focused on four key statistical areas crucial for assessing the economic impact of activities in the oil and gas sector: national accounts, oil and gas investment statistics, foreign trade statistics and the business register.

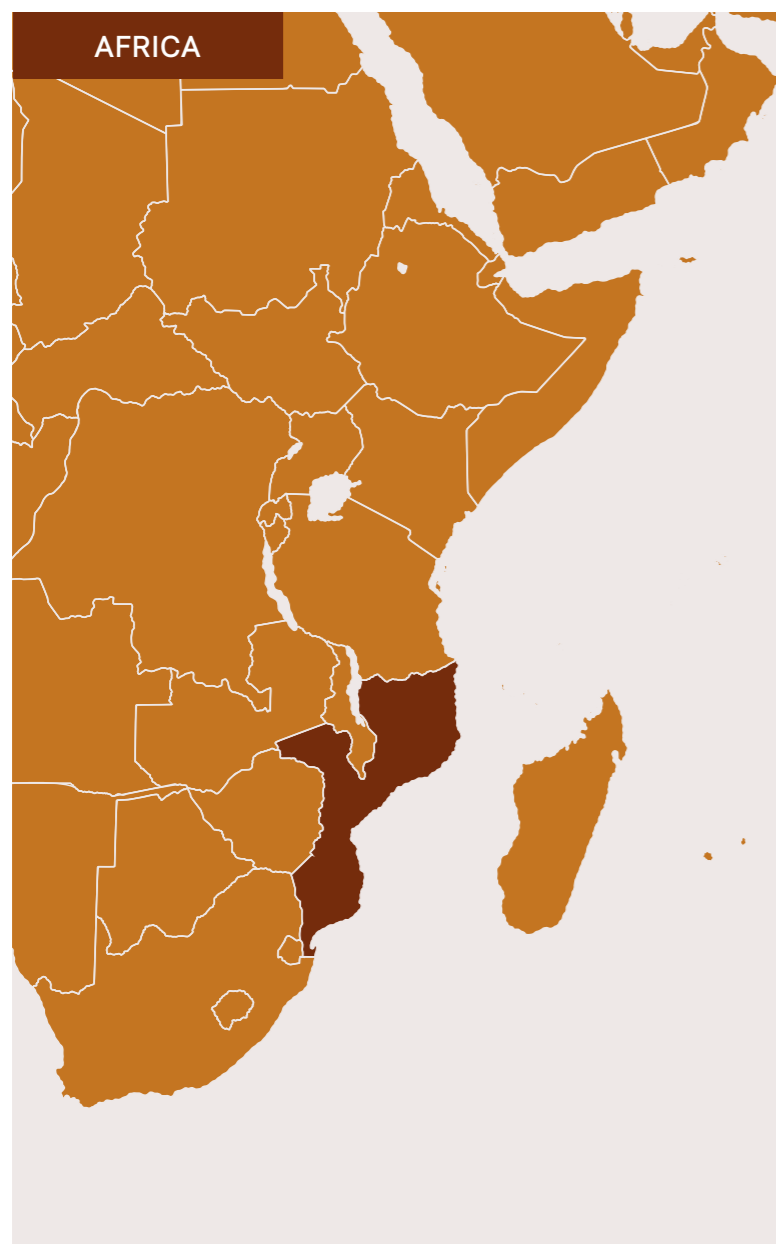
Oil and gas investment statistics measure both the amount already invested and planned future investment. Statistics Norway has assisted UBOS throughout the development of these statistics.

Investments in the oil sector require the import of goods and services, while most future oil and gas production will be exported. UBOS must capture these data flows through foreign trade statistics, which also feed into the national accounts and the balance of payments.

A key achievement was the inclusion of oil and gas investments in the national accounts. The OfD programme has contributed to collecting investment statistics from the oil and gas sectors and to updating the national accounts system to include the oil sector.

→ Statistics Norway working shoulder-to-shoulder on national accounts and statistics with partner from UBOS in Uganda. | Photo: John Åge Haugen, Statistics Norway





4.2 Mozambique: Building the regulatory backbone and supervisory practice

Mozambique's OfD programme focused on establishing and operationalising a modern regulatory regime for the natural gas sector as the country transitioned from small fields to very large offshore discoveries. Cooperation centred on the upstream legal framework, transparent licensing and contract standards, clear institutional roles, and strengthening the regulator's practical capacity for day-to-day supervision, safety and environmental oversight – including acute spill preparedness along a sensitive coastline.

OfD prepared counterparts to transition from traditional production-sharing agreements (PSAs) to more predictable, rules-based concession contracts and modern legislation. Legal and policy work was paired with tools and templates that make regulation executable: model contracts that standardise key terms and limit discretionary bargaining, step-by-step licensing procedures, documented workflows for permitting, inspections and audits, and guidance on environmental and

safety compliance. Data and information systems were treated as core infrastructure, not add-ons, enabling regulators to make informed decisions and communicate them transparently.

The programme also strengthened operational competence. Safety authorities and inspectors received training in drilling and well operations, pipeline integrity management and auditing of onshore and offshore facilities. Environmental authorities advanced EIA practice and permitting, while coastal agencies worked on spill preparedness and contingency planning. Within the revenue component, petroleum-related statistics and management of petroleum revenues were improved. Across these workstreams, OfD emphasised coordination: clarifying mandates among the ministry, regulator, national oil company, fiscal authorities and environmental agencies, so that the chain from legal texts to supervision and enforcement functioned coherently.





Key programme facts

Implementing partner institutions: Ministry of Mineral Resources and Energy; Instituto Nacional de Petróleo (INP); environmental authorities responsible for EIA and coastal preparedness, including the Ministry of Land, Environment and Rural Development (MITADER) and the Instituto Nacional da Marinha (INAMAR); tax and audit entities for petroleum revenues.

Norwegian implementing institutions: Norwegian Offshore Directorate; Norwegian Ocean Industry Authority; Norwegian Environment Agency; Norwegian Coastal Administration; Oil Taxation Office; Statistics Norway.

Civil society organisations supported: National and international actors promoting transparency and environmental accountability in the extractive sector, complemented by media and parliamentary engagement.

International organisations supported: World Bank EGPS; IMF (natural resource management and fiscal frameworks); UN Environment Programme; cooperation aligned with EITI.



↑ Field exercise in oil spill response, Mozambique. | Photo: Norwegian Coastal Administration





4.2.1 Mozambique result example: Strengthened petroleum management

Between 2010 and 2013, large natural gas deposits were discovered in the Rovuma basin off the coast of Mozambique's northernmost province, Cabo Delgado.

↓ Field exercise with INP in Mozambique. | Photo: Norad

The discoveries sparked interest among major international oil companies. The Italian company ENI operates a floating LNG facility at Coral South, which began production in 2022. There is also an onshore LNG project under development, operated by the French company TotalEnergies.

