**PROGRAM DOCUMENT**
November 2010

TOPICAL TRUST FUND

# Managing Natural Resource Wealth (MNRW-TTF)

GLOBAL PARTNERSHIPS
Shared Objectives • Joint Action • Real Impact

International Monetary Fund

**A Multi-Donor Trust Fund for**
**IMF Capacity Building Technical Assistance**

**in**

# *Managing Natural Resource Wealth*

**Program Document**
**(Revised--November 2010)**

**List of Acronyms**

| | |
|---|---|
| ALM | Asset and Liability Management |
| EI | Extractive industries |
| EITI | Extractive Industries Transparency Initiative |
| JODI | Joint Oil Data Initiative |
| LIC | Low-income country |
| LMC | Lower-middle-income country |
| LTO | Large tax payer office |
| MNRW | Managing Natural Resource Wealth |
| NRC | National Resource Company |
| NOC | National Oil Company |
| PFM | Public financial management |
| PSC | Production sharing contract |
| RFMS | Results Focused Management System |
| RSN | Regional Strategy Note |
| RTAC | IMF Regional Technical Assistance Center |
| SSA | Sub-Saharan Africa |
| SAA | Strategic Asset Allocation |
| SC | Steering Committee |
| SFA | New Framework Administered Account for Selected Fund Activities |
| SWF | Sovereign Wealth Fund |
| TA | Technical assistance |
| TAIMS | Technical Assistance Information Management System |
| TTF | Topical Trust Fund |
| WB | World Bank |

## EXECUTIVE SUMMARY

# Building Capacity for Managing Natural Resource Wealth
# Proposal for an IMF Trust Fund

### The Challenge of the "Resource Curse"

Many resource-rich developing countries fail to realize the full development potential of their natural resources. This is especially acute in the case of oil, gas, and mineral resources. The enlarged fiscal space from such resources can boost economic growth and generate large revenues for the government. Those, in turn, can finance public goods and services that benefit sustainable development and poverty reduction, such as investment in education, health, and physical infrastructure. Evidence from many resource-rich countries shows their performance on human development indicators compares unfavorably to less-endowed countries.

At the root of this underperformance—often referred to as the "resource curse"—is the failure by governments to properly address the institutional and policy challenges that come with natural resources. National administrations are weak, laws and regulations are defective, and policies inadequate. Governments are often badly equipped to deal with large, international Extractive Industries (EI) companies. Moreover, the overall governance environment is often poor, compounded by a tendency towards secrecy in natural resource matters. As a result, countries often do not receive fair compensation for their resources, and what they *do* receive once spent does not produce the desired benefits.

The good news is that countries *can*—and *do*—escape or avoid the "resource curse", and assistance with capacity building can help them in this. Capacity building can draw on the widespread practical experience with strengthening institutions, and on the good-practice approaches identified for the specific economic-policy issues. The governance challenges associated with natural resources can be tackled by strengthening accountability mechanisms and enhancing transparency about policies and policy outcomes. Efforts to strengthen country capacities to avoid the "resource curse" can have a huge development pay-off, accelerating progress towards the *Millennium Development Goals*. Moreover, the beneficial spillovers for the global community could be substantial, as access to natural resources becomes more secure and stable, and more socially responsible.

### Why an IMF TTF?

The International Monetary Fund (IMF) is planning to establish a multi-donor topical trust fund (TTF) to help countries in overcoming the resource curse. The IMF has a strong track record in supporting the management of natural resource wealth thanks to its specialized expertise and unique ability to integrate policy, administrative and legislative dimensions. It is also a standard setter in fiscal transparency. To exploit this comparative advantage, the IMF is seeking a partnership with donors who make a priority of sound macroeconomic management in countries rich in hydro-carbons and minerals. The TTF will concentrate on capacity building in five areas:

- EI fiscal regime
- EI revenue administration
- Macro-fiscal policies and public financial management
- Asset and liability management; and
- Statistics for natural resources.

**How will it work?**

The group of eligible recipients will consist of about 50 low-income and lower-middle-income countries with substantial current or prospective hydrocarbon and mineral exploitation. Demonstrated commitment to reform will be a consideration for inclusion in the work program. The proposed TTF would leverage the IMF's considerable in-house expertise by scaling up the IMF's supply of Technical Assistance (TA) to meet the growing demand from developing countries with extractive industries.

The TTF's approach builds on the IMF's tradition in providing high-quality TA. It will be programmatic, covering all economic topics along the "value chain" that transforms natural resource wealth into development, and delivering TA flexibly in the form of modules tailored to country circumstances. The TA will be results-oriented, delivering concrete outcomes over a multi-year horizon. The trust fund will coordinate with other TA providers and stakeholders, consistent with the *Paris Declaration on Aid Effectiveness* and the *Accra Agenda for Action*. The promotion of transparent institutions and policies will cut across all areas, in line with the IMF's *Guide on Resource Revenue Transparency*. To improve absorption of information, and strengthen the demand for good governance, the IMF experts will systematically reach out to broader government and civil society. The TTF will also support implementation of the *Extractive Industries Transparency Initiative (EITI)*.

**TTF a partnership**

The IMF is seeking a partnership with donors for the TTF. Donors organized in a Steering Committee (SC) will guide the TTF and endorse annual work plans. Advance contributions are sought to fund a five-year program with an estimated cost of about $25 million; all contributions will be channeled into a dedicated subaccount with the IMF. This TTF will be one of several topical trust funds, whose global orientation and specialization will complement the work of the IMF's regional technical assistance centers (RTACs) in Africa, the Caribbean, Central America, Central Asia, the Middle East and the Pacific.

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# I. Improving the Management of Natural Resources

## A. Natural Resource Wealth and the Financing of Development

1. **Natural resources present an opportunity for financing accelerated development and making inroads into poverty.** This is true particularly for oil, gas and minerals which are the focus of the trust fund described in this paper. Much of the world's deposits of oil, gas and minerals are located in developing countries, and the demand on the world market for those resources is strong and growing. If properly produced and traded, they can be an important source of financing for development. It is the purpose of this trust fund to help developing countries build the institutions and capacity to turn their natural resource wealth into sustainable development.

2. **Many developing countries have rich deposits of oil, gas and minerals and in an increasing number they are being successfully exploited.** The focus of the proposed trust fund is on non-renewable natural resources that are extracted, namely oil, gas and coal—collectively named "hydrocarbons"—and minerals.[1] In value terms and strategically those are the most important. For instance, by 2008 the importance of West Africa as an oil supplier to the United States had grown to almost 15 percent of total imports; and it supplied around 27 percent of oil to South and Central America and 6 percent to Europe. "Proved reserves" in Africa have grown from 6 percent of the world's total in 1988 to 10 percent in 2008, and these reserves should last for over 30 years at current production rates.[2] Mineral deposits are also spread widely across the globe, and developing countries produce 70 percent of the world's minerals.[3] Over 50 percent of major known deposits are in countries with per capita gross national incomes of $10 per day or less.[4]

3. **For many developing countries revenue from hydrocarbons and minerals is already very large.** The IMF has identified 19 low-income and 18 lower-middle-income countries as rich in hydrocarbons and/or minerals (see Annex 1). In these countries—which

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[1] Natural resources are considered "gifts of nature", available without human intervention. They can be broadly classified into renewable ones—incl. forestry and fisheries—and non-renewable ones—incl. hydrocarbons, metallic and non-metallic minerals.

[2] See *BP Statistical Review of World Energy* 2009 at http://www.bp.com/productlanding.do?categoryId=6929&contentId=7044622.

[3] *World Mining Data* (in metric tons, excl. diamonds) at http://www.bmwfj.gv.at/EnergieUndBergbau/WeltBergbauDaten/Documents/WMD2009.pdf.

[4] See page 5 of the European Union's 2008 *Raw Materials Initiative* at http://ec.europa.eu/enterprise/non_energy_extractive_industries/raw_materials.htm.

include most of sub-Saharan Africa—hydrocarbons and/or minerals contributed, on average over 2000-07, between 30 to 40 percent of fiscal revenues and 50 percent of export proceeds. Clearly, the flip side of this opportunity for accelerating development is a growing dependency on revenue from resource exploitation. The importance to the budget and the economy is likely to increase with many projects currently under construction coming to completion in the near and medium term.[5] In the longer term, given their openness to investment in exploration, the amount of discovered sub-soil natural assets in developing countries is likely to increase substantially from its current low level.[6]

4. **Developing countries should be able to benefit greatly from the exploitation of their natural resource wealth.** The initial investments and subsequent opportunities for local employment and service provision will generate economic activity, as would any value addition in the country. This should translate into private sector growth and sustainable development. While these economic effects are important, far more important for economic development are payments by the EI companies to the government in the form royalties, bonuses, income taxes, production shares, export taxes and other fees. Those payments greatly expand the fiscal space, enabling governments to increase the supply of public goods and services that are critical to development and poverty reduction.

5. **Financing more investment in education, health, and infrastructure is critical for reaching the *Millennium Development Goals (MDGs)*.** So far Sub-Saharan Africa (SSA) has made "noticeable gains in universal education but very limited headway on poverty and hunger eradication and on various health-related goals."[7] In order to meet the MDGs on access to infrastructure, SSA will need huge investments.[8] Enhanced revenue collection from natural resources would help developing countries meet their commitment as part of the Monterrey Consensus to mobilize more domestic revenues, and the increase could easily outstrip external aid.

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[5] The Swedish Raw Materials Group reports almost $15 billion in mining projects on which construction started in 2007, about double the amount for the period 2001-06 (as quoted in *Mining for Development*, May 2009, at http://www.globalutmaning.se/files.asp?f_id=9299 ).

[6] Africa in particular is underexplored and promises many more discoveries. On average a square kilometer of subsoil in Africa contains known natural assets worth only $25,000 compared to $125,000 in the OECD area. See p. 25 of *Managing the Exploitation of Natural Assets* by Paul Collier and Anthony Venables, 2008, at http://users.ox.ac.uk/~econpco/research/pdfs/ManagingtheExploitationofNaturalAssets.pdf.

[7] See the *Economic Report on Africa 2009*, Economic Commission for Africa and African Union, April 2009, at http://www.uneca.org/era2009/ .

[8] The African Development Bank estimates that SSA will need to spend as much as $38 billion per year on infrastructure investments in the sanitation, energy, transport and telecommunication sectors. See http://www.afdb.org/en/topics-sectors/sectors/infrastructure.

6. **The importance of natural resources to the development process is widely recognized.** For instance, the G8 at its 2002 summit in Canada stressed the need for severing the links between natural resources and armed conflict. And at its 2007 summit in Germany the G8 agreed on the need to further enhance the contribution of mineral resources to sustainable growth (Box 1).

**Box 1. G8 Support for Capacity Building in Mineral Extraction**

"Mineral resources have a great potential to contribute to poverty alleviation and sustainable development. In some cases, nonetheless, extraction and processing of resources are associated with misuse of revenues, environmental destruction, armed conflict and state fragility. We firmly agree on the need to further enhancing the contribution of mineral resources to sustainable growth and will continue to support resource rich countries in their efforts to further expand their resource potential while promoting sustainable development and good governance. To this end we will build capacity for good governance of mineral resources consistent with social and environmental standards and sound commercial practices by reducing barriers to investment and trade, through the provision of financial, technical and capacity building support to developing countries for the mining, processing and trading of minerals. Based on sound life cycle analyses, we will also encourage conservation, recycling and substitution of raw materials, including rare metals, for sustainable growth."

G8 June 2007 Economic Summit Declaration *Growth and Responsibility in the World Economy*
See http://www.canadainternational.gc.ca/g8/assets/pdfs/2007-06-respons-en.pdf

## B. Economic Policy Problems to Overcome

7. **Developing countries face serious economic policy challenges in trying to realize the development potential of their natural resources.** Once a decision has been taken on whether and how to exploit the natural resources, many policy issues must be addressed and technical problems overcome. Laws and regulations must be drafted to properly address possibly adverse economic, social and environmental consequences. The development of the natural resource wealth, including the rate of exploitation, must be integrated in the country's long-term economic development program. The fiscal regime and contracts must balance the country's interests with those of the companies. Countries must be able to successfully negotiate and interact with large EI companies, which typically enjoy a great information advantage thanks to their international operations. Fortunately, the surge of interest in oil and mining licenses means more competition among companies. Moreover, governments can take advantage of the increasing supply of specialized TA from a variety of stakeholders.

8. **After resource revenues start to flow, their collection and macroeconomic management will pose policy challenges.** Collection is technically and administratively demanding. The process needs to be effective in making companies pay what is due under the contracts and fiscal regime. And what companies pay should be channeled transparently

through the budgetary process where national spending priorities are set, which was the motivation for the *Extractive Industries Transparency Initiative* (EITI).[9] At that point, major macro-fiscal issues arise. Governments must contend with the volatility of the revenue flow, the constraints on their absorptive capacity, the finite nature of the resources, and the risks of hurting the competitiveness of the non-resource export sectors. Endowed countries usually also have better access to international capital markets, which is an opportunity that must be well managed, as must any accumulation in international reserves. Finally, to support macroeconomic policies, statistics must be developed that account for the natural resources.

## C. Quality of Governance Is Crucial

9. **Breakdowns in governance are generally recognized as the principal reason why natural resource wealth does not generate more sustainable development.** Governance challenges trump economic challenges since for those technical solutions are well known. Governance problems exist in all countries, but in developing countries their impact on the quality of life is especially serious. In *resource-rich* developing countries they are particularly daunting and intractable.[10]

10. **Many resource-rich countries disappoint in their performance on economic and human development indicators.** While academics are still debating the empirical nature of this paradox (termed "resource curse") and its possible causes, most agree that the poor quality of institutions is mainly to blame.[11] Of 22 countries rated "low human development" on UNDP's *Human Development Index*, seven appear on the IMF's list of resource-rich countries.[12] A comparison between countries on four continents of key human development

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[9] As of early-2010, 32 countries participated in the EITI—except for Norway all developing countries—while several more had signaled their intention to do so (see http://eitransparency.org/).

[10] For instance, see the 2005 report of the UN-sponsored Millennium Project headed by Professor Sachs, *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals* (http://www.unmillenniumproject.org/reports/index.htm), the 2005 *Report of the Commission for Africa* (http://www.commissionforafrica.org/english/report/introduction.html), and the UK DFID's 2006 White Paper *Eliminating World Poverty—Making Governance Work for the Poor* (http://www.dfid.gov.uk/About-DFID/Quick-guide-to-DFID/How-we-do-it/2006-White-paper-Making-governance-work-for-the-poor/).

[11] For two differing evaluations, see *The Resource Curse revisited and revised: A tale of paradoxes and red herrings*, by Christa N. Brunschweiler and Erwin H. Bulte, Journal of Environmental Economics and Management, 55 (2008) at http://www.ucl.ac.uk/bioecon/9th%20paper/Bulte.pdf and *Commodity Prices, Growth, and the Natural Resource Curse: Reconciling a Conundrum*, by Paul Collier and Benedikt Goderis, Working Paper, The Center for the Study of African Economies, 2007, at http://www.oxcarre.ox.ac.uk/wp-content/uploads/collier-goderis.pdf . For an empirical finding that the effect of institutions is greater for minerals than for oil and gas, see *Resource Curse or Not: A Question of Appropriability*, by Anne Boschini, Jan Pettersson and Jesper Roine, Scandinavian Journal of Economics, 2007, at http://www2.hhs.se/SITE/homepages/JespersPDFs/sjoe_509.pdf.