The discovery of such substantial natural gas resources, and the resulting investments and revenues, increased the importance of establishing appropriate legislation and authorities with the necessary competence.

Over several years, the OfD programme has provided legal advice and technical assistance to the INP, Mozambique's petroleum authority. This has contributed to changes in laws and regulations governing petroleum activities and to the introduction of new standard contracts for exploration and production, in line with international standards.

The contract templates limit the negotiable terms to a minimum and reduce the need for negotiations with international oil companies when awarding new exploration licences. This helps safeguard Mozambique's interests.

A thorough understanding of natural resources is essential to effective national resource management. Years of systematic cooperation under the OfD programme and extensive data collection by INP have resulted in a reference database covering oil companies, concession contracts, well data, seismic surveys, prospects, discoveries, fields and resource estimates. The database is linked to GIS software, enabling INP to produce its own maps of petroleum activity.

The database provides an overview of national oil and gas resources. It will facilitate the development of national resource accounts and efficient petroleum administration in Mozambique. Knowledge of the database is also important for assembling a suitable portfolio for future licensing rounds.





4.2.2 Mozambique result example: Petroleum metering

Since 2013, cooperation between the Norwegian Offshore Directorate (NOD) and the Instituto Nacional de Petróleo (INP) has focused on capacity building

in measurement technology, energy balances and regulatory oversight. Through training, field audits and the development of an energy balance model for the natural gas pipeline export system to South Africa, INP has gradually built methodological and technical competence to conduct its own inspections and assess measurement data with greater precision. This

has led to a more consistent resource management and volume calculations across national borders.

A key area has been a multi-year training programme in measurement technology. In 2016 and 2017, workshops were held in which engineers from INP and representatives from NERSA in South Africa received training in gas measurement principles, including the use of orifice, ultrasonic and turbine meters. The training also covered gas chromatography (GC), sampling, laboratory routines and traceability requirements. The workshops were based on internationally recognised principles for measurement terminology and uncertainty evaluation, providing a common reference across institutions and borders. Relevant standards from ISO and API were also incorporated into the practical work.

The collaboration included follow-up on measurement systems for the pipeline export to South Africa, important for regional production and energy supply. From 2013, INP participated in several audits covering methodology, technical assessments and field-based training. This has given INP greater experience in identifying deviations, assessing causes and following up on the operator's measures.

← Workshop on fiscal metering in Mozambique. | Photo: Steinar Vervik, Norwegian Offshore Directorate





In 2016, an ISO inspection methodology was introduced, emphasising planning, document review, risk assessment, field verification and the systematic treatment of deviations. The methodology has gradually been integrated into INP's routines and used in audits in both Mozambique and South Africa. INP is now increasingly conducting audits independently, with clearer priorities and more structured documentation.

An energy balance model for the pipeline export system to South Africa was developed in 2020. The model links measurement points, uncertainty contributions and process data across the value chain, providing a basis for assessing compliance between export and reception volumes. It enables quantification of variations, identification of potential bottlenecks and setting of more precise requirements for the operator's reporting and quality systems. Compilations of sample extractions, GC analyses, calibrations, uncertainty assessments and energy settlements have been jointly reviewed, including references to the laboratory in Germiston, South Africa.

Overall, the cooperation spanning more than a decade (2013–2024) has strengthened the professional basis for exercising authority in Mozambique. INP has established more systematic, risk-based inspection processes across the gas value chain. The quality of the data basis for the authorities' measurements and energy balances has improved. Technical dialogue with operators

and South African authorities is more precise, and the basis for government revenues and long-term predictability in the gas system is more robust.

↓ Metering station for natural gas in Mozambique. | Photo: Steinar Vervik, Norwegian Offshore Directorate





4.2.3 Mozambique result example: Sovereign wealth fund

With support from the OfD programme over several years, Mozambique established a sovereign wealth fund in 2024, initially funded by LNG revenues from the Rovuma Basin. For the first 15 years, 60% of petroleum revenues are allocated to the state budget and 40% to the fund. After that, the allocation shifts to 50/50.

The fund is established and governed by a transparent legal framework for managing future petroleum revenues, aligned with international best practice, and is managed by the Bank of Mozambique. The law includes several key mechanisms, such as monthly, quarterly and annual reporting and oversight and audit mechanisms, as well as advisory bodies including an Investment Advisory Council and a Supervision Committee.

The objectives of Mozambique's sovereign wealth fund are:

1. To break the link between volatile, non-renewable petroleum revenues and government spending, thereby stabilising the budget and avoiding boom-and-bust cycles.
2. To set aside savings and create a buffer for future generations and national development projects.

Establishing a petroleum fund will not, on its own, ensure effective management of petroleum revenues. It is also necessary to build skills, enhance transparency and ensure checks and balances to enable wise spending. In this area, civil society also has a crucial role to play.

↓ Coffee plant growing. | Photo: Marte Lid, Norad





4.2.4 Mozambique result example: Oil spill response

Despite limited financial and institutional resources, Mozambique has strengthened its national capacity to respond to acute oil pollution through improved organisation and increased interaction among national authorities, local authorities and private industry.

Through cooperation under the OfD programme, the Mozambican authorities have improved their ability to plan and coordinate responses to oil spills, including incidents where oil drifts ashore and beach clean-up operations are required. The authorities have gained a greater understanding of how national plans can be translated into practical efforts at the regional and local levels, and how different actors must cooperate in a real incident. The activities have been carried out in several places across the country and have helped strengthen the link between central authorities, provincial authorities and local actors who will play a key role in the event of an actual spill.

The OfD programme has contributed with:

- Professional support for the use and further development of the national emergency plan as a framework for organising the response.
- Implementation of tabletop exercises, including clarification of roles and responsibilities,