[12] See the UNDP Annual Report 2008 at http://www.undp.org/publications/annualreport2008/.

indicators shows that the oil-rich ones have performed not appreciably better, and indeed in some cases worse, than the non-oil-rich ones (see Table 1). Some of the worst performance is the result of civil war to which countries with natural resources seem more disposed than others.[13] But the great variation in country experiences clearly shows that the "resource curse" can be avoided. One only has to look at the starkly different development experiences of Indonesia and Nigeria—both equally underdeveloped and oil rich 50 years ago—or of Botswana and Sierra Leone—both equally poor and endowed with diamond deposits 30 years ago.

**Table 1. Indicators of Welfare across Regions—Oil and Non-Oil Countries**

| | CIS | | Latin America | | Middle East | | Sub-Saharan Africa | |
|---|---|---|---|---|---|---|---|---|
| | Oil | Non-Oil | Oil | Non-Oil | Oil | Non-Oil | Oil | Non-Oil |
| **Oil production** (barrels/cap/year) | 19.2 | 0.7 | 31.6 | 2.5 | 161.7 | 1.4 | 46.0 | 0.1 |
| **Life expectancy** (years) | 63.7 | 66.5 | 72.3 | 68.7 | 71.7 | 70.7 | 51.3 | 45.1 |
| **Child mortality** deaths per 1,000 live births) | 71.8 | 63.0 | 22.7 | 40.3 | 27.1 | 32.7 | 149.3 | 173.5 |
| **GDP per capita** (US$; PPP) | 6,012 | 2,348 | 6,086 | 4,581 | 9,959 | 4,202 | 5,109 | 1,178 |
| **Net primary school enrollment** (%) | 85.5 | 86.5 | 94.0 | 94.0 | 81.4 | 90.7 | 72.3 | 62.0 |
| **Roads** (km paved/1000 pop) | 4.2 | 4.0 | 3.4 | 5.0 | 5.2 | 1.4 | 5.2 | 3.2 |
| **Electricity** (KWh produced, cap) | 3,705 | 2,586 | 3,029 | 781 | 7,147 | 1,681 | 304 | 283 |

Jeffrey D. Sachs:*How to Handle the Macroeconomics of Wealth*
in *Escaping the Resouce Curse*by M. Humpreys, J. Sachs and J. Stiglitz (eds.), Columbia Press, 2007
Based on most recent World Bank data available to author

[13] For a comprehensive empirical analysis of the likelihood of civil conflict in the presence of natural resources, see *Beyond Greed and Grievance: Feasibility and Civil War*, by Paul Collier, Anke Hoeffler, and Dominic Rohner, May 2008, at http://users.ox.ac.uk/~econpco/research/pdfs/BeyondGreedandGrievance.pdf.

11. **Extractive industries exhibit features that pose serious challenges to governance.** These include their enclave character, the temptations associated with the rents they generate, and the complexity of the EI fiscal regimes. The EI companies are usually weakly integrated in the domestic economy and not covered by the host country's checks-and-balance mechanisms. The complexity of the EI fiscal regimes and associated contracts, plus the fact that the taxpayers are few in number, foreign, highly informed, sophisticated and politically powerful, creates an environment in which governance of the resource sector easily erodes. As governments receive more revenues from foreign EI companies, they are under less pressure to be accountable to citizen-taxpayers.[14] Finally, the large rents associated with natural resources permit key officials to extract illegal payments from companies, and companies to bribe officials to obtain privileges. From the agencies dealing with the EI sector, poor governance and corruption tends to spread to other government agencies, compromising their capacity to deliver quality public goods and services.[15]

12. **The debate on the "resource curse" has highlighted the role played by institutions.** Natural resource wealth may undermine institutions, or it may produce favorable economic outcomes only in the presence of sound institutions. In either case, strengthening institutions is critical. The potential pay-off is enormous: IMF staff estimates that if the quality of institutions in sub-Saharan Africa were raised to the level of developing Asia, a near doubling of Africa's per capita GDP might be possible.[16] The management of natural resource wealth is particularly demanding of accountability institutions, such as government auditors and parliamentary commissions. Their effectiveness depends on a free flow of information, within government and to the public. Transparency is a prerequisite for the well-functioning of every link in the "value chain" which turns natural resource wealth into sustainable development and poverty reduction.[17] [18]

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[14] See *Governance, Taxation and Accountability—Issues and Practices,* OECD/DAC, 2008, at www.oecd.org/dataoecd/52/35/40210055.pdf .

[15] See *Addressing the Natural Resource Curse: An Illustration from Nigeria*, by Xavier Sala-i-Martin and Arvind Subramanian, IMF WP 03/139, July 2003 at http://www.imf.org/external/pubs/cat/longres.cfm?sk=16582.0.

[16] See Chapter III of the September 2005 IMF World Economic Outlook on *Building Institutions* at http://www.imf.org/external/pubs/ft/weo/2005/02/.

[17] Transparency is the focus of the IMF's *Guide on Resource Revenue Transparency*, 2007 (see http://www.imf.org/external/np/exr/facts/fiscal.htm) and generally emphasized for natural resources (for instance, it is the organizing theme of *Escaping the Resource Curse*, Macartan Humphreys, Jeffrey D. Sachs and Joseph E. Stiglitz (eds.), 2007, Columbia University Press).

[18] See *Extractive industries value chain* by Eleodoro Mayorga Alba, World Bank Africa Region Working Paper #125, March 2009, at http://go.worldbank.org/KLQAH1H350 .

## II. TRUST FUND

### A. Objectives and Beneficial Outcomes

13. **The Topical Trust Fund (TTF) will permit an increase in IMF technical assistance (TA) on Managing Natural Resource Wealth (MNRW).** Its overarching objective is building economic policy and administrative capacities that would enable low-income countries to derive the maximum benefit from their oil, gas and mineral resources, boosting economic development and alleviating poverty in the process.

14. **Not only the TA-receiving countries but also the global community will benefit from the reform programs funded by the TTF (Box 2)**.

**Box 2. Beneficial Outcomes of the Trust Fund**

***For resource-rich countries***

- Maximization of revenues over the life-cycle of extractive projects, thanks to a fiscal regime that balances government and industry interests, and an effective administration for collecting revenues.
- More effective spending of resource revenues with the help of budgetary mechanisms tailored to the large size of resource revenue, and its volatile and finite nature.
- Better governance throughout the government by enhancing accountability through transparency in the public service dealing with resource revenues.
- More investment in the natural resource sector thanks to an attractive, stable investment climate that induces socially responsible behavior by companies.
- Full utilization of the expanded range of options for asset and liability management to maximize the country's welfare.
- Creation of information base on the economic impact of natural resources exploitation to inform strategic policy decisions.

***For the global community***

- Foster economic and social development in low and lower middle income countries by using aid money to leverage the development impact of natural resource revenues.
- An enlarged and more secure global supply of energy and minerals, including specialty metals.
- Improved climates for investment and production so that international resource companies can operate consistent with their corporate social responsibility standards and with their home countries' development policies.

The global community benefits because it takes a keen interest in more sustainable development and better governance in the recipient countries. But there are more benefits. The reforms promoted by this TTF render climates for investment and production more attractive. That benefits the global community in the form of greater and more stable supplies of energy and minerals. Securing the supply of oil and gas is already a dominant strategic concern, and concerns are now emerging over the secure supply, quality and availability of rare minerals for which the demand in industrial countries is growing strongly with the adoption of new environmentally-friendly technologies.[19]

15. **The TTF will also benefit donors and the IMF.** For donors it will be a useful mechanism for coordinating their assistance in the area of natural resource wealth management. It will further be an opportunity to exchange experiences with other donors and IMF staff on the topic. Likewise, improved coordination and knowledge exchange will be valuable to the IMF, helping it expand and deepen its expertise. Moreover, the IMF's TA delivery will benefit from the programmatic approach being introduced with the TTF, and the governance structure emphasizing results orientation and accountability.

## B. Scope and Nature of the TTF

16. **The TTF will concentrate on extractive industries, that is, oil, gas, and mining.** They share a number of characteristics, and thus there is a commonality in the best policy approaches, notably tax design, revenue administration and macroeconomic management. Extractive projects all have large sunk costs and long production periods, can produce substantial "rents",[20] may dominate a country's tax revenues, are often taxed as individual projects, and are taxed both nationally and internationally. These features are not unique to the extractive industries but their scale stands out. Truly unique to the extractive industries is that the resources are non-renewable which has implications for the design of optimal tax instruments.

17. **The TTF will address economic policy problems with technical solutions following international best practices.** It will fund capacity-building TA delivered by the IMF in areas that fall within the IMF's macro-economic and financial mandate, and where the IMF has established a reputation for expert assistance. Resolving economic-technical problems can help with overcoming the political-economy problems that are undeniably the main obstacles to good management of natural resources. By advocating simplicity in policy design and implementation, streamlined procedures, minimal administrative discretion, and accountability through maximum transparency, the TTF-supported TA will promote good governance and limit the scope for corruption.

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[19] See for instance the **European Union**'s 2008 *Raw Materials Initiative* (http://ec.europa.eu/enterprise/non_energy_extractive_industries/raw_materials.htm), the 2008 report by the **US** National Research Council *Minerals, Critical Minerals, and the US Economy* at (http://www.usgs.gov/newsroom/article.asp?ID=1800), and **Japan**'s *Guidelines for Securing National Resources* (www.meti.go.jp/english/newtopics/data/pdf/080328Guidelines.pdf).

[20] An economic rent occurs if the payment for some action exceeds the minimum cost required for it to be undertaken. With production costs of oil often at around $25 per barrel, or even substantially lower, the scope for rents given current world market oil prices is large.

18. **The TTF will seek to develop synergies with the many development partners active in this area** (see Box 3 and Annex 2 for an overview). IMF staff and external experts involved in TTF-funded programs will work closely with those stakeholders, consulting them early on, and engaging them throughout the reform process. Particularly important will be a further intensification of the good collaboration already existing with the World Bank. The Fund's mandate is to approach MNRW issues from a macro perspective, while the World Bank does so from a sector perspective. There is thus a potential for overlap which requires close coordination, especially in the field. The aim is to avoid fragmentation and duplication, exploit synergies, and respect the limited absorptive capacity of recipient countries. Doing so, the TTF will answer the call for donor coordination from the *2005 Paris Declaration on Aid Effectiveness* and the *2008 Accra Agenda for Action* which the IMF endorsed.[21]

19. **The multi-donor nature of the TTF will assist in addressing aspects outside the IMF's mandate and will enhance the TTF's legitimacy.** The IMF's mandate is limited to economic and financial aspects when in practice the responsible management of natural resources requires addressing other important aspects in conjunction. Examples are safeguarding against environmental risks and properly integrating gender issues in EI project designs. For those aspects the TTF will rely on other stakeholders. Furthermore, the support of a diversified group of stakeholders, each with their own economic, political, and development relations to the TTF eligible countries, adds legitimacy to the TTF, and will usefully reinforce its efforts. It will also help overcome the political sensitivities often surrounding the exploitation of oil, gas and minerals, both domestically and internationally.

20. **Good governance in natural resource management presupposes solid accountability procedures and those, in turn, require a high degree of transparency.** This is what motivated the *Extractive Industries Transparency Initiative* (EITI). In the same vein, this TTF will emphasize transparency for the institutions, arrangements and policies put in place. The IMF is the international standard setter for fiscal transparency, and the TTF will use the IMF's *Guide on Resource Revenue Transparency* as a benchmark for assessing transparency along the "value chain" transforming natural resource wealth into sustainable development.[22]

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[21] See http://www.oecd.org/document/18/0,2340,en_2649_3236398_35401554_1_1_1_1,00.html.

[22] The IMF adopted in 1998 its *Code of Good Practices on Fiscal Transparency*, revised in 2005 and 2007, from which in 2005 the *Guide on Resource Revenue Transparency* was derived, which was revised in 2007 (http://www.imf.org/external/np/exr/facts/fiscal.htm).

### Box 3. Trust Fund Complementarities with Other Stakeholders

The TTF will coordinate closely with other stakeholders to develop the synergies from complementary initiatives. In particular, it will coordinate with:

The **Extractive Industries Transparency Initiative (EITI),** which is an external accountability mechanism being implemented in some 30 countries. It receives funding from 16 countries and 19 companies and organizations, and has an annual budget of around $3 million which finances the activities of the Norway-based Secretariat in supporting the Board and conducting outreach. The TTF will support EITI implementation (see also Box 5).

The **EITI Multi-Donor Trust Fund**, which supports EITI implementation, such as organizing EITI institutions and mechanisms in country and organizing and financing EITI reports. It has13 donors who have committed almost $26 million, and is managed by the World Bank's Oil, Gas, Mining and Chemicals Department. It does not provide TA to government agencies on revenue administration as will the TTF.

The World Bank's **EITI++ Initiative**, which broadens the EI revenue agenda beyond revenue collection to cover the entire length of the resource value chain for selected countries and topics. Its emphasis is on transparency. The initiative is being piloted in half a dozen countries. No specific TA trust fund related to EITI++ is being considered.

The World Bank's **Oil, Gas, Mining and Chemicals Department**, which provides loans and finances TA, policy dialogue and analytical work in some 70 countries. The associated work on public financial management overlaps to some extent with the MNRW TTF and thus close coordination is essential. The Bank's comparative advantage is in dealing with sectoral economic and corporate issues, whereas the Fund's advantage is in macro-finance and revenue administration. The Department's new **Technical Advisory Facility (EI-TAF)** is a donor-funded program to provide rapid-response advice on EI transactions and, more broadly, on EI capacity building and policy frameworks.

The **Natural Resource Charter** is an Oxford University-based initiative to disseminate general precepts and technical guidance on the management of non-renewable resources. It intends to become a platform for exchanging information on best practices.

21. **The IMF has a track record in supporting the management of natural resource wealth with its unique ability to integrate multiple dimensions** (see Annex 3). Reform efforts tend to be more successful when the policy, administrative and legislative dimensions are closely coordinated. Given the scope of its activities, the IMF is well placed to do so, and also to exploit cross-country experiences in economic policies. Its membership is global, and spans all types of institutional arrangements and all stages of development. The IMF's continuous surveillance relations with its members and its periodic program relations offer opportunities for following up on capacity building TA, linking it to the country's broader macroeconomic policy agenda, and creating strong traction as a result.

22. **The IMF's strength in providing effective TA derives from its TA delivery model.** First, all IMF TA delivery is designed and guided by HQ staff, and largely delivered by them. TA missions typically consist of HQ staff complemented with external experts to cover specialized topics and bring practical experience. For the latter, the IMF draws on a roster of external experts—often staff from government agencies with which the IMF has a privileged relationship. External experts can also be engaged as short or long-term resident advisors, but are always supervised by, and interact closely with, IMF HQ staff. This "backstopping" ensures the TA is consistent with IMF best-practice advice. The systematic manner in which this is done stands the IMF apart from other TA providers and helps it realize its comparative advantage.[23] Second, all TA outputs are always formally reviewed internally by both functional and area department staff, realizing synergies between TA and the IMF's surveillance and lending operations. The fact that IMF TA reports are available to donors and other TA providers with a legitimate interest provides an additional layer of quality control. Finally, besides advice IMF TA includes training, seminars and workshops, as well as HQ desk-based review of the issues at hand. While continuing with this time-tested approach, the TTF will strengthen delivery further with its programmatic approach and results-based monitoring.

23. **The TTF-funded TA will be additional to the IMF's internally funded TA.** In parallel to the TTF, the IMF will continue to provide TA on natural resource wealth management from its own resources at the current level. That TA will complement the programmatic TA of the TTF in several ways, for instance to address urgent issues not anticipated in the work program with one-off missions, to serve countries not eligible for the TTF, or to cover natural resources other than hydrocarbons and minerals. The donor-funded IMF Regional Technical Assistance Centers (RTACs) will also complement the work of the TTF, with the former providing practical support in implementation and the latter tackling more complex diagnostic and strategic issues.[24] Because the TTF implies a substantial scaling up of IMF TA, the IMF will hire additional HQ staff and experts. Since appropriate hiring takes time, the TTF is expected to start operations only gradually.

## C. Eligible Countries

24. **All natural-resource-rich, low-income and lower-middle-income countries will be eligible under the TTF.** Besides countries already receiving large revenue flows from their natural resources, the group of eligible countries includes countries considered "prospective" natural resource producers based on ongoing exploration. Combining natural resource

[23] See the report commissioned by the IMF on its backstopping: *The Framework for TA in the IMF: A Qualitative Assessment of Benefits of the Approach to Backstopping and Project Management*, William J. Crandall, September 2009 (see http://www.imf.org/external/np/pp/eng/2009/090109A.pdf).

[24] For a description of the RTACs, see http://www.imf.org/external/np/exr/facts/afritac.htm .

endowment and income level resulted in the selection of, currently, some 50 countries eligible under the TTF (see Box 4 and Annex 2).

25. **Critical to the success of any TA is the recipient's commitment to reform.** Country commitment will be assessed when countries are selected for inclusion in the TTF's work program. The assessment will be informed by IMF and other stakeholder experiences with the country, and involve discussions with the authorities. The TTF will favor countries willing to undertake comprehensive reforms involving multiple modules (see section E) over a multi-year horizon. Commitment tests in the form of actions by authorities will be built into each project as part of results-based management. The quality of inter-agency cooperation will be an important consideration as well. The TTF's outreach component (see paragraph 48) will help authorities build domestic support for their reforms.

### Box 4. Selecting the Group of Eligible Countries

The countries eligible for TA from the TTF were selected based on the presence of hydrocarbons and minerals, and their income level.

With the government revenue and export information at its disposal, IMF staff has identified a set of 53 hydrocarbon or mineral rich countries, which served as the starting point (see Annex 1). In these countries revenues from hydrocarbons and/or minerals contributed on average over 2000-2007 at least 25 percent to total government revenue and/or export proceeds.

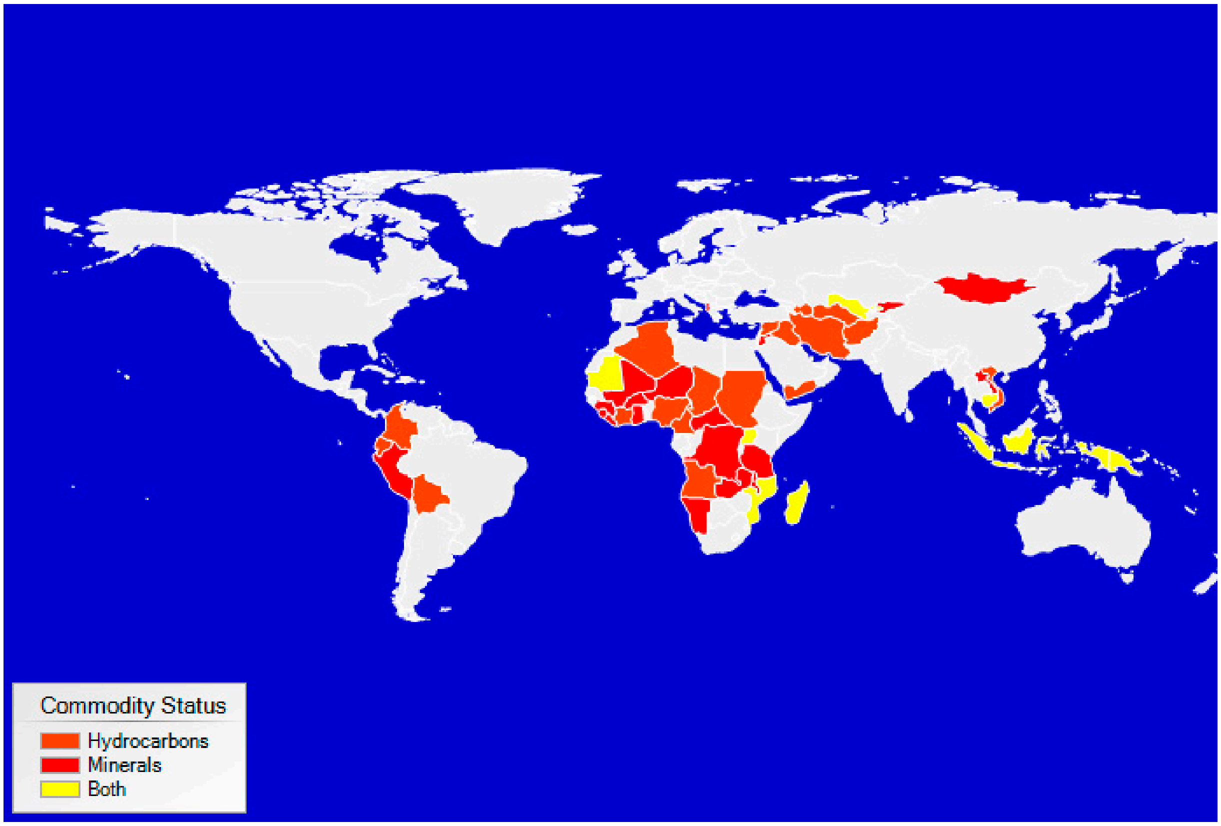
From this set were selected the 32 countries that fell in the low-income category (LIC ) and the 16 in the lower-middle income category (LMC) as defined in the World Bank's *World Development Report*.[25]

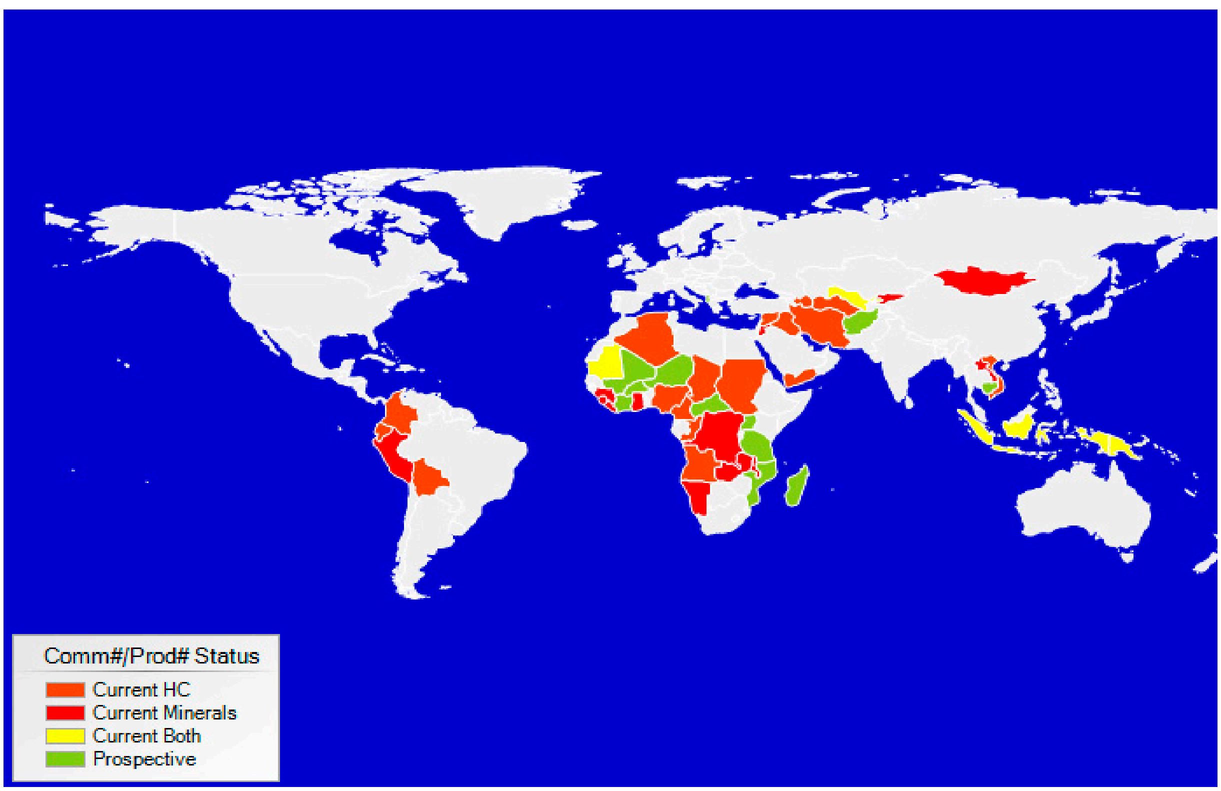
To this set were added a number of countries which on the basis of promising exploration are considered "prospectively" rich in hydrocarbons or minerals, including all LIC and LMC EITI candidate countries.

The end result is the group of 51 countries eligible in principle to receive TA under the TTF. Of those, 22 are mainly rich in hydrocarbons, 21 in minerals, and 8 in both. And 34 countries are current producers and 17 prospective ones (see Figure 1). Going forward, new EITI candidates that are LICs or LMCs will automatically be added as "prospective."

[25] The Bank's 2009 *World Development Indicators* divides countries into income categories on the basis of their 2007 GNI. Low-income countries have a GNI per capital of $935 or less, and lower middle income of $936-3,705. See the *World Development Report 2009* at http://go.worldbank.org/BG9ZDW9XZ0. All resource-rich countries classified in WDI since 2009 as LIC or LMC are in principle eligible.

**Figure 1. Eligible Countries**



26. **The group of eligible countries is heterogeneous with Africa heavily represented.** About two third are low-income countries (see Figures 2-6). The eligible countries are spread across the globe, divided over five of the six regions used by the World Bank for classifying developing countries. With some 25 countries, Sub-Saharan Africa accounts for roughly half of all eligible countries (about 40 percent if weighted by population).[26] About two thirds of the countries are mature producers already earning substantial revenue from hydrocarbons and/or minerals, while one third have prospects of becoming large earners of such revenues. Reforms brought about by the TTF are expected to help countries improve their performance on human development and quality of governance (see Figures 7 and 8). Presently the eligible countries despite their substantial resource revenue perform only slightly better than their income group on the UNDP's *Human Development Index*.[27] On Transparency International's *Corruption Perception Index*, the low-income eligible countries score very similar to their income group but the lower middle-income ones significantly below.[28]

[26] The World Bank distinguishes East Asia and Pacific (EAP), Europe and Central Asia (ECA), Latin America and the Caribbean (LAC), Middle East and North Africa (MENA), South Asia (SA), and Sub-Saharan Africa (SSA), plus High income OECD and Other High Income.

[27] See the 2007/2008 *Human Development Report* at http://hdr.undp.org/en/reports/global/hdr2007-2008/.

[28] See Transparency International website at http://www.transparency.org/policy_research/surveys_indices/cpi.

## Figures 2 – 6: Eligible Countries by Income, Region, and Production Status

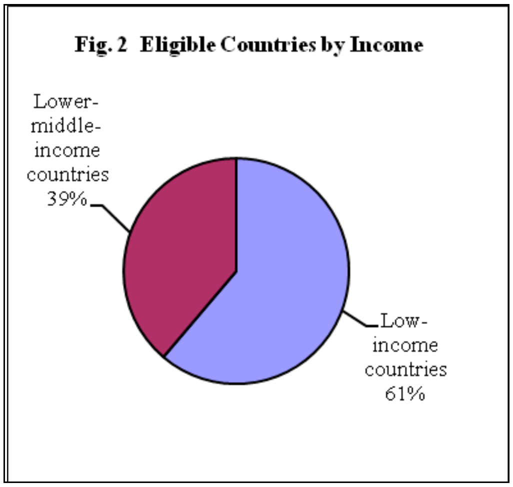



**Fig. 2 Eligible Countries by Income**

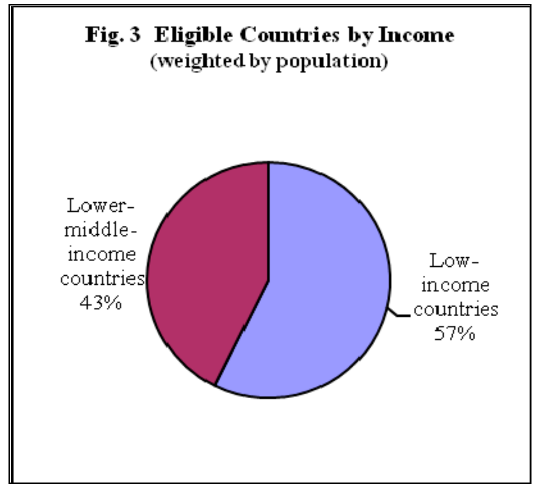



**Fig. 3 Eligible Countries by Income**
(weighted by population)

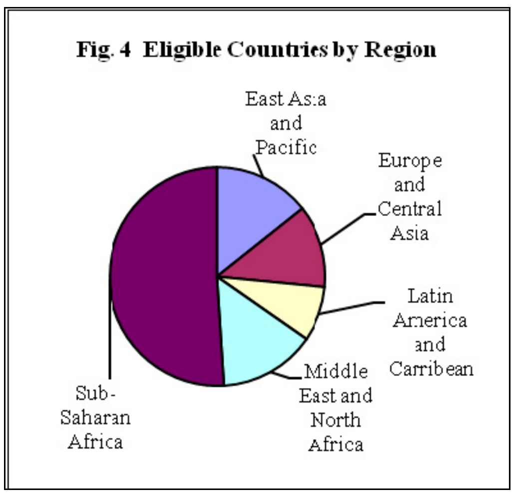



**Fig. 4 Eligible Countries by Region**

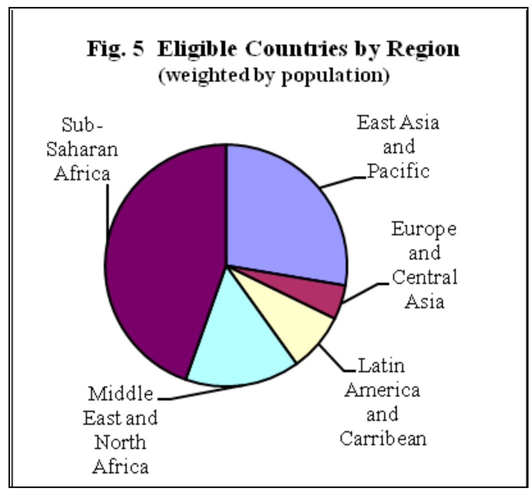



**Fig. 5 Eligible Countries by Region**
(weighted by population)

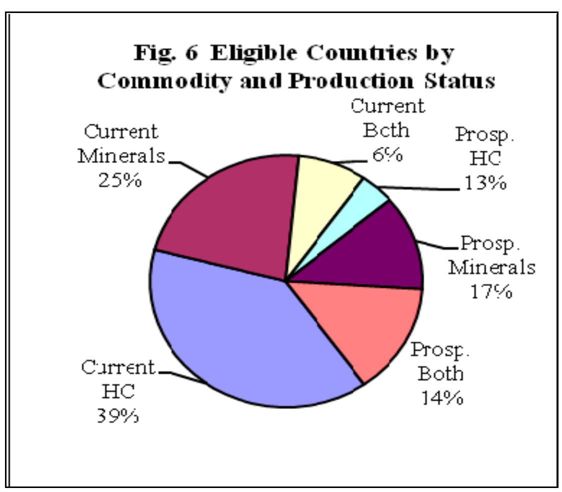
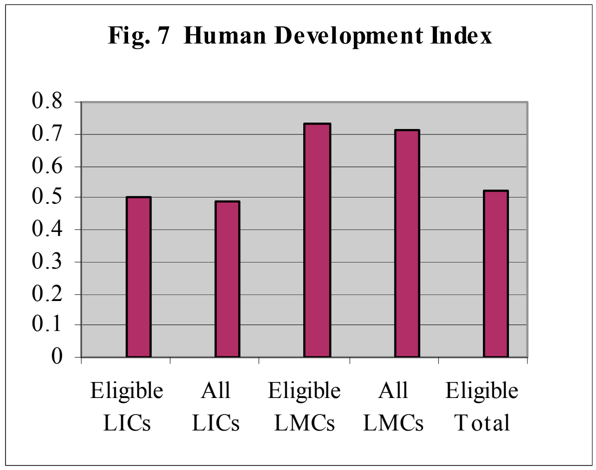
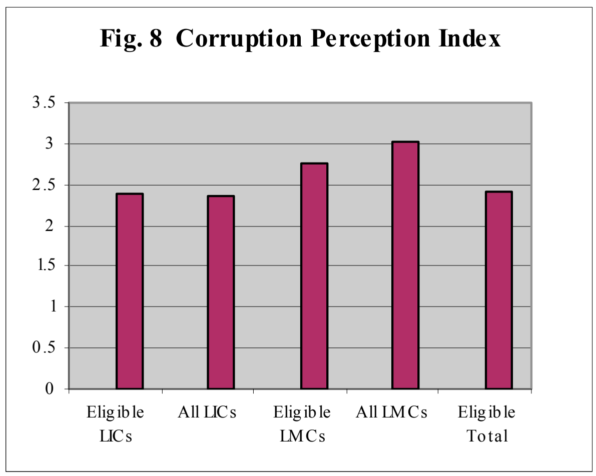