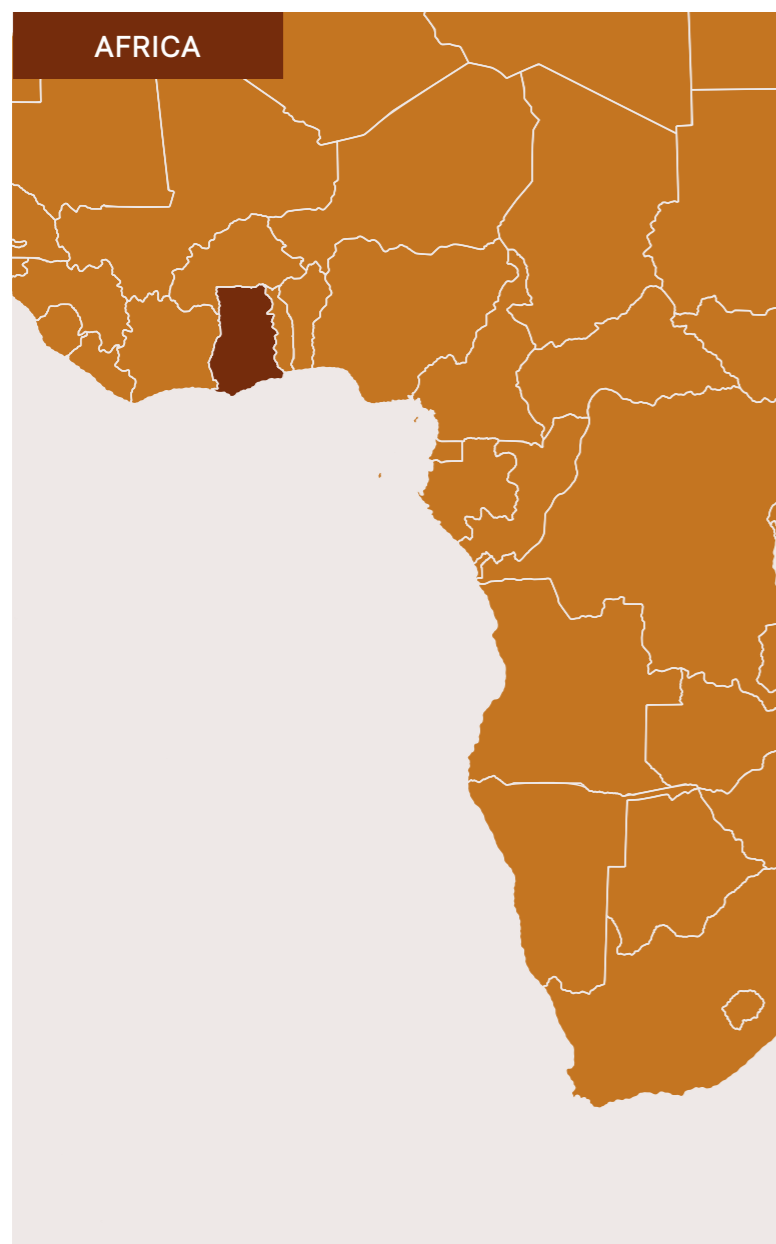
coordination, and the use of environmental and vulnerability data in decision-making.

- Training and exchange of experience in planning and organising beach clean-up operations, which is particularly relevant in the Mozambican context.
- Involvement of participants from neighbouring countries in an exercise using vulnerability data, which has contributed to regional learning and experience sharing.

↑ Field exercise in oil spill response, Mozambique. | Photo: Norwegian Coastal Administration

Mozambique remains vulnerable and dependent on support in the event of major incidents, but has taken clear steps towards a more structured and realistic approach to emergency response. The authorities have strengthened their ability to coordinate efforts, prioritise measures and cooperate across administrative levels in the event of acute oil pollution.





4.3 Ghana: Embedding environmental governance and preparedness

Ghana's OfD programme combined legal and regulatory development with institutional support across environment, safety, resources and revenues. OfD strengthened Ghana's petroleum legal and institutional framework by supporting the development of key laws and regulations for sector governance. This included support for the passage of the Petroleum Commission Act, 2011, which established the Petroleum Commission as a dedicated and independent regulator, and the Petroleum Exploration and Production Act, 2016. OfD also contributed to the development of implementing regulations, including measurement, HSE and data management regulations adopted in 2016–2017, and supported work on the draft General Petroleum Regulations. Alongside the legal reforms, the programme helped build the Commission's operational capacity through peer-based institutional support, contributing to stronger regulatory oversight, clearer procedures and improved technical competence.

Workstreams included drafting and applying health, safety and environmental (HSE) regulations;

strengthening the petroleum regulator, environmental authorities and data management functions; improving fiscal measurement and administration including National accounts, petroleum investment statistics and business statistics; and advancing practical transparency. The emphasis was on translating environmental governance into usable, operational tools: procedures, datasets and skills that enable screening, permitting, monitoring and emergency response in a dynamic coastal petroleum context.

On the regulatory side, general petroleum regulations and HSE-specific rules were advanced, alongside data management regulations that clarify responsibilities and standards for sector information. Capacity development focused on the "how" of implementation: building GIS competence, improving data coordination between agencies, standardising permitting and inspection routines, and strengthening preparedness plans for coastal risks. The revenue and resources components worked in concert with the environment and safety components to ensure that policy, regulation and operations were aligned.





Transparency and accountability were woven throughout. Authorities increased the frequency and usability of disclosures, and cooperation with civil society and the media helped make environmental data and permitting processes more accessible. As in other country programmes, delivery was peer-to-peer and task-centred, with documented procedures and job aids to embed change within institutions.

Key programme facts

Implementing partner institutions: Ministry of Energy; Petroleum Commission (PC); Environmental Protection Agency; Ghana National Petroleum Corporation (GNPC); Ghana Revenue Authority and related fiscal entities.

Norwegian implementing institutions: Norwegian Environment Agency; Norwegian Offshore Directorate; Norwegian Ocean Industry Authority; Norwegian Coastal Administration; Statistics Norway; Oil Taxation Office.

Civil society organisations supported: National chapters and partners working on transparency in the extractive sector, community engagement and environmental stewardship (including Publish What You Pay, Natural Resource Governance Institute, Oxfam, WWF and others).

International organisations supported: UN Environment Programme; IMF and World Bank platforms for extractives governance; cooperation aligned with EITI.