**Fig. 6 Eligible Countries by Commodity and Production Status**

**Figure 7–8: Eligible Countries by Human Development and Corruption Perception**




## D. Programmatic Approach

27. **The TTF will follow a programmatic approach facilitated by its modular structure.** The following are the key features of this approach. One, together the five modules cover the topics along the natural resource "value chain" on which the IMF has expertise, thereby offering eligible countries a comprehensive program of support. Two, the modules are defined around sets of concrete, desirable outcomes, and in any country they will aim to deliver an appropriate subset of those outcomes, for instance those that have the highest priority or are most achievable. Three, the application of one module will always involve multiple missions and other TA interventions and therefore typically take several years. Four, while the modules are interconnected they can be administered separately, allowing focused application. Countries where oil production has yet to start may benefit especially from assistance with their EI fiscal regime, EITI candidate countries may want assistance with revenue administration, and reserve-rich mature producers may want help with asset and liability management. Five, given that the modules are interconnected and mutually

reinforcing, the TTF will favor countries with the need and commitment to undertake several modules. In other countries, single modules will fill in gaps in capacity. In any event, every module will include an assessment of the usefulness for undertaking other modules. Finally, the success in achieving the predefined outcomes will be monitored and reported on.[29]

28. **Good coordination is stressed at all levels.** In recipient countries, different modules will typically be handled by different ministries or agencies. These include the ministry of finance, independent revenue and/or customs agencies, petroleum and mining ministries, president and/or prime minister's offices, EI regulating bodies, national resource companies, central banks and statistical agencies. The quality of cooperation between them will be judged in the context of government commitment. In the IMF at least three TA delivering departments will be involved.[30] The coordination of multiple modules, both in the recipient countries and at the IMF, is expected to produce valuable synergies. Where modules overlap, pragmatism will determine which one will include a specific outcome.

29. **Transparency is emphasized across modules to promote accountability and improve the quality of decision-making.** Transparency in fiscal policy gives citizens the information they need to hold their government accountable. But transparency in the form of easily available, comprehensive and reliable information about past, present, and future activities of government also informs and improves the quality of economic policy decisions. For natural resource management this is all the more important given the huge impact it can have on economic policy and given its long-term ramifications. Therefore each TTF module includes an independent assessment of the transparency of the pertinent institutions, arrangements and policies. This assessment can either serve as an ex-ante diagnosis, to inform the design of a reform program, or be done ex-post to evaluate the beneficial impact of reforms undertaken. The IMF's *Guide on Resource Revenue Transparency* will be used to benchmark these transparency assessments.

30. **A logical framework approach will permit the monitoring of results.** As noted, modules are defined around sets of *outcomes*. These are the intended changes that result from the interventions by government, the TTF, and other stakeholders. They are considered prerequisites for achieving desirable higher level *objectives*. The TA *inputs* financed from the TTF will be used to produce well-defined *outputs* over which the IMF staff has control. Ultimately the TTF will be judged by the degree of success in realizing the sought-after outcomes, a process monitored through *verifiable indicators* to the extent available. Annex 5

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[29] Where modules overlap, pragmatism will determine which one will include a specific outcome. At least three TA delivering departments will be involved: Fiscal Affairs Department (FAD), the Monetary and Capital Markets Department (MCM) and the Statistics Department (STA). They may draw on the support of the IMF's Legal Department (LEG) and the IMF Institute (INS). The Office of Technical Assistance Management (OTM) handles donor relations. For an overview of the IMF, see http://www.imf.org/external/about/staff.htm.

contains a broad logical framework covering these steps for all five modules, together with the *risks*. Within this broad framework, the IMF will prepare detailed project proposals for each module application to a specific country. These proposals would include outputs, outcomes and indicators specific to the project. The indicators will be sufficiently broken down to show government commitment and permit periodic review by the TTF Steering Committee.

## E. The Modules

31. **The TTF modules cover policies instrumental to developing countries as they try to maximize the benefits from their oil, gas and mineral resources.** The five modules correspond with IMF areas of expertise:

- Module 1: EI Fiscal Regimes, Licensing and Contracting
- Module 2: EI Revenue Administration
- Module 3: EI Macro-Fiscal, PFM and Expenditure Policy
- Module 4: Natural Resource Asset and Liability Management (ALM)
- Module 5: Statistics for Managing Natural Resources

Below follows a brief description of the specific challenges each module will address, providing the context to the module *outcomes* targeted by the TTF, which are listed in the logical framework (see Annex 5).

### E.1 Module 1—EI Fiscal Regimes, Licensing and Contracting

32. To prepare for the exploitation of its natural resources, a country must adopt a complex set of interrelated laws, rules and regulations. The officials in charge should be able to negotiate with international EI companies lobbying hard for results that serve their corporate interests. Sector specific laws should be in harmony with national tax laws, and domestic rules and laws must be harmonized with international tax treaties. Standardized or model contracts by limiting the number of negotiable variables enhance transparency and improve the negotiation process. Mining should be covered by the general taxation regime with just a few mining-specific features. In general, the more reliant the EI fiscal regime is on the general tax regime, the more coherent and easier to implement it will be. Arm’s length pricing rules must be prescribed in order to prevent abusive transfer pricing. The fiscal regime needs to also provide for the clean-up of environmental damage and mitigation of environmental risks.

33. Analysts and practitioners broadly agree on the key characteristics of a good EI fiscal regime. First, it should be “neutral”, that is, not distort investment and production decisions. Second, the regime should reserve the major portion of possible resource rents for the

government, something that can be argued on both efficiency and fairness grounds. Third, the regime should assign risk to government and investors depending on their abilities to bear risk. Fourth, it should usually be "progressive", that is, lead to higher payments to government as underlying profitability increases, for instance when commodity prices rise. And, fifth, the regime should be flexible or adaptable to changing circumstances, thereby increasing the likelihood that it will be adhered to.

34. These characteristics involve difficult trade-offs. For developing country governments there is much to be gained from minimum complexity and maximum transparency. The IMF can provide quantitative assessments of the revenue and incentive implications of alternative regimes and/or contracts. When a government wants to participate in the equity of a natural resource venture—which it can do directly or through a National Oil Company (NOC)--the fiscal and commercial implications must be evaluated in combination. Political-economy considerations may dictate fiscal decentralization which should be organized so as to balance revenue with spending responsibilities, and preserve the central government's ability to conduct macroeconomic policy.

35. The assignment of exploration and exploitation rights has very long-term implications and is therefore critically important. It should be done transparently, to assure accountability and competition. When feasible, auctions constitute an inherently transparent approach for assigning rights. Under certain circumstances other approaches may be preferable, but those, too, can be conducted transparently, including by publishing the contractual arrangements once finalized.

36. The IMF has a long-standing expertise on fiscal regimes, both regarding practical advice and research. It provides extensive TA in broad tax policy, and tax issues feature prominently in its annual consultations with member countries. Currently the IMF provides TA on resource tax policy annually to half a dozen developing countries, and recently has been expanding its research on resource taxation issues.[31] The TTF will assist governments to prepare for contract negotiations by providing general policy advice, but will not directly support negotiations; for this the World Bank and the African Development Bank are developing facilities.

### E.2 Module 2—EI Revenue Administration

37. Organizing the collection of EI revenues is conceptually straightforward but quite problematic in practice. Developing countries face enormous problems in collecting all taxes and other payments due to them. Typically revenue collection is fragmented and administrative capacities are weak. All revenues due may not be collected, or if they are, they

[31] See *The Taxation of Petroleum and Minerals: Principles, Problems and Practice*, edited by Philip Daniel, Michael Keen and Charles McPherson, IMF and Routledge, London, 2010.

may not be centralized in the budget. The process is vulnerable to abuse and consequently in many countries citizens mistrust the results. This is what motivated the EITI to strive for greater transparency in the payment and receipt of EI revenues. EITI Candidate Countries will need a well-organized EI revenue administration to meet their commitments (see Box 5).

38. EI tax regimes and accompanying regulations are complex, and the international EI companies enjoy a huge information advantage over country authorities in applying them. The large rents generated pose a continuous threat to the integrity of the process. The secrecy surrounding the EI fiscal regime and contracts stymies the flow of information and makes it hard to organize an effective collection effort. Collection of government revenues by national resource companies is popular but raises serious agency problems. Fiscal and cost audits, up to international standards, and of a quality that matches the skills of the corporate taxpayers and is commensurate to the large sums at stake, are beyond what most developing-country revenue administrations can do on their own. As a result, abusive accounting and transfer pricing practices often go unchecked and large amounts of revenue are foregone. Revenue collection from numerous, small-scale artisanal mining projects is beset with its own particular problems, notably the informal character of the sector making it difficult to tax effectively.[32]

39. Besides monetary payments, countries receive large in-kind payments. Under the Production Sharing Contracts (PSC), popular in oil and gas exploitation in developing countries, governments receive volumes of oil and gas as their production shares, which they then have to market. NOCs tend to play a big role in this marketing, effectively acting as fiscal agent. Often these proceeds account for the majority of EI revenues. The fiscal valuation of those in-kind revenues, their storage and marketing all involve special competencies and are usually not the responsibility of tax administrations. Nonetheless the ministry of finance retains overall responsibility for making sure that what is due is collected for the budget. Metering and valuation of commodities are critical steps not only under a PSC but also under a tax and royalty system.

[32] The *Kimberley Process*, an international initiative closely involved with artisanal mining of diamonds, collects detailed data which may be helpful to a revenue administration (see http://www.kimberleyprocess.com/).

## Box 5. Supporting EITI Implementation

**The TTF helps the EITI achieve its operational objective and strives for the same broader objective.** In collecting revenues from the exploitation of their natural resources, low-income countries with weak administrative capacities face **three major challenges.** They must make sure that:

1. all payments by EI companies are accounted for in the budget process;

2. EI companies pay what is *due* under the fiscal regime and contracts; and

3. EI companies pay the country a fair return on its natural resources.

The EITI broad objective is to strengthen governance by improving transparency and accountability in the EI sector. Its operational objective is limited to the **first challenge**, namely corroborating government *revenue* information by comparing it to company *payment* information. This narrow focus is the reason for the EITI's popular appeal and effectiveness. It puts the spotlight on the budget process as the proper political mechanism for allocating EI revenues to spending priorities. Rigorously drafted EITI reports will greatly enlarge publicly available information on resource revenues. To meet their commitments to the EITI, governments must be able to produce revenue information that is of sufficient detail and quality to match the company information. It must also be consistent with the official public finance accounts. EITI reports published to date suggest that this capacity in many countries is weak. Hence, TA to governments under **Module 2 on EI Revenue Administration** will directly support EITI implementation. In the longer run, it will help establish domestic accountability mechanisms that can make the EITI redundant.

But the TTF goes beyond the EITI's narrow focus and addresses the other two challenges as well, thereby supporting the EITI's broader objective. Through Module 2 it will train EI revenue administrations to deal with the **second challenge**, in particular their capacity to conduct high-quality tax and cost audits and to follow up the results. And the **third challenge** will be addressed under Module 1 by designing a proper EI tax regime including model contracts, plus licensing system.

40. Traditional tax administration collects only part of resource revenue, namely the corporate income and other taxes due by EI companies. Royalties and production shares are typically collected by the resource ministries and/or national resource companies, export taxes by customs, surface taxes by property administrations, and dividends on equity participations by property administrations and/or national resource companies. Clear institutional responsibilities for the collection of each of these revenue flows should be assigned, reporting obligations established, information centralized in the ministry of finance for budget reporting, and accountability mechanisms established to ensure the integrity of the revenue flows, including ex post audits. A large taxpayer office (LTO) in the tax administration can play an effective role in collecting the tax part of the revenues and overseeing the whole administration effort. In-sourcing international expertise for specialized tasks will often by cost effective given the large amounts of revenue that could otherwise be foregone.

41. For revenue administration, as for tax policy, the TTF will draw on the IMF's extensive expertise and practical experience. Given the importance of stable revenue mobilization for macroeconomic policy, building capacity in tax and customs administration has always been part of the IMF's mission. It has an in-house expertise of some twenty professional staff, and recently has been developing specific expertise in resource tax administration, through country workshops, TA missions and research.[33]

### E.3 Module 3--EI Macro-Fiscal, PFM and Expenditure Policy

42. In a country that depends heavily on revenues from oil, gas and mineral resources, macroeconomic management must contend with special challenges linked to unique features of those revenues. For one, these revenues exhibit great volatility—largely due to cyclical price swings on the world market but also to variability in production—and are non-renewable and thus finite. Also, the revenues may be on a scale the country is unable to absorb effectively in the short term. The volatility in revenues may spur boom-bust development cycles detrimental to growth. The finite nature of the resources raises questions on how to split the revenues between savings and consumption to best serve intergenerational equity and prepare the economy for the post-resource period. Income distribution will emerge as an issue, and the government has to be adept at managing expectations.

43. The macro policy decisions on resource extraction and the associated revenues should be taken within the context of the country's long-term development strategy. They should be based on a good understanding of the value of the natural resource endowment and the potential flow of revenues to the government under different assumptions about commodity prices and extraction rates. The paramount decisions will be how much of the revenue to consume and how much to save and invest, and, of the investments, how much should be in financial assets abroad and how much in physical and human capital at home. Increasing absorptive capacity would permit more investments at home. Trust by the citizenry in how its government handles resource revenues will increase the macroeconomic policy options.