→ Oil waste incinerator plant in Ghana. | Photo: Marit Hverven, Norad





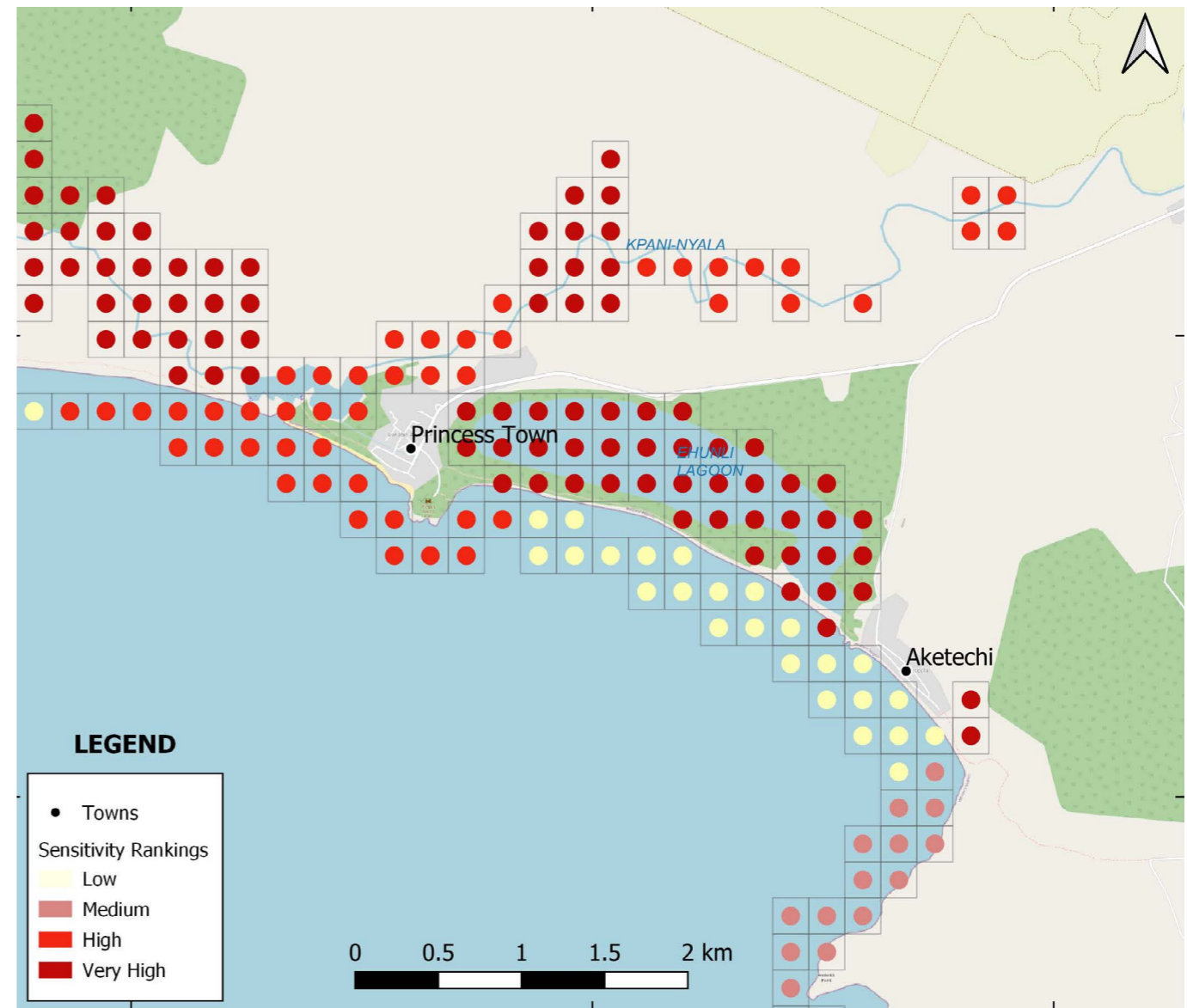
4.3.1 Ghana result example: Coastal environment sensitivity atlas

A new coastal sensitivity atlas was developed to guide preparedness, environmental assessment and planning in areas with petroleum-related risks. The atlas integrates updated environmental assets, such as mangrove forests, water resources and habitats of vulnerable species, with current land-use information, and shows relative vulnerability to different types of incidents, including acute oil pollution.

The atlas consists of a publicly available report that includes maps, documentation of the assets, the rationale for the assigned environmental values, and a description of how different pressures affect them. Maps are also published online to support wider use.

The product updates and improves an earlier atlas by applying a refined methodology with a stronger land-use focus and modern Geographical Information Systems (GIS) tooling, coupled with training for authorities in GIS, data management and drone-assisted data collection.

The atlas supports screening coastal areas for development, feeds into EIA processes by providing sensitivity information up front and informs contingency plans for emergency response. By making high-quality environmental data usable and accessible, the atlas will strengthen day-to-day permitting decisions and improve preparedness in a coastal petroleum context.



↑ Illustration: Example of ecological sensitivity map, Environmental Protection Authority, Ghana.





4.3.2 Ghana result example: Petroleum data centre

Under the OfD cooperation, a petroleum data centre was established and is now fully operated by Ghana's Petroleum Commission (PC). The data centre development was a collaboration between the OfD programme and the World Bank, in which the World Bank financed the equipment, and the OfD programme provided technical assistance to establish a well-functioning data centre.

Petroleum data management involves the systematic collection, organisation, storage and analysis of large oil and gas datasets, including seismic, well and production data, to improve operational efficiency and decision-making.

Alongside the development of the data centre, the OfD programme assisted in developing the data management regulation. Experience and expertise from the Norwegian Offshore Directorate informed the development and implementation of the regulation. All historical legacy data was reprocessed and digitised, and is now stored and managed by the Ghana PC.

In accordance with the regulation, all newly assessed petroleum data must be submitted to the PC. This will make the PC the national data custodian in Ghana, which is the purpose of the petroleum data centre.

However, work remains to establish the physical core storage. The PC's ambition is to establish a core storage facility like the one in Uganda, as illustrated in the picture below.

↓ Core storage at PAU in Uganda. | Photo: Gunnar Sjøgren, Norwegian Offshore Directorate





4.3.3 Ghana result example: Macroeconomic modelling

The main objective of the collaboration between Statistics Norway and the Ministry of Finance in Ghana in the field of macroeconomic modelling was to strengthen the Ghanaian authorities' ability to analyse economic relationships, particularly the macroeconomic impacts of the petroleum sector.

Through the development of an operational macroeconomic model, an associated database and thorough documentation, OfD helped establish a

comprehensive analysis tool adapted to Ghanaian conditions. The model, developed through joint workshops in Accra and Oslo, linked the real economy, the public sector and petroleum revenues and estimated key econometric relationships. This enabled the preparation of baseline scenarios and the analysis of the effects of various policy and shock scenarios, including those related to the state budget and changes in oil prices.

A key element of the collaboration was building capacity and institutionalising the modelling work within Ghana's Ministry of Finance. Over time, staff

gained expertise in maintaining, updating and using the model through practical work on data collection, re-estimating equations and running simulations.

Although the model was not fully integrated into the regular budget process, the tool gained considerable professional confidence within the ministry. The collaboration also strengthened links between macroeconomic modelling and official statistics, including through feedback to Ghana's statistical authorities. This laid an important foundation for more evidence-based economic policy and more sustainable management of petroleum revenues.





Across these programmes, OfD's long-term, peer-to-peer approach – anchored in institutions and focused on the “last mile” of regulation – produced practical tools, rules and capacities that improve decision-making and accountability. In each setting, the combination of clear frameworks, institutionalised routines and usable data was critical to achieving results that are sustainable over time.

Together, these countries' experiences illustrate how OfD's design principles translated into practice, and they provide the backdrop for the [following chapter's](#) more critical discussion of the programme's challenges and limitations.



→ Ghana beach. | Photo: Marit Hverven, Norad





5. OfD programme challenges

← Afghanistan 2022. | Photo: Ken Opprann, Norad





A balanced account of the OfD programme must recognise that outcomes have been uneven across countries, contexts and time. Alongside strong examples of institution building, several country programmes failed to deliver durable results despite extensive engagement. This reflects the inherent difficulty of governance reform in politically complex environments, the long lead times in the petroleum sector and systemic constraints beyond the control of any single programme.

The challenges below are presented generically. They synthesise recurring patterns from years of programme reporting and implementation experience, with the aim of balancing success stories with a clear-eyed view of what limited progress and why.



↑ Oil spill before clean-up, Iraq. | Photo: UNEP





5.1 Contextual constraints that limit reform

Many OfD engagements took place in settings where the political economy of the petroleum sector and the broader governance environment constrained reform. These factors shape the “enabling space” for institutional cooperation before technical assistance even begins. Where incentives were misaligned, progress was often partial, slow or reversed.

Political resistance to governance, transparency and accountability

In some contexts, governing coalitions rely on discretionary control over sector decisions and rents. This reduces incentives to publish contracts, strengthen independent oversight or clarify mandates, even when reforms were formally adopted.

Instability, conflict and abrupt political shifts

Periods of conflict, coups and rapid policy reversals disrupt cooperation, reshuffle leadership and restrict in-country access, leading to paused activities or a shift to low-exposure tasks, with knock-on effects for institution-building.

Lack of petroleum resources

Where exploration did not yield commercial finds or projects stalled, the case for investing scarce political

capital in petroleum governance weakened. Without sufficient petroleum resources, active licences, permits and compliance decisions, routines remained untested and skills unmaintained.

Poverty reduction expectations

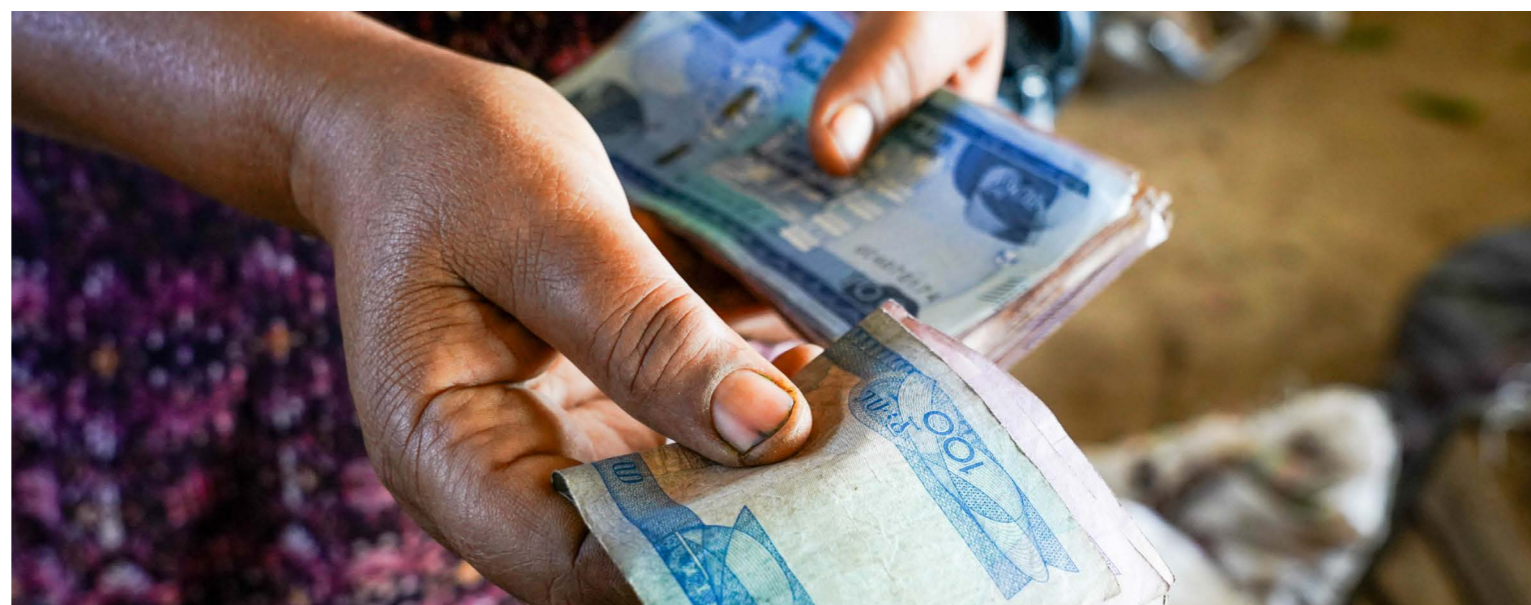
Even when revenues materialised, weak public financial management, corrupt practices and limited oversight meant funds did not reliably translate into broad-based welfare. Revenue sharing was sometimes unequal or

unpredictable, fuelling perceptions of unfairness.

Market risk, volatility and transition pressures

New upstream investment decisions are complicated by price swings, regulatory risks, investor caution and the energy transition. This uncertainty reduces momentum for comprehensive institutional reforms in prospective producer contexts.

↓ Illustration of corruption risk. | Photo: Marte Lid, Norad





5.2 Institutional and operational delivery challenges

Even where there was broad agreement on the direction of reform, practical delivery encountered recurrent obstacles. These challenges typically involved a lack of capacity, competence, coordination and continuity, hindering new rules and systems from becoming routine practice. Limited knowledge of and sensitivity to country- and institution-specific contexts among those contributing to the programme on the Norwegian side was also a factor, especially at the start of the cooperation.

Fragmentation, turnover and absorptive capacity

Lack of basic competence, overlapping mandates, weak cooperation, lack of proactive response, high staff turnover and frequent reorganisations dilute accountability and slow implementation – institutional memory declines, trained individuals move on, and interagency coordination requires constant attention.

Competition from other donor programmes

Several simultaneous development programmes sometimes reduced interest and attention among OfD programme participants. Different per-diem allowance systems among donors may contribute to this effect.

Cost control and efficiency

Budget follow-up focusing solely on the outcome level in the results framework reduces oversight and the ability to manage programme activities. In addition, certain programme expertise, such as legal and financial advisers, generally costs more than ordinary civil servants. Excessive use of such expertise may result in budget constraints.

Legal and regulatory bottlenecks

Draft laws, decrees and secondary regulations were sometimes stalled in approval chains. Without these anchors, downstream work on licensing, revenue administration, inspections and enforcement could not proceed as intended.

Restricted civic space and performative transparency

Where civic and media freedoms were constrained, gains in transparency risked being procedural rather than substantive. Data might be published, but with limited uptake or impact in the absence of independent oversight.

Access and modality constraints

Security concerns and, later, the pandemic curtailed

travel and fieldwork. While digital tools preserved some momentum, hands-on mentoring, joint inspections and on-site verification – the programme's comparative strengths – were more difficult to sustain.

Data and systems gaps

Weaknesses in data quality, metering, registry design and information flows limited evidence-based decision-making. Without reliable, routinely updated datasets, oversight and transparency lost traction.





5.3 Patterns commonly observed in programme reporting

Over the years and across contexts, short “programme challenges” sections in the OfD annual reports converged on a set of familiar themes. These patterns help explain why some country programmes delivered few sustainable results despite multi-year support, and why others made progress only to see it stall or reverse.

Security and volatility determine feasibility

Windows of opportunity opened and closed with the political cycle. When conditions deteriorated, in-country delivery was curtailed, new phases were delayed, and activities were narrowed to preserve gains and relationships for future re-engagement.