44. A revenue management system based in law can help with institutionalizing some of these key decisions once taken, but runs the risk of introducing fragmentation and costly rigidities in public financial management. All spending decisions are best taken in the context of a medium-term budget framework based on conservative projections of resource revenues and consistent with long-term fiscal sustainability. Given the inevitable volatility in resource revenues, it is important to secure the financing of all investment projects at the time of launch. The budget process can forge broad political support for the direction chosen if it is participatory and transparent. All relevant information should be available on the resource envelope, on the risks to the envelope, and on the claims already in existence. A fiscal responsibility law may be helpful.

[33] See paper by Calder in Daniel, Keen and McPherson (2010) of footnote 31.

45. Finally, resource-rich countries often face difficult spending decisions not observed in other countries. These include: sharing of revenues with sub-national governments or localities where extractive industries are located; subsidization to stabilize domestic retail petroleum product prices below world market levels; and infrastructure investment financed directly from resource revenues.

46. These specific resource-management issues require fiscal capacities which the IMF given its macro-fiscal orientation is uniquely placed to help build.[34] The activities undertaken in this module will focus on a set of outcomes--described in Annex 5—which are vital to countries endowed with non-renewable resources. As such, this module is distinct from ongoing IMF TA in this topic area. The module complements the other two fiscal modules, and enables the TTF to address a range of interrelated resource management issues, such as the desired consumption-savings time profile and safeguards against boom-bust investment cycles.

### E.4 Module 4—Natural Resource Asset and Liability Management (ALM)

47. High EI revenues, currently or prospectively, create major challenges and opportunities for asset-liability management (ALM). Over the course of decades sound investment strategies will make a massive difference to the return from natural resources, and can offset some of the volatility in the revenues and the value of the resources themselves. But there are also risks involved which low-income countries may find hard to handle, and good governance becomes an imperative.

48. The exploitation of natural resources over time may generate a substantial increase in the country's foreign financial assets. Besides on the size of the natural resource reserves, the amount and longevity of this increase will depend on strategic decisions regarding the rate of the exploitation, the extent to which they are exported, the consumption-investment split and the proportion of financial investments in overall investments, and the rates of return on the financial assets. Private sector revenues from EI will add to international reserves depending on repatriation provisions and deposit behavior.

49. These financial assets may be accumulated in the central bank as international reserves (often with indirect government ownership through claims on the central bank), or in a sovereign wealth fund (SWF), managed by the central bank or a separate entity. A key task of governments is to decide on the purposes of the asset accumulations and the accompanying governance structures. The investment strategies or strategic asset allocation (SAA)

[34] See for instance *Managing the Oil Revenue Boom: The Role of Fiscal Institutions*, by Ossowski, Rolando, Villafuerte, Mauricio, Medas, Paulo, and Thomas, Theo, IMF Occasional Paper 260, April 30, 2008 at http://www.imf.org/external/pubs/cat/longres.cfm?sk=20565.0, and *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*, by Davis, Jeffrey, Ossowski, Roland and Fedelino, Annalisa, IMF 2003, at http://www.imf.org/external/pubs/cat/longres.cfm?sk=16018.0.

frameworks need to be in line with the stated purposes (see Box 6). In all cases, reserves should be invested so as to render a maximum return over the investment horizon in the chosen currency composition, while meeting the government's minimum standards for liquidity and security. The internationally endorsed Santiago Principles, drawn up with help of the IMF, promote the sound and transparent management of SWFs.[35] Macro-financial linkages from the SWF to the domestic economy need to be assessed and planned for.

50. The revenue volatility associated with commodity income can be reduced by hedging the price risk. Commodities can be sold forward thus locking in the price and thereby providing certainty as to the revenue. This requires strong governance frameworks and institutions with market knowledge. Typically such sales are limited because the hedging markets are not deep, and because of sensitivity to later criticisms that benefited from hindsight. Some countries therefore prefer to use options rather than forward sales to limit their price exposure.

51. The exploitation of hydrocarbons and minerals usually makes a major impact on the environment. To prepare for the eventual clean up of their sites as per national environmental regulations, companies under most EI contracts are required to start making provisions to cover clean-up or abandonment costs once depletion reaches a certain threshold.[36] The amounts accumulating in these abandonment funds tend to be large, since clean-up costs are large—they can equal the development costs. Governments must see to it that they are securely invested as an earmarked reserve, so as to be available at the end of the EI project.

52. Asset management decisions should be coordinated with debt or liability management to produce the desired risk-return combination. Resource-rich developing countries often have access to debt financing options not normally available to countries of their income level. These include credit facilities collateralized against future revenue from resources and structured-financing, for instance so called "carried-interest" loans to cover the costs of government equity investments in resource projects. Debts contracted by a national resource company are often effectively guaranteed by the government and should be integrated in public debt management. In particular, the bartering of natural resources for infrastructure, as currently done in Africa, has debt implications that require a careful assessment.

53. On account of its strong relationship with central banks and its focus on balance of payments issues, the IMF plays a prominent role in reserve and debt management. As noted, the IMF helped draw up guidance for SWFs. It also authored guidelines for foreign reserve

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[35] For the *Sovereign Wealth Funds—Generally Accepted Principles and Practices* ("Santiago Principles"), see http://www.imf.org/external/pubs/ft/survey/so/2008/NEW101508B.htm.

[36] The topic is covered in the IMF's *Guide on Resource Revenue Transparency* (see paragraph 63 in http://www.imf.org/external/np/fad/trans/guide.htm). See also the dedicated publication from the *International Council on Mining and Metals* (http://www.icmm.com/document/23).

management,[37] and, together with the World Bank, guidelines for debt management.[38] The IMF helps *the International Working Group of Sovereign Wealth Funds* (IWG) to organize several meetings per year, and hosts an annual roundtable for reserve managers. It has been putting out a considerable body of research and technical cooperation advice.[39] Drawing on this expertise, the TTF is uniquely placed to offer an integrated approach to asset and liability management to resource rich countries.

### Box 6. Objectives of SWFs and Corresponding Investment Strategies

**Different objectives for saving resource revenues require different investment strategies.** Countries with large deposits relative to exploitation, or with good prospects for finding new deposits, such as Russia, can continue extraction at the same or even an increasing pace for a long time. They may want primarily to insulate their budgets from large price fluctuations. Countries with natural resources that are clearly going to be depleted over a foreseeable horizon, such as Norway, may be primarily concerned with sharing this wealth with future generations.

**Stabilization funds** are designed to meet the budget objective. They therefore have relatively short investment horizons (of about 10 years, in line with the commodity price cycle over which they need to smooth available resources) and will invest mostly in government bonds. They may also invest in instruments that are negatively correlated with the price risk the fund is meant to cover.

**SWFs with the objective of saving** part of the wealth for future generations have much longer investment horizons and therefore can invest in securities with greater short-term volatility but better long-term returns (including notably equity). They may also aim to preserve a certain amount of capital, in real terms in the short-term, to put a floor on the purchasing power of the fund.

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[37] See the IMF's 2001 *Guidelines for Foreign Exchange Reserve Management* at http://www.imf.org/external/np/mae/ferm/eng/ and the accompanying 2005 paper with case studies at http://www.imf.org/external/pubs/ft/ferm/guidelines/2005/.

[38] See the 2000 *Public Debt Management Guidelines* at http://www.imf.org/external/np/mae/pdebt/2000/eng/.

[39] See for instance *Setting up a Sovereign Wealth Fund: Some Policy and Operational Considerations by* Das, Udaibir S., Mulder, Christian B., Sy, Amadou, and Lu, Y, IMF Working Paper No. 09/179, August 2009, at http://www.imf.org/external/pubs/cat/longres.cfm?sk=23205.0; *Sovereign Wealth Funds: Current Institutional and Operational Practices*, by Hammer, Cornelia, Kunzel, Peter, Petrova, Iva, IMF Working Paper No. 08/254, November 2008, at http://www.imf.org/external/pubs/cat/longres.cfm?sk=22453.0; and *Macrofinancial Linkages of the Strategic Asset Allocation of Commodity-Based Sovereign Wealth Funds*, by Brown, Aaron, Papaioannou, Michael G., Petrova, Iva , IMF Working Paper No. 10/9, January 2010 at http://www.imf.org/external/pubs/ft/wp/2010/wp1009.pdf.

### E.5 Module 5—Statistics for Managing Natural Resources

54. Good statistics are indispensable for sound macroeconomic decision making. Strategic decisions in the exploitation of natural resources, with their long horizons, great uncertainty and irreversible implications, are particularly demanding on the quality of information. Often in the aggregate statistics developments in the natural resource sector overshadow what is happening elsewhere in the economy. This complicates the pursuit of a policy of economic diversification. It also makes it hard to adequately assess the overall economic impact of large natural resource projects—including multiplier effects—as part of the approval process. A proper separation of natural resources within the national accounts statistics and other areas of macroeconomic statistics is therefore useful. To guide a policy of high investment rates, good statistics on national saving are particularly important. Macroeconomic and public financial management need to be well-informed on the continuous contributions EI sectors make despite the volatility in their revenues. On the global level, deficient information on reserves and production of, and investments in, natural resources has been identified as a source of instability. This is being addressed by international data initiatives, such as the *Joint Oil Data Initiative*[40], in which developing countries are also encouraged to participate.

55. Resource-rich countries will find it useful to have accumulation flow and stock data for nonfinancial assets related to natural resources, both produced and non-produced, by the sector generating the flows and/or controlling ("owning") the assets. These sectors comprise nonfinancial corporations, financial corporations, general government, households, and non-profit institutions serving households. The non-produced assets covered by the TTF would be 'natural resources' and 'contracts, leases, and licenses' (where the latter pertain to natural resources, such as emissions permits). These statistics constitute measures of national wealth and are fundamental to designing and monitoring the implementation of an effective policy managing national wealth including natural resources. The initial focus of the TTF is on selected resources, important in the national context, rather than comprehensive coverage. TA under the module would identify and prioritize data gaps and devise statistical development strategies to fill them.

56. The IMF is the standard setter for several key statistical systems, as well as a major compiler and disseminator of country financial statistics.[41] Furthermore, the IMF developed and manages a framework for improving the quality of statistics and their dissemination

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[40] Of the 25 TTF eligible countries currently producing hydrocarbons, nine (mostly low-income) do not participate in the *Joint Oil Data Initiative* (JODI). See http://www.jodidata.org/.

[41] IMF statistical products include its *Balance of Payments Manual*, its *Government Finance Statistics Manual*, and its *Monetary and Financial Statistics Manual*, and data are disseminated through the IMF's *International Financial Statistics* (see http://www.imf.org/external/data.htm#sc).

especially for its developing country members.[42] With its concentration on extractive sectors, the work of this TTF would complement ongoing IMF data development and TA on real sector statistics, including in the regional TA centers.

### F. Outreach, Research and Analytical work

57. **Building capacity in government for managing natural resource wealth in low-income countries requires engagement with civil society.** In many countries civil society organizations are active in promoting a better understanding of the technical, economic and political issues involved in the beneficial exploitation of their country's natural resources. This is a positive development which fits well with the TTF's transparency objective. But more information translates into improved political dialogue and effective accountability *only* if it is trusted and properly understood. In countries embarking on resource exploitation that is often not the case. The TTF will join efforts with civil society to educate the public on natural resource wealth management through the outreach activities contemplated under the program.

58. **The TTF will reach out beyond the recipient government agencies.** During every major mission the TTF experts will set aside one day to meet with wider government—other ministries, parliament, government accountants and auditors, the offices of the prime minister and president—and with civil society at large—local NGOs, churches, unions, academics, press, etc. They will use that opportunity to share their general knowledge on the topic matter they are assisting with, but also to describe country specific circumstances and discuss the choices the country is facing. This outreach will be coordinated with the recipient country authorities.

59. **Conferences and workshops will disseminate issues, practices and policies for managing natural resource wealth in TTF-eligible countries.** The TTF envisages targeted research and analytical work to identify good or best practice approaches and distill lessons from experiences. The results will be disseminated widely, including to policy practitioners, development partners and other stakeholders, via publications, and regional and international workshops and conferences. Possible topics are:

**Fiscal Policy**

- EI fiscal design and implementation experience.
- International resource tax administration models and experience.
- Best practices in the monitoring, control and reporting of financial flows in EI resource sectors.

[42] See the description of the General Data Dissemination System (GDDS) at http://dsbb.imf.org/Applications/web/gdds/gddshome/.

- Fiscal and financial roles of national resource companies.

**Asset and Liability Management**

- Modeling to derive optimal asset allocations taking into account price uncertainty and the size of natural resource deposits.
- Analysis of macro-financial linkages dominant in resource-rich countries.
- Direct and indirect hedging of commodity-export revenues using derivative markets and the asset allocations of SWFs.

**Statistics**

Methodological papers and compilation guidelines on:

- Measuring the impact of natural resources on national accounts (particularly oil/non-oil GDP; mining/non-mining GDP)
- Improving statistical recording of transactions for natural resources from production sharing agreements and joint exploitation arrangements in the national accounts
- Developing sectoral balance sheets for natural resource assets.

## G. Projected Resource Needs

60. **The budget of the TTF for five years of operation is estimated at about $25 million.** The work program and cost estimate factor in the likely demand for the various` modules. The breakdown of costs by category is shown in Table 2, on an annual basis, and in Figure 9 for the whole period. The relative size of the modules is shown in Figure 10. The Revenue Administration module is the largest since this area has been relatively underserved so far, and is followed by the other two fiscal modules. The Statistics and ALM modules are smaller reflecting the projected smaller demand. The evolution of spending under the modules over the program period is shown in percent of total in Figure 11.A and in US dollar costs in Figure 11.B. These indicative projections presume a slow ramping up in year one and a winding down in year five of the TTF. It is further assumed that each in-country module application will take two years to complete, and the projected costs are spread accordingly. Based on the estimated module costs, the TTF could apply the modules about 37 times. Assuming on average two modules are applied per country, this implies the TTF could cover about 18 countries over its five year funding cycle.