Upstream delays cascade down the value chain

When core legal instruments were not approved, everything from licensing to taxation and environmental permitting was uncertain. In the absence of live projects, task-centred capacity building could not be grounded in real workflows.

Capacity, coordination and implementation are the “last mile”

Drafting laws and regulations as necessary but insufficient. Results hinged on an operational implementation

machinery that made rules enforceable: documented procedures, clear decision mandates, trained teams, functioning data systems and interagency protocols.

Accountability depends on both disclosure and use of information

Publication alone did not guarantee scrutiny. Where oversight bodies lacked independence or resources, and civic actors faced constraints, transparency could

not reliably translate into corrective action.

Expectations must be aligned with sector realities

In countries without commercial discoveries or with long delays, ambitions for comprehensive institutional architectures were often unrealistic. Modular, low-regret investments proved more appropriate until substantive sector decisions were on the horizon.





5.4 Reflection on programme challenges

OfD's comparative advantage was built on Norway's decades of knowledge and experience in petroleum governance, coupled with long-term, peer-to-peer cooperation delivered through a comprehensive, whole-of-sector lens – covering resources, revenues, the environment and safety – with transparency and accountability threaded throughout. That approach remains sound. Yet outcomes will continue to vary with political context and incentives, sector realities and the strength of public institutions.

The central lesson is to design for the context you have, not the one you wish for. In favourable settings, aim for a broad programme that builds institutional capacity through clear laws and regulations, robust administration and strong enforcement. In tougher environments, invest in targeted modular capacities, practical transparency and verification tools that preserve integrity and options. Across all contexts, anchor reforms in real tasks, make accountability usable and plan for setbacks. This is how durable public-interest governance of petroleum can be advanced: steadily when possible, incrementally when necessary.

These challenges and reflections directly inform the lessons and recommendations presented in the [final chapter](#), intended to guide future Knowledge Bank programmes facing similar constraints.

↓ Afghanistan 2022. | Photo: Ken Opprann, Norad





6. Lessons learned for the Knowledge Bank



← Field exercise at Lake Albert, Uganda. | Photo: Norad





This chapter compiles OfD's most transferable insights for future institutional cooperation programmes. It synthesises cross-cutting learning accumulated over time with concise, actionable guidance, aligning with the implications for future programming and the executive messages in this report. The emphasis is on designing for coherence, delivering through public systems and sustaining accountability and resilience in demanding contexts.

In addition to experience in programme design and implementation, the participating institutions on the Norwegian side emphasise the importance of the inter-ministerial management structure for the success of the OfD programme. The OfD steering committee's regular quarterly meetings enabled engaged dialogue among participating ministries and provided a basis

for resource mobilisation and prioritisation, high-level quality assurance and a common understanding of challenges and opportunities.

↓ Field exercise in oil spill response, Tanzania. | Photo: Ken Opprann, Norad





6.1 Developments over time and cross-cutting lessons

Over 20 years of operations, the OfD programme evolved in scope, methods and focus, while maintaining a consistent core of peer-to-peer institutional cooperation. This section summarises key cross-cutting lessons on the programme's development and what proved most important for effectiveness and sustainability, both in enabling success and managing risks.

Comprehensive, integrated sector approach

The comprehensive, integrated approach across resources, the environment, safety and revenues – together with cross-cutting themes of anti-corruption, climate and gender – proved successful. It created coherence across policy, regulation and operations and reduced silo-driven sub-optimisation. Joint multi-institutional workshops fostered cooperation and oversight across institutions.

Long-term peer-to-peer institutional cooperation

Long-term peer-to-peer institutional cooperation was a distinctive strength. Counterparts considered the programme relevant and consistently valued working alongside Norwegian civil servants on real tasks, exercises and fieldwork, which accelerated the

absorption and contextualisation of knowledge. Long-term cooperation helped build trust and good relations.

Portfolio focus and flexibility

Portfolio flexibility mattered. Strategic consolidation and restructuring – paired with rigorous selection and prioritisation – supported effectiveness when agreements lagged or contexts shifted. Concentrating comprehensive programmes where progress was strongest and ownership stable helped deepen results.

Digital and hybrid delivery modalities

Digital modalities sustained capacity development despite constraints. The 2020 pivot to e-learning and virtual collaboration revealed where digital delivery can scale and where in-person engagement remains critical. Trust and strong local ownership were key success factors. Hybrid approaches are likely to remain important.

Climate and energy-transition alignment

Climate alignment became integral. Scaling climate-risk assessment, scenario analysis and emissions mitigation, as well as reviewing programme alignment with the Paris Agreement, signalled that future governance support should embed climate

considerations from strategic planning to operational practice. Treating the energy transition as part of core sector governance proved both feasible and necessary.

Decision-support systems and open data

Decision-support systems and open data strengthened resilience. Environmental sensitivity atlases, EIA databases, resource data platforms and public disclosure of contracts and revenue forecasts were high-leverage tools that delivered compounding benefits across frameworks, institutional performance and accountability.

Multilateral partnerships and global platforms

Multilateral partnerships extended reach and depth. Collaboration with the IMF, World Bank EGPS, EITI and UNEP complemented Norwegian bilateral assistance, aligning sector governance, macro-fiscal frameworks and environmental management, and providing standards and peer learning.

Civil society and accountability ecosystems

Civil-society engagement was vital. Formalising stakeholder roles (e.g. in SEA guidelines) and supporting the media and NGOs improved accountability ecosystems, particularly in contexts of





shrinking civic space. Accountability depended not only on disclosure but also on actors' capacity and space to use available information.

These cross-cutting lessons from OfD's evolution over time provide the backdrop to the more operational recommendations that follow.



→ From a reporting trip in Nigeria. | Photo: Fredrik Naumann, Norad





6.2 Consolidated lessons learned for future programming

Building on these developments and the cross-cutting lessons and implications for programme design and portfolio management, this section consolidates recommendations for future Knowledge Bank programming. The points are organised under short headings, each reflecting a key design or management principle for institutional cooperation. While derived from OfD's petroleum-governance work, most are relevant to other Knowledge Bank sectors.

Lead with political-economy insight and calibrate ambition

Consider the country context, political economy, governance system and capacity needs, and reform aspirations thoroughly. Map the political context, incentives, approval chains and veto points, and involve institutions early in programme mapping. Sequence reforms around feasible entry points and link scale-up to tangible demonstrations of commitment. Adapt programme ambitions, activities and schedule to realities, and define pause/exit triggers up front.

Match assistance to resource base and sector developments

Plan programme design, scope and sequence of activities in cooperation with relevant peer institutions,

and consider the sector's absorption capacity and development. Where discoveries are unlikely or timelines are long, prioritise low-regret building blocks – such as options notes, template procedures, environmental baselines and training-of-trainers – rather than full institutional blueprints. In fragile contexts, consider a soft start with selected activities and balance the level and content of assistance with actual sector developments.