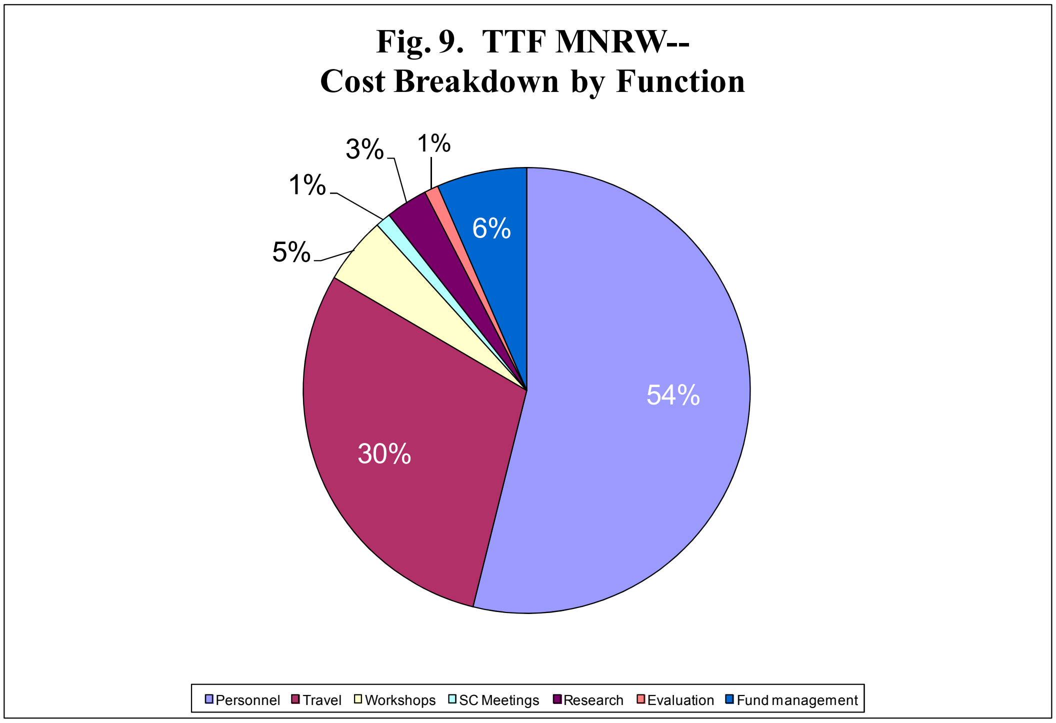
## Table 2. TTF MNRW—Resource Needs and Expenditures

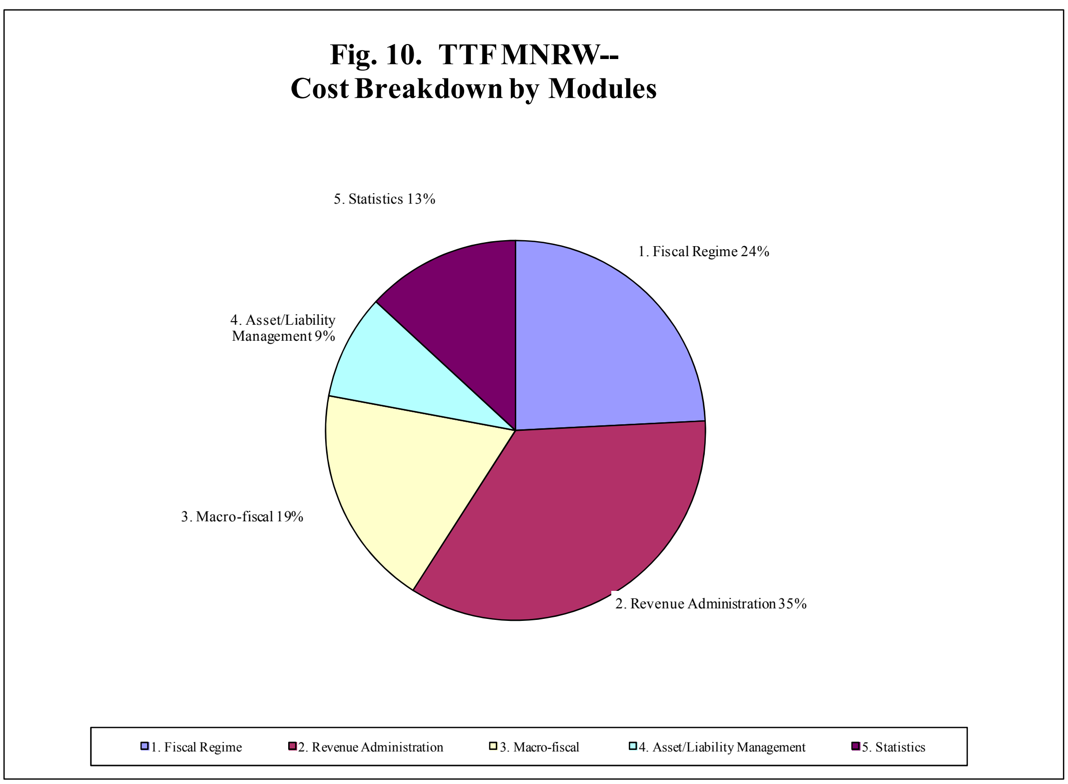
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total | Percent |
|---|---|---|---|---|---|---|---|
| In '000s of US$ | | | | | | | |
| | | | | | | | |
| **Personnel costs** | 2,107 | 4,307 | 5,320 | 6,019 | 2,884 | 20,635 | 83.4 |
| **TA delivery (1)** | 1,380 | 2,764 | 3,393 | 3,903 | 1,884 | 13,324 | 53.9 |
| **Travel** | 726 | 1,542 | 1,927 | 2,115 | 1,000 | 7,311 | 29.6 |
| | | | | | | | |
| **Workshops/Conferences** | 225 | 225 | 225 | 225 | 300 | 1,200 | 4.9 |
| | | | | | | | |
| **Research** | 150 | 150 | 150 | 150 | 150 | 750 | 3.0 |
| | | | | | | | |
| **Steering Committee meetings** | 50 | 53 | 55 | 58 | 61 | 276 | 1.1 |
| | | | | | | | |
| **Evaluation** | - | - | - | 250 | - | 250 | 1.0 |
| | | | | | | | |
| **Trust fund management fee (2)** | 177 | 331 | 402 | 469 | 238 | 1,618 | 6.5 |
| | | | | | | | |
| **Total** | 2,709 | 5,065 | 6,152 | 7,171 | 3,632 | 24,729 | 100.0 |
| **Percent of total** | 11.0 | 20.5 | 24.9 | 29.0 | 14.7 | 100.0 | |

(1) Includes HQ-based work, field delivery of TA through staff missions and experts visits, backstopping, and project management.

(2) Equal to 7% of TTF expenditures. Covers costs of maintaining donor relations, including reporting, legal support and financial transactions.

**Figures 9–10: TTF MNRW Cost Breakdown by Function & Modules**



# Figure 11: TTF MNRW Annual Costs

Fig. 11.A TTF MNRW Annual Costs by Module--% of Total

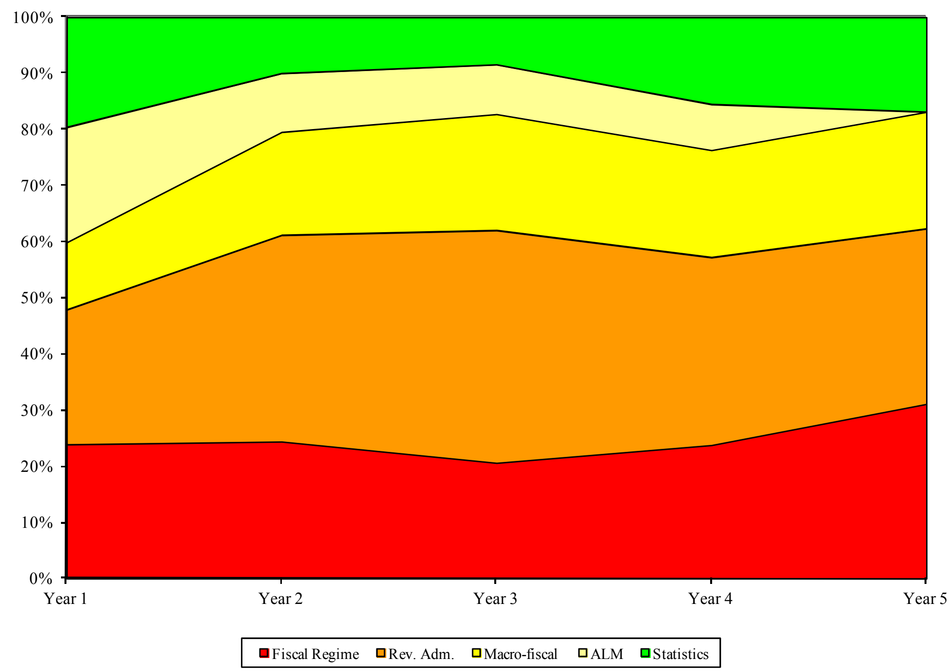
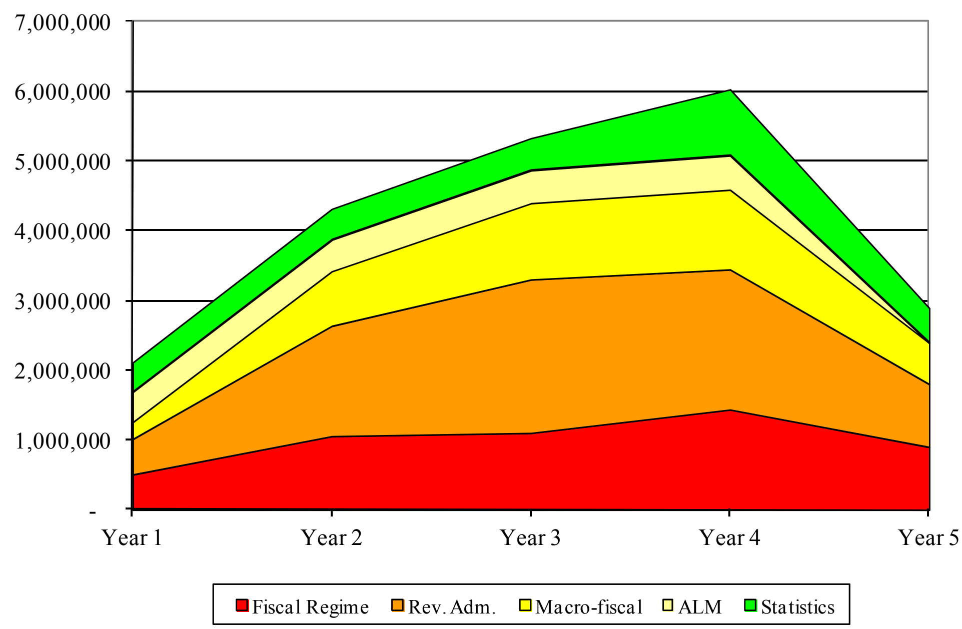



Fig. 11.B TTF MNRW Annual Costs by Module--US$



## III. Governance and Operational Arrangements

61. Compared to a bilateral approach, organization into a multi-donor trust fund generates substantial efficiency gains in organizing and administering TA while improving donor coordination and ensuring a global approach, reach, and visibility. The governance and operational arrangements of the trust fund aim to reap fully these benefits.

### A. Governance Structure

**Steering Committee**

62. **Work under the TTF will be guided by a Steering Committee (SC), composed of donor representatives and IMF staff.** The SC will be chaired by a donor representative, with the possibility of rotating the chairmanship among donors. IMF staff will serve as the Secretariat to the SC. Committee meetings will be held annually, with additional meetings as necessary. When appropriate, other stakeholder organizations could be invited to participate as observers. The Secretariat will ensure a regular flow of information throughout the year and, if necessary, consult informally with the SC.

63. **The SC's function is to provide strategic guidance and contribute to the setting of policies and priorities, including through the endorsement of an indicative annual work plan.** The SC will review progress under the work plan as well as performance under the program. The SC will also be a forum for coordinating TA on managing natural resource wealth among the TTF, donors, and other stakeholders. For that purpose, the TTF will share with the SC information on mission planning and mission reports.[43]

**Identification of Country Needs and TA Programming within the IMF**

64. **In consultation with country authorities, IMF area departments integrate the reform agendas of countries with the Fund's own policy and surveillance perspectives, drawing on the technical expertise of TA departments.** They identify areas of TA-needs and set priorities across TA departments and balance short- and medium-term considerations, while relying on the TA departments' technical expertise and country knowledge for TA prioritization, sequencing, and delivery mode. This internal prioritization process provides checks and balances, which ensure that Fund TA remains highly relevant and focuses on Fund core expertise while taking into account regional developments. The resulting Regional Strategy Notes (RSNs), which are shared with recipient countries and donors, set out a joint medium-term TA agenda that countries and all concerned departments subscribe to, providing the basis for integration of TA activities into the Fund's surveillance and lending operations.

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[43] Guided by the *Staff Operational Guidelines on Dissemination of TA Information* IMF staff will proactively, on a non-objection basis, seek country permission to disseminate IMF TA information to donors and other TA providers. See http://www.imf.org/external/pp/longres.aspx?id=4332.

### B. Work Plan

65. **TA selection and delivery will be demand-driven based on the identified needs and country requests.** A constant flow of TA demand is expected from new requests as well as the Fund's substantial past and ongoing TA work. TA prioritization will be based on country need and authorities' commitment to reform, as well as distribution across regions and modules. TA will be organized into projects reflecting the modules described in section II.E and Annex 5.

66. **It is envisaged that the work plan will also include applied research relevant to the work of the TTF and dissemination of findings** that are of broader interest through workshops and conferences as indicated in Table 2.

67. **The work plan will be submitted to the SC for its endorsement at its regular meetings.** Prior to formal endorsement, IMF staff will seek strategic guidance of SC members when assembling the work plan.[44] At each SC meeting, the IMF will deliver a report on the execution of activities under the previously endorsed work plan.

### C. Accountability and Quality Control

68. **To foster accountability, effectiveness, and sustainability of the TA delivered, the management and use of TTF resources will be closely monitored in a number of ways**.

- In line with the Fund's *Results Focused Management System* (RFMS) approach, TA under the TTF will be organized into country-specific projects reflecting the modules described in section II.E and Annex 5. Each project will have defined inputs needed to deliver specific outputs that will contribute toward the desired country level outcomes and objectives. Attainment of these outcomes will be measured using a set of verifiable indicators. Areas within IMF control and those that require action by the authorities will be distinguished. To ensure country ownership, staff will consult the authorities in the design of the main project deliverables. Project implementation and monitoring under the RFMS will be enabled through the Fund's *Technical Assistance Information Management System* (TAIMS)—a computerized system for managing and tracking all of the Fund's TA activities.[45]

- The IMF's TA departments will supervise, carry out, and backstop the TA delivery under the TTF. This reflects the principal role of these departments in maintaining the

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[44] An operational guidance note lays out more detailed procedures for operations under the trust fund, including interactions between Fund staff and SC members in the preparation of the work plan.

[45] See descriptions of RFMS and TAIMS in *Enhancing the Impact of Fund Technical Assistance*, IMF Staff Paper, April 3, 2008, at http://www.imf.org/external/np/pp/eng/2008/040308a.pdf.

overall quality and consistency of all Fund TA and policy recommendations in their respective areas of expertise. Operationally, quality control will be provided through: (a) the screening and selection process for experts; (b) regular supervision and backstopping support from IMF headquarters; and (c) regular self-assessments, assessing progress achieved to date against the pre-defined project objectives and outcomes.

- The IMF's Area Departments will also, in the context of IMF-supported country programs and surveillance activities, monitor the progress of beneficiary countries in implementing reforms that are supported by the TTF.

- Relevant information on project status will be accessible to donors via the IMF's *Donor Gateway* (https://www-extranet.imf.org), a secure website. In addition to financial information, the Donor Gateway is a central repository of information on donor arrangements, including their legal documentation, project documents, progress reports, project status, and self-assessments. The Gateway also provides access to RSNs as well as a multitude of other information on Fund TA.

### D. Evaluation

69. **After no fewer than three years of operation, an independent evaluation of the work carried out under the TTF will be conducted by a team of outside experts**. The evaluation will assess the effectiveness and sustainability of this work and will formulate recommendations for improvement. The findings of the evaluation will inform discussions on operations for the remainder of the initial five-year phase and beyond.

## IV. Financing and Administrative Issues

### A. Financing

70. **The estimated total cost of MNRW TA provided under the TTF for an initial five-year phase is US$25 million.** To provide stability and continuity financing is sought in advance for the entire five-year period.

### B. Administrative Arrangements

71. **All contributions from donors will be made into a multi-donor subaccount to be established by the IMF for this purpose.**[46] This Subaccount will be used to receive and disburse financial contributions for the sole use of financing TA activities under the TTF. All funds will be commingled.

[46] The IMF will create a subaccount governed by its *New Framework Administered Account for Selected Fund Activities (SFA)* adopted in March 2009 (see http://www.imf.org/external/np/pp/eng/2009/030409.pdf).

72. **The basis for the financial arrangements between donors and the IMF will be a *Letter of Understanding* accompanied by *Essential Terms and Conditions of the Subaccount***, establishing the purposes of the contributions, and the method, terms, and conditions by which the costs of TA activities under the TTF will be financed from the resources contributed to the Subaccount. The IMF will administer and account for all donor contributions in accordance with its financial regulations and other applicable IMF practices and procedures. If the IMF recruits outside consultants and experts, it will do so in accordance with its normal procedures.[47] For any procurement of goods and services beyond a certain threshold amount (currently US$25,000), IMF regulations require a competitive bidding process with at least three competitive bids.[48]

73. **The IMF will charge all project-related costs of TA provided under the TTF on the basis of actual cost, including for IMF staff time**. In addition, the IMF charges a trust fund management fee of 7 percent.

74. **The IMF will provide donors with reports on the subaccount's expenditures and commitments.** The operations and transactions conducted through the subaccount will be subjected to annual audits. Separate reporting on the execution of the TTF budget will also be provided at each SC meeting and is available on an ongoing basis via the IMF's Donor Gateway.

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[47] The Fund maintains a roster of experts whose certification is based on, among others, strong performance records, and proven familiarity with international best practice.

[48] For more on IMF procurement methodologies, see http://www.imf.org/external/np/procure/eng/meth.htm.

# Annex 1. Hydrocarbon and Mineral Rich Countries—Revenue and Export Receipts[1/]

| Income category/Country (World Development Report 2009) | Resource type | Fiscal revenues from hydrocarbons and minerals: % of GDP | Fiscal revenues from hydrocarbons and minerals: % of total revenues | Export proceeds from hydrocarbons and minerals: % of total exports of goods |
|---|---|---|---|---|
| **Low-income** | | | | |
| 1 Cameroon | Hydrocarbons | 5.1 | 26.6 | 47.2 |
| 2 Chad | Hydrocarbons | 3.3 | 27.3 | 47.3 |
| 3 Congo, Dem. Rep. of | Minerals | 2.4 | 18.3 2007 /3 | 54.0 |
| 4 Ghana | Minerals | 1.1 | 4.7 | 34.5 |
| 5 Guinea | Minerals | 2.8 | 19.3 2008 /3 | 85.6 |
| 6 Kyrgyz Republic | Minerals | 0.5 | 1.7 2008 /3 | 31.8 |
| 7 Liberia | Minerals | 1.2 | 8.3 | 51.9 |
| 8 Mauritania 2/ | Minerals | 2.7 | 4.1 2006 /3 | 51.6 |
| 9 Mauritania | Hydrocarbons | 5.5 | 11.4 | |
| 10 Nigeria | Hydrocarbons | 28.4 | 78.2 | 90.7 |
| 11 Papua New Guinea | Hydrocarbons | 6.7 | 20.7 | 76.8 |
| 12 São Tomé & Príncipe | Hydrocarbons | 33.9 | 35.4 | 0.0 |
| 13 Sierra Leone | Minerals | 0.4 | 1.0 | 64.1 |
| 14 Sudan | Hydrocarbons | 8.5 | 50.5 | 83.5 |
| 15 Uzbekistan 2/ | Minerals | 0.2 | 0.6 2007 /3 | 13.8 2007 /3 |
| 16 Uzbekistan | Hydrocarbons | 1.2 | 3.9 | 14.5 |
| 17 Vietnam | Hydrocarbons | 7.7 | 30.9 | 20.7 |
| 18 Yemen, Republic of | Hydrocarbons | 24.6 | 72.3 | 89.0 |
| 19 Zambia | Minerals | 1.7 | 8.9 2007 /3 | 66.2 |
| **Average** | | 7.3 | 22.3 | 51.3 |
| **Lower middle income** | | | | |
| 1 Algeria | Hydrocarbons | 27.3 | 71.6 | 97.7 |
| 2 Angola | Hydrocarbons | 33.0 | 75.7 | 91.1 |
| 3 Azerbaijan, Rep. of | Hydrocarbons | 16.2 | 58.5 | 88.9 |
| 4 Bolivia | Hydrocarbons | 6.7 | 23.6 | 27.7 |
| 5 Colombia | Hydrocarbons | 2.6 | 10.0 | 26.1 |
| 6 Congo, Republic of | Hydrocarbons | 25.1 | 73.4 | 90.4 |
| 7 Ecuador | Hydrocarbons | 6.2 | 24.5 | 49.4 |
| 8 Indonesia 2/ | Hydrocarbons | 5.0 | 26.4 | 22.5 |
| 9 Indonesia | Minerals | 0.9 | 4.6 2006 /3 | 7.3 |
| 10 Iran, I.R. of | Hydrocarbons | 16.5 | 65.0 | 82.4 |
| 11 Iraq | Hydrocarbons | 67.5 | 94.7 2006 /3 | 97.6 2006 /3 |
| 12 Jordan | Minerals | 0.2 | 0.7 | 12.4 |
| 13 Mongolia | Minerals | 3.1 | 8.7 | 53.3 |
| 14 Namibia | Minerals | 2.4 | 7.7 | 60.3 |
| 15 Peru | Minerals | 0.9 | 4.7 | 52.4 |
| 16 Syrian Arab Republic | Hydrocarbons | 10.5 | 39.0 | 56.4 |
| 17 Timor-Leste | Hydrocarbons | 48.5 | 62.4 | No Data |
| 18 Turkmenistan | Hydrocarbons | 9.1 | 46.1 | 33.3 |
| **Average** | | 15.6 | 38.7 | 55.8 |
| **Upper middle income** | | | | |
| 1 Botswana | Minerals | 17.1 | 44.0 | 77.5 |
| 2 Chile | Minerals | 3.1 | 12.0 | 41.8 |
| 3 Gabon | Hydrocarbons | 2.6 | 10.0 | 26.1 |
| 4 Kazakhstan | Hydrocarbons | 7.2 | 27.5 | 54.4 |
| 5 Libya | Hydrocarbons | 40.5 | 76.7 | 97.0 |
| 6 Mexico | Hydrocarbons | 6.9 | 34.5 | 12.2 |
| 7 Russia | Hydrocarbons | 8.2 | 21.6 | 48.2 |
| 8 South Africa | Minerals | 0.5 | 1.8 | 21.2 |
| 9 Venezuela, Rep. Bol. | Hydrocarbons | 15.6 | 48.1 | 84.4 |
| **Average** | | 11.3 | 30.7 | 51.4 |
| **High income** | | | | |
| 1 Bahrain, Kingdom of | Hydrocarbons | 23.7 | 73.8 | 73.1 |
| 2 Brunei Darussalam | Hydrocarbons | 44.4 | 94.2 | 91.7 |
| 3 Equatorial Guinea | Hydrocarbons | 26.7 | 77.5 | 97.4 |
| 4 Kuwait | Hydrocarbons | 49.7 | 78.6 | 92.8 |
| 5 Norway | Hydrocarbons | 14.1 | 25.8 | 42.7 |
| 6 Oman | Hydrocarbons | 39.2 | 83.3 | 80.3 |
| 7 Qatar | Hydrocarbons | 27.7 | 67.6 | 88.8 |
| 8 Saudi Arabia | Hydrocarbons | 34.0 | 72.5 | 88.8 |
| 9 Trinidad and Tobago | Hydrocarbons | 12.0 | 38.0 | 65.2 |
| 10 United Arab Emirates | Hydrocarbons | 26.9 | 68.6 | 47.0 |
| **Average** | | 29.8 | 68.0 | 76.8 |
| **Average (All--56)** | Hydrocarbons and Minerals | 15.8 | 41.2 | 56.6 |
| **Average (Hydrocarbons--29)** | Hydrocarbons | 18.7 | 48.1 | 58.8 |
| **Average (Minerals--27)** | Minerals | 12.8 | 36.4 | 57.0 |

1/ Included in this list are countries where hydrocarbons and/or minerals on average over 2000-07 contributed at least 25 percent to total government revenue and/or their exports made up at least 25 percent of the value of total exports of goods.

2/ The total is 53 countries since three countries qualify as both rich in hydrocarbons and minerals.

3/ Last available year data collected outside sample and not included in overall averages. These are data collected by IMF staff except for Mauritania (2006 EITI report) and Indonesia (2007 publication by Ministry of Energy and Mineral Resources).

Source: IMF staff estimates.

## Annex 2. Overview of Stakeholders Active in Advising on Management of Natural Resource Wealth

The potential for raising the development impact of natural resource wealth is widely recognized and has prompted IFIs, bilateral donors, NGOs, industry groups, and others to start assisting low-income and lower-middle-income countries in managing their natural resource wealth. The activities under the IMF TTF for Managing Natural Resource Wealth (MNRW) will be closely coordinated with stakeholders with complementary activities. Coordination with stakeholders is critical for the TA provided under the TTF to be effective. It should also serve to minimize the implementation burden on TA recipient countries. As such, the TTF can help its participants in meeting commitments for improved donor coordination under the *Paris Declaration* and *Accra Agenda for Action*.[49]

Below follows a list of stakeholders active in various ways in advising on or assisting with the management of natural resource wealth in developing countries. The list is not comprehensive. Descriptive quotes were lifted from websites or official documents.[50]

**International Financial Institutions**

**African Development Bank**

Endorsed EITI

Legal Support Facility
http://www.afdb.org/en/topics-sectors/initiatives-partnerships/african-legal-support-facility/
"Technical advisory facility to help member countries, among other things, with negotiating extractive resource contracts and creating an appropriate, enabling environment with modern legal and regulatory frameworks for the extractive resource sector."

**Asian Development Bank**

Endorsed EITI

**Inter-American Development Bank**

Endorsed EITI
http://www.iadb.org/news/detail.cfm?language=English&id=5544

**Organization for Economic Cooperation and Development**

Promoting responsible investment in the mining sector through enhanced due diligence
www.oecd.org/daf/investment/mining
Builds on the OECD Guidelines for Multinational Enterprises.

**World Bank**

Endorsed EITI

Oil, Gas, Mining and Chemicals Department

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[49] For the 2005 *Paris Declaration* and 2008 *Accra Agenda for Action*, see the OECD/DAC website at http://www.oecd.org/document/3/0,3343,en_2649_3236398_41297219_1_1_1_1,00.html.

[50] For an overview specifically on Africa, see *Governance of the Extractive Industries in Africa: Survey of donor-funded assistance*, African Development Bank, February 2009 at http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Strauss%20brochure.pdf.

http://go.worldbank.org/95SG8YD8A0
"Provides support to countries throughout the entire "resource cycle" from awarding contracts to monitoring operations, to collecting taxes, to spending resources effectively for sustainable growth and poverty reduction."

EITI-Multi Donor Trust Fund
http://go.worldbank.org/155CQ1CCG0
The EITI MDTF is administered by the World Bank. It provides support for EITI implementation.

Extractive Industries Technical Advisory Facility (EI-TAF)
see http://go.worldbank.org/NGJ46W9J80
The EI-TAF is a donor-funded program run by the World Bank's Oil, Gas, Mining and Chemicals Department to provide rapid-response advisory services on EI transactions and broader extractive industry resource policy frameworks.

EITI ++ Initiative
http://go.worldbank.org/Y940IAY670
World Bank initiative to help reformist developing countries with strengthening accountability institutions in all areas of the so-called "value chain", emphasizing heavily the importance of transparency.

Mineral Resources Governance Project
http://web.worldbank.org/external/projects/main?pagePK=104231&piPK=73230&theSitePK=40941&menuPK=228424&Projectid=P076245
"The Mineral Resources Governance Project aims at strengthening governance and transparency in the management of mineral resources, placing particular emphasis on small-scale and artisanal mining."

Reserves Advisory and Management Program (RAMP)
http://treasury.worldbank.org/sip/htm/index.html
"The World Bank Treasury provides advisory services and training to official sector investment managers to help countries efficiently manage foreign currency reserves and other investment portfolios. The focus is on building a governance and risk management framework that balances return objectives with prudent risk management and controls."

**International Finance Corporation (World Bank Group)**

"IFC's Oil & Gas team provides equity and loan financing to small and midsize independents and larger players in the oil and gas sector. Our mission is to help companies reach their full potential in emerging markets and benefit the countries and communities in which they operate. … IFC's Mining Group provides equity and loan financing for mining companies to build projects that reward owners, investors, and local communities. We offer an integrated approach that combines financing with industry expertise and assistance in maximizing projects' social benefits while minimizing their environmental footprints."

## Other Multilateral Initiatives

### Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development

http://www.globaldialogue.info/intro_e.htm
"The Global Dialogue was ... designed to fulfill the priorities for the mining, minerals and metals sector as identified in the Johannesburg World Summit Plan of Implementation. The Global Dialogue was for national Governments with an interest in the mining, minerals and metals sector. Fifty-three countries participated in the Global Dialogue. Together, they decided that the objectives of the Global Dialogue would be best achieved through the establishment of an Intergovernmental Forum for the mining, minerals and metals sector."

**Joint Oil Data Initiative**

http://www.jodidata.org/

"The end of the 1990s was characterized by unusually high volatility of oil prices. The lack of transparent and reliable oil statistics was identified as an aggravating factor for the volatility in addition to factors such as political tensions and economic shocks. The efforts to improve the availability and reliability of oil data began among producers and consumers, who recognized the need for more data transparency in the oil market. Ministers at the 7th International Energy Forum in 2000 in Riyadh made clear their support for better data and urged a global response to the challenge. ...Six international organizations – APEC, Eurostat, IEA, OLADE, OPEC and UNSD – took up the challenge, combined their efforts, involved their Member Countries and, in April 2001 launched the Joint Oil Data Exercise. The primary goal was not to build a database, but to raise the awareness of all oil market players of the need for more transparency in oil market data."

**Oslo Group on Energy Statistics**

http://og.ssb.no/

"The Oslo Group on Energy Statistics is to contribute to the development of improved methods and international standards for national official energy statistics, and, in particular, to review and contribute to the updating of the United Nations handbooks and manuals on energy statistics."

## Regional Initiatives

**African Tax Administrators Forum (ATAF)**

http://www.sars.gov.za/home.asp?pid=10421

"The development of the African Tax Administration Forum (ATAF) comes at a crucial time for tax administrations in Africa. The Forum aims to become a platform to allow African administrators to articulate African tax priorities, anchor good practices, and build capacity in African tax policy and administration through peer learning and knowledge development."

**African Petroleum Producers Association (APPA)**

http://www.appa.int/en/pres/index.html

"APPA is an intergovernmental organization created in 1987 in Lagos, Nigeria, to serve as a platform for African petroleum producing countries to cooperate, collaborate, share knowledge and competences. It aims to promote common policy initiatives and projects in all facets of the petroleum industry with a view to maximizing the developmental and welfare benefits accruable from petroleum exploitation activities in the Member Countries in particular and in Africa in general."

## Bilateral Donors

For a number of donors evidence of their special interest supporting the sound management of natural resource wealth are their financial contributions to the EITI and the EITI-Multi-donor Trust Fund administered by the World Bank. These activities are included below.

**Australia**

Supports EITI and EITI-MDTF

**Austria**

World Mining Data

http://www.bmwfj.gv.at/EnergieUndBergbau/WeltBergbauDaten/Documents/WMD2009.pdf

Maintained by the Federal Ministry for Economy and Labor.