Integrate components and design for implementation

Ensure programme components and activities are integrated and reinforce cross-institutional cooperation. Consider joint workshops and other mechanisms that bring institutions together around shared tasks. Design for implementation, not just adoption: pair laws and policies with standard operating procedures, job aids, staffing plans, costed workstreams and interagency coordination mechanisms. Build coordination into texts and routines, not just committees.

Be selective, demand-driven and realistic from the outset

Formal demand is necessary but not sufficient. Apply clear baseline entry criteria. Develop scope, outcomes and roles in close cooperation between peer institutions,

anchored in mandates and real work. Clarify and agree on realistic expectations, including what the programme can and cannot deliver within a given period.

Anchor design in a clear theory of change and results framework

Anchor programme design in a clear theory of change and a practical results framework. Define how frameworks, institutional performance and accountability combine to produce better public outcomes. Translate this into baselines, indicators, verification and assigned responsibilities, and link activity-based annual work plans and budgets directly to outputs and outcomes. Treat the theory of change as a living hypothesis and adjust as contexts evolve.

Institutionalise competence and work through systems

Work hands-on with laws, guidelines, workflows, inspections and data collection, then institutionalise gains through operating procedures, job aids, documentation and information systems so performance survives staff changes. Deliver through public systems rather than relying on individual champions. Protect critical institutional memory through documentation and data management.





↑ Workshop at the Norwegian Ocean Industry Authority in Stavanger with partners from Mozambique. | Photo: Norad

Treat all components as core governance

Integrate all components and cross-cutting issues into the programme to ensure breadth and completeness, so that trade-offs are managed transparently and coherently across the value chain.

Make transparency and accountability integral and practical

Embed disclosure requirements in laws and routine reporting – covering, for example, contracts, emissions and flaring, licence registers and budget flows – in formats usable by different audiences. Support parliaments, auditors general, civil society and the media in understanding, analysing and acting on the information. Schedule regular, structured dialogue on transparency deliverables and respond to feedback from oversight actors.

Invest in decision-support systems and data infrastructure

Build sectoral data systems, public disclosure portals and analytics capacity, and link data flows directly to decision-making processes so that information is routinely used. Protect verification capacity by investing early in metering, cost-recovery audits, environmental inspections and safety audits – the levers that connect rules to behaviour and sustain credibility across political and market cycles.

Coordinate partnerships to amplify impact

Align bilateral depth with multilateral breadth.





Use multilateral partnerships to extend reach and coordinate donors locally to minimise duplication and seek complementarities. Use experience from bilateral knowledge programmes to follow up on and manage Norwegian-supported multilateral programmes in the same sectors and countries, creating feedback loops between country experience and global initiatives.

Anticipate fiduciary risk and safeguard cost control and efficiency

Assess financial management capacity early, agree minimum controls and escalation paths and be prepared to suspend, rescope or tighten arrangements when standards are breached. Avoid supporting allowance payments that may distort incentives. Maintain close budgetary control at the activity level and aim to deploy a cost-effective mix of competent resources.

Preserve portfolio flexibility and manage for depth and quality

Maintain criteria and processes for timely consolidation or expansion, and adjust them as contexts and opportunities arise in cooperation with partners. Manage the portfolio actively for depth and quality: focus on comprehensive, integrated programmes where progress is strongest and ownership is stable; elsewhere, sustain targeted support and partnerships that keep accountability systems alive during difficult periods.

Plan exit and transition strategies from day one

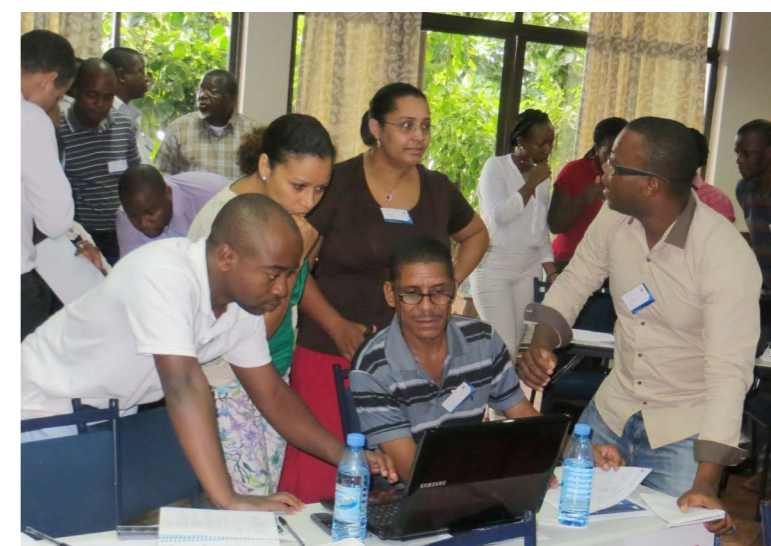
Communicate exit pathways clearly and review them annually in collaboration with partners. Use agreed transition plans to guide the scaling down of activities, the handover of tools and responsibilities, and, where relevant, the shift to lighter-touch cooperation or multilateral partnerships that can sustain gains.

Connect sector governance to broader public finance and development goals

Recognise that poverty reduction depends on credible public financial management, predictable transfers and effective service delivery. Align sector revenue work with broader PFM reforms and national development strategies so that improvements in petroleum governance translate into tangible welfare gains.

In sum, 20 years of experience with the OfD programme has demonstrated how long-term, hands-on cooperation can strengthen public institutions to govern complex sectors in the public interest. The objective with this report is to summarise the gained experience and provide inspiration and a template for Knowledge Bank initiatives facing demanding contexts and evolving challenges.

The hope is that these lessons and recommendations will be a valuable reference for other development assistance programmes within the Knowledge Bank.



→ Ofu workshop environment component Mozambique.
| Photo: Johnny Auestad, The Norwegian Environment Agency





Annex

← From a reporting trip in Nigeria. | Photo: Fredrik Naumann, Norad





Table 1: Annual OfD disbursements, by region and year (1000 NOK)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total 2006-2024	Total %
Africa	35,678	52,429	79,655	89,901	102,109	164,100	117,392	164,492	176,009	134,848	151,272	129,316	101,296	114,695	65,686	41,462	63,909	71,448	40,499	1,896,196	55%
Asia	18,195	30,908	37,773	52,635	32,687	24,400	15,608	7,139	6,889	11,331	9,656	13,042	13,187	23,194	13,832	6,724	4,165	0	0	321,366	9%
Middle East	3,000	13,310	11,144	5,717	3,503	8,150	5,255	12,023	10,231	14,059	14,162	18,407	14,364	13,615	8,196	7,128	7,612	9,782	684	180,342	5%
Latin America	353	2,058	4,875	9,155	14,441	20,500	20,349	9,851	4,326	4,514	3,124	2,742	3,253	6,340	4,161	1,302	5,211	6,991	13,465	137,012	4%
Global and other	25,108	49,295	71,499	49,592	69,332	74,000	95,787	61,308	44,828	46,090	32,370	54,312	31,351	75,618	46,378	31,154	28,170	18,838	17,886	922,916	27%
Total	82,334	148,000	204,946	207,000	222,072	291,150	254,391	254,813	242,283	210,842	210,584	217,819	163,452	233,462	138,253	87,770	109,067	107,058	72,535	3,457,832	100%

Table 2: Annual OfD country programme disbursements 2006–2024 (nominal values NOK 1000)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total 2006-2024	Total %
Uganda	3,055	7,121	8,419	13,808	30,298	48,800	27,818	50,609	47,333	16,820	26,799	21,552	5,383	25,121	20,536	10,913	23,588	24,575	23,248	435,797	12.6%
Mozambique	8,496	14,900	18,802	13,861	5,614	17,200	4,429	18,131	22,525	37,947	32,307	31,653	34,176	28,586	14,798	15,908	21,329	35,494	61	376,217	10.9%
Ghana	-	-	3,428	8,308	15,576	36,000	24,791	19,092	26,787	15,202	22,688	16,938	17,054	14,708	4,685	3,277	5,245	10,492	17,102	261,373	7.6%
Sudan	5,039	4,800	13,476	10,951	27,037	44,200	13,262	26,084	13,000	8,770	2,079	14,379	8,468	5,409	972	-	293	-	-	198,219	5.7%
Tanzania	700	1,431	1,447	1,492	623	1,500	5,944	20,453	28,775	30,314	31,211	18,689	11,501	17,121	13,405	4,051	2,535	-	-	191,191	5.5%
Angola	2,984	11,162	7,888	13,548	15,635	9,100	2,332	6,556	9,988	8,637	18,834	16,277	6,261	7,383	1,295	-	-	-	-	137,881	4.0%
Timor-Leste	14,258	15,889	13,553	19,670	21,570	19,800	13,738	5,958	-	-	-	-	-	-	-	-	-	-	-	124,436	3.6%
South Sudan	-	-	-	-	-	-	27,976	18,337	24,735	14,873	11,739	2,727	7,102	1,500	2,070	1,600	1,600	-	-	114,259	3.3%
Lebanon	-	2,422	5,600	2,431	2,111	7,600	4,880	4,640	4,797	11,011	12,766	12,282	10,942	10,599	5,932	3,830	3,189	4,560	-	109,592	3.2%
Myanmar	-	-	-	-	-	-	-	1,181	6,889	11,331	9,656	13,042	13,187	23,194	13,832	6,724	4,165	-	-	103,202	3.0%
Iraq	3,000	10,500	4,844	3,286	1,392	550	375	7,383	5,434	3,048	1,396	6,125	3,422	3,016	2,264	3,299	4,423	5,221	684	69,662	2.0%
Bolivia	353	1,401	2,805	5,976	8,696	12,800	15,252	4,564	2,839	-	-	-	-	-	-	-	-	-	-	54,686	1.6%
Kenya	-	30	1,500	1,163	700	-	-	-	-	2,285	4,933	6,568	6,958	7,560	4,687	2,803	4,719	451	-	44,357	1.3%
Nigeria	6,769	5,655	4,511	4,559	3,743	4,600	6,941	3,387	-	-	-	-	-	-	-	-	-	-	-	40,165	1.2%





	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total 2006-2024	Total %
Colombia	-	-	-	-	-	-	-	-	-	-	-	303	1,639	4,204	3,695	1,273	5,211	6,991	13,465	36,782	1.1%
Afghanistan	64	3,289	8,570	13,039	5,738	3,100	-	-	-	-	-	-	-	-	-	-	-	-	-	33,800	1.0%
Bangladesh	3,045	3,045	10,210	8,783	3,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,083	0.8%
Cuba	-	-	-	-	1,073	3,400	3,097	4,556	1,101	4,514	3,124	2,439	1,614	2,135	466	29	-	-	-	27,548	0.8%
Madagascar	643	6,272	12,574	4,303	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23,883	0.7%
Somalia	-	-	-	-	-	-	-	-	-	-	682	533	2,999	5,690	2,729	2,741	4,562	437	88	20,461	0.6%
Vietnam	221	5,775	1,657	2,464	1,523	1,500	1,870	-	-	-	-	-	-	-	-	-	-	-	-	15,010	0.4%
São Tomé and Príncipe	607	200	50	1,125	1,874	1,600	3,505	1,448	2,112	-	-	-	-	-	-	-	-	-	-	12,521	0.4%
Ecuador	-	657	1,724	1,954	3,803	3,300	-	-	-	-	-	-	-	-	-	-	-	-	-	11,438	0.3%
Cambodia	107	2,410	2,773	3,907	856	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,053	0.3%
South Africa	6,000	500	2,392	1,102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,994	0.3%
Nicaragua	-	-	346	1,225	869	1,000	2,000	720	328	-	-	-	-	-	-	-	-	-	-	6,488	0.2%
Zambia	1,070	-	2,127	1,978	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,188	0.2%
Ivory Coast	-	-	1,148	3,463	51	-	4	-	-	-	-	-	-	-	-	-	-	-	-	4,666	0.1%
Mauritania	315	358	745	815	854	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,087	0.1%
Indonesia	500	500	1,010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,010	0.1%
Benin	-	-	-	-	-	-	-	-	-	-	-	-	-	1,034	508	169	37	-	-	1,749	0.1%
Liberia	-	-	-	-	-	550	206	395	345	-	-	-	-	-	-	-	-	-	-	1,496	0.0%
Sierra Leone	-	-	-	-	-	550	184	-	409	-	-	-	-	-	-	-	-	-	-	1,143	0.0%
Palestinian Territory	-	388	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,088	0.0%
Uruguay	-	-	-	-	-	-	-	11	58	-	-	-	-	-	-	-	-	-	-	69	0.0%
Global*	25,108	46,595	68,364	53,055	50,647	58,950	95,787	61,308	44,828	46,090	32,370	50,801	31,351	75,618	46,378	31,154	28,170	18,838	17,886	883,298	25.5%
Regional*	-	2,700	4,283	10,734	18,685	15,050	-	-	-	-	-	3,511	1,394	582	-	-	-	-	-	56,939	1.6%
Total	82,334	148,000	204,946	207,000	222,072	291,150	254,391	254,813	242,283	210,842	210,584	217,819	163,452	233,462	138,253	87,770	109,067	107,058	72,535	3,457,832	100.0%

*The Global and Regional categories are associated OfD programmes, usually multilateral support to civil society organisations that work to influence and improve transparency, accountability, fiscal justice, biodiversity and public governance in relation to the petroleum sector. These categories are not allocated to specific countries.

Disclaimer: This table is specifically compiled for the purpose of OfD annual reports and this summary report. The table does not represent official development aid statistics.





OfD relative component split of disbursements