**Belgium**

Supports EITI and EITI-MDTF

**Canada**

Supports EITI and EITI-MDTF, and practices EI transparency through a dedicated website
http://eiti.nrcan.gc.ca/index-eng.php

Natural Resources Canada (NRC)
http://www.nrcan-rncan.gc.ca/com/index-eng.php
Was one of the original sponsors, and conducts the Secretariat, of the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development.

Canada International Development Agency (CIDA)
http://www.acdi-cida.gc.ca/cidaweb/acdicida.nsf/En/Home
Corporate social responsibility for mining companies is a CIDA mandate.

**European Union**

Supports EITI and EITI-MDTF

Thematic Program on Environment and Sustainable Management of Natural Resources (ENRTP)
http://ec.europa.eu/europeaid/how/finance/dci/environment_en.htm
"The program helps developing countries and partner organizations to address environmental and natural resource management issues. Moreover, it helps to meet their obligations under multilateral environmental agreements and to take international policy leadership in such areas as fighting climate change, tackling land degradation and desertification, biodiversity protection and proper management of chemicals and wastes."

Precious Metals Initiative

http://ec.europa.eu/enterprise/non_energy_extractive_industries/raw_materials.htm
"Integrated strategy which sets out targeted measures to secure and improve the access to raw materials for EU industry."

**Finland**

Supports EITI and EITI-MDTF

**France**

Supports EITI and EITI-MDTF

**Germany**

Supports EITI and EITI-MDTF

GTZ (Gesellschaft für Technische Zusammenarbeit)
http://www.gtz.de/en/
Collaborates on School on Governance of Oil, Mining and Gas Revenues in Ghana together with Ghana Institute of Management and Public Administration (GIMPA) and Revenue Watch Institute (RWI).
InWent (International Weiterbildung und Entwicklung gGmbh)
http://www.inwent.org/index.php.en
Supports EITI implementation with capacity development

**Italy**
Supports EITI

**Japan**
Supports EITI

**Netherlands**
Supports EITI and EITI-MDTF

**Norway**
Supports EITI and EITI-MDTF

Its development agency (Norad) runs Oil for Development (OfD)
http://www.regjeringen.no/en/dep/ud/selected-topics/development_cooperation/oil-for-development.html?id=446108
"The OfD initiative aims at assisting developing countries with petroleum resources (or potential) in their efforts to manage these resources in a way that generates economic growth and promotes the welfare of the population in general, and in a way that is environmentally sustainable."

**Qatar**
Supports EITI

**Spain**
Supports EITI and EITI-MDTF

**Sweden**
Supports EITI

**Switzerland**
Supports EITI and the EITI-MDTF

**United Kingdom**
Supports EITI and EITI-MDTF. Sponsors Facility for Oil Sector Transparency in Nigeria.

**United States**
Supports EITI and the EITI-MDTF

**Non-Governmental Organizations**

**Oxfam**
http://www.oxfam.org/
Participates in EITI.
Oxfam America – Oil, gas and mining
http://www.oxfamamerica.org/whatwedo/issues_we_work_on/oil_gas_mining

Oxfam Australia
http://www.oxfam.org.au/campaigns/mining/
"Lobbies Australian mining companies and governments to adhere to policies and practices that support the rights of affected communities and defends these communities' rights through our Mining Ombudsman process."

**Publish What You Pay**

http://www.publishwhatyoupay.org/english/

"PWYP is a global civil society coalition that helps citizens of resource-rich developing countries hold their governments accountable for the management of revenues from the oil, gas and mining industries. Natural resource revenues are an important source of income for governments of over 50 developing countries. When properly managed these revenues should serve as a basis for poverty reduction, economic growth and development rather than exacerbating corruption, conflict and social divisiveness." Participates in EITI.

**Revenue Watch**

http://www.revenuewatch.org/

"Revenue Watch promotes transparent, accountable and effective management of natural resource wealth to help countries avoid the "resource curse." It takes a comprehensive approach to improving governance and development across the entire value chain, from with the organization of extractive production, revenue generation, and revenue management, and through to the expenditure processes and development outcomes in these resource rich countries." Participates in EITI. Collaborates on School on Governance of Oil, Mining and Gas Revenues in Ghana together with Ghana Institute of Management and Public Administration (GIMPA) and German GTZ. Is in the process of creating an Extractive Resources Facility for Africa as part of the African Center for Economic Transformation (ACET) in Accra, Ghana.

**Global Witness**

http://www.globalwitness.org/

"Global Witness exposes the corrupt exploitation of natural resources and international trade systems, to drive campaigns that end impunity, resource-linked conflict, and human rights and environmental abuses." Participates in EITI.

**Human Rights Watch**

http://www.hrw.org/en/home

"HRW is one of the world's leading independent organizations dedicated to defending and protecting human rights." Pursues extractive industries as special business topic. Participates in EITI.

**Industry Groups**

**International Council on Mining and Metals (ICMM)**

http://www.icmm.com/

"ICMM is a CEO-led organization representing many of the world's leading mining and metals companies as well as regional, national and commodity associations. … It operates the Resource Endowment Initiative whose objectives are to identify the factors that have allowed some countries to benefit from their substantial resource endowments through economic growth and poverty reduction and avoid the so-called 'resource curse'. It also aims to determine some of the practical steps that can be taken by companies, governments, local communities and aid agencies to build such propitious factors where they are lacking."
http://www.icmm.com/page/1409/our-work/work-programs/articles/resource-endowment-initiative
Participates in EITI.

**Southern Africa Resource Watch**

http://www.sarwatch.org/

SARW's advocacy agenda includes "promotion of revenue transparency by supporting the EITI and encouraging countries to sign up on the EITI" and "advocate together with communities around mining and oil companies for an environmentally friendly exploitation of resources."

**Multi-stakeholder Initiatives**

**Extractive Industries Transparency Initiative (EITI)**

http://eitransparency.org/

"The EITI is a global standard that promotes revenue transparency. It has a robust yet flexible methodology for monitoring and reconciling company payments and government revenues at the country level. The process is overseen by participants from the government, companies and national civil society. The EITI Board and the International Secretariat are the guardians of the EITI methodology internationally."

**Kimberley Process (KP)**

http://www.kimberleyprocess.com/

"The KP is a joint governments, industry and civil society initiative to stem the flow of conflict diamonds – rough diamonds used by rebel movements to finance wars against legitimate governments. The Kimberley Process Certification Scheme (KPCS) imposes extensive requirements on its members to enable them to certify shipments of rough diamonds as 'conflict-free'."

**Others:**

**Natural Resource Charter**

http://www.naturalresourcecharter.org/

"Its purpose is to assist the governments and societies of countries rich in non-renewable resources to manage those resources in a way that generates economic growth, promotes the welfare of the population in general and is environmentally sustainable. The Charter is organized around twelve Precepts that offer guidance on core decisions that governments face – beginning with the decision to extract the resources, and ending with decisions about using the revenues they ultimately generate. It provides four levels of detail about each of the Precepts."

**Mining for Development**

http://bistandsaktuelt.typepad.com/blade/2008/11/mining-for-development-initative-launched-in-sweden.html

Sweden-based initiative under consideration by minerals consultancy Raw Materials Group and NGO Global Challenge.

## Annex 3. Examples of Successful IMF Capacity-Building Support for MNRW

| Country | IMF inputs and project objectives | Achievements |
|---|---|---|
| **EI Fiscal Regimes, Licensing and Contracting** | | |
| **Cambodia 2005–2008** | IMF sent a series of missions, and provided advice from HQ, for the review of the petroleum fiscal arrangements | Comprehensive petroleum tax provisions have been developed within the income tax code |
| **Malawi 2006–2007** | Malawi received proposals from whom? for the development of a major uranium deposit in 2006, and sought IMF assistance in reviewing suitable fiscal terms and designing a new general regime for mining. | The government adopted recommendations of what? in its budget for 2006/07, and proceeded to secure agreement with a foreign investor on development of the uranium project. |
| **Mozambique 2007–2008** | As part of a general overhaul of the taxation of natural resources, and of "megaprojects", Mozambique sought IMF assistance on the design of the fiscal regime for petroleum. | The government adopted recommendation for petroleum taxation provisions to complement the existing corporate tax code. Assistance with legal drafting. |
| **Nigeria 2000** | Review of: taxation of oil and gas sector; petroleum profits tax; PSCs; tax treatment of investments in gas; arrears of the National Resource Company in funding its share of investments; and fiscal control of petroleum companies. | The advice influenced the subsequent review of the tax memorandum of understanding, and the design of the next generation of PSCs. |
| **Timor-Leste 2000–2001** | During the UN Transitional Administration, the IMF developed an agenda for the fiscal treatment of petroleum activities, complicated by the absence of maritime boundaries, and the legacy of a previous "joint development zone". | Timor-Leste secured agreement on the major Bayu-Undan gas project (producing since 2004), and new investments in exploration that have resulted in further discoveries. The IMF helped design a Petroleum Fund mechanism preserved the country's wealth during the financial crisis. |
| **EI Revenue Administration** | | |
| **Algeria 2002–2006** | Restructuring the tax administration organization and improving taxpayer services and enforcement, including for businesses in the hydrocarbon sector. | New headquarters and filed offices are now in place, including a LTO, with a dedicated unit for oil companies. |
| **Indonesia 2002–present** | Modernizing regulations and procedures, restructuring the tax administration organization, introducing segmentation and improving taxpayer services and enforcement, including for businesses in the mining, natural resources and hydrocarbon sector. | New headquarters and field offices are now in place, including a LTO, with dedicated units for oil companies, mining companies and other resource-intensive companies (logging). |

| Country | IMF inputs and project objectives | Achievements |
|---|---|---|
| **Mali**<br>**2007–2008** | Modernizing the tax administration, enhancing the management of tax operations, and developing compliance programs. | Performance criteria have been developed and monitored; compliance strategies are being implemented, with specific audit and intelligence programs for the (gold) mining sector. |
| **Mozambique**<br>**1995–2008** | Complete overhaul of the tax and customs administration, complete reform of the direct and indirect tax system, its regulations and related procedures. | An autonomous Revenue Agency has been created, with new headquarters and field offices, including a LTO; improved audit and enforcement procedures for mining companies and other resource-intensive companies ("megaprojects"). |
| **Peru**<br>**2004–2008** | Overall improvement of revenue administration, including modernizing regulations and procedures for mining and natural resources, improving taxpayer services and enforcement. | State-of-the-art business processes have been implemented for all revenue administration functions, including improved audit and enforcement procedures for mining and natural resources companies |
| **EI Macro-Fiscal, Public Financial Management, and Expenditure Policy** | | |
| **Ghana**<br>**2008** | Advice on Fiscal Responsibility Laws, and Future Oil Production | A draft Fiscal Responsibility Law. |
| **Mauritania**<br>**2006** | Advice on Fiscal Responsibility Laws, Stabilization fund | |
| **Mongolia**<br>**2007–present** | Advice on a rule-based macro-fiscal framework for the management of natural resources | |
| **Angola, Equatorial Guinea, Gabon, Mozambique, Namibia**<br>**2005–2008** | IMF staff missions to assess and report on the application of the principles of the IMF *Code of Good Practices on Fiscal Transparency*; and to provide suggestions for reform. | Fiscal Transparency ROSCs with resource revenue modules published for:<br>Equatorial Guinea (2005)<br>http://www.imf.org/external/pubs/ft/scr/2005/cr05144.pdf<br>Gabon (2006)<br>http://www.imf.org/external/pubs/ft/scr/2006/cr06388.pdf<br>Mozambique (2008)<br>http://www.imf.org/external/pubs/ft/scr/2008/cr08152.pdf<br>Namibia (2008)<br>http://www.imf.org/external/pubs/ft/scr/2008/cr08184.pdf<br>Cameroon (2010)<br>http://www.imf.org/external/pubs/cat/longres.cfm?sk=24143.0 |

| Natural Resource Asset and Liability Management | | |
| --- | --- | --- |
| **Bank of Central African States (BEAC) 2008** | Assessment of reserves management and advice on setting up an SWF or other pooling of reserves available for longer-term investment | Ongoing |
| **Chile 2008** | TA missions to assess macro-financial linkages pertinent to SAA of Chile's SWFs | Analytical framework in place for analyzing macro-financial linkages for a commodity-based stabilization SWF |
| **Timor Leste 2005** | Advice and capacity building TA on setting up the Petroleum Fund incl. governance framework | Timor Leste's Petroleum Fund is a well-functioning and successful SWF with robust and transparent governance. |
| **Statistics for Managing Natural Resources** | | |
| **Kazakhstan 2006** | Compiling macroeconomic aggregates for measuring the effects of the oil sector on the economy. | Experimental estimates for oil/non-oil GDP compiled. Guidelines provided on the sources and methods for disaggregating the oil and non-oil transactions in the national accounts and the balance of payments following international statistical standards. |

## Annex 4. TTF MNRW Eligible Countries

| | | | | |
|---|---|---|---|---|
| | | Production Status 1/ | Commodities | |
| | **Low-income (LIC)** | | | |
| 1 | Afghanistan | Prospective | Minerals | |
| 2 | Burkina Fasso | Prospective | Minerals | |
| 3 | Cambodia | Prospective | Minerals | Hydrocarbons |
| 4 | Cameroon | Current | | Hydrocarbons |
| 5 | Central African Republic | Prospective | Minerals | |
| 6 | Chad | Current | | Hydrocarbons |
| 7 | Congo, Dem. Rep. of | Current | Minerals | |
| 8 | Ghana | Current | Minerals | |
| 9 | Guinea | Current | Minerals | |
| 10 | Ivory Coast | Prospective | | Hydrocarbons |
| 11 | Kyrgyz Republic | Current | Minerals | |
| 12 | Laos | Prospective | Minerals | |
| 13 | Liberia | Current | Minerals | |
| 14 | Madagascar | Prospective | Minerals | Hydrocarbons |
| 15 | Malawi | Prospective | Minerals | |
| 16 | Mali | Prospective | Minerals | |
| 17 | Mauritania | Current | Minerals | Hydrocarbons |
| 18 | Mozambique | Prospective | Minerals | Hydrocarbons |
| 19 | Niger | Prospective | Minerals | |
| 20 | Nigeria | Current | | Hydrocarbons |
| 21 | Palau | Prospective | | Hydrocarbons |
| 22 | Papua New Guinea | Current | Minerals | Hydrocarbons |
| 23 | São Tomé & Príncipe | Current | | Hydrocarbons |
| 24 | Sierra Leone | Current | Minerals | |
| 25 | Solomon Islands | Prospective | Minerals | |
| 26 | Sudan | Current | | Hydrocarbons |
| 27 | Tanzania | Prospective | Minerals | |
| 28 | Uganda | Prospective | Minerals | Hydrocarbons |
| 29 | Uzbekistan | Current | Minerals | Hydrocarbons |
| 30 | Vietnam | Current | | Hydrocarbons |
| 31 | Yemen, Republic of | Current | | Hydrocarbons |
| 32 | Zambia | Current | Minerals | |
| | | | | |
| | **Lower middle income (LMC)** | | | |
| 33 | Albania | Prospective | Minerals | |
| 34 | Algeria | Current | | Hydrocarbons |
| 35 | Angola | Current | | Hydrocarbons |
| 36 | Azerbaijan, Rep. of | Current | | Hydrocarbons |
| 37 | Bolivia | Current | | Hydrocarbons |
| 38 | Colombia | Current | | Hydrocarbons |
| 39 | Congo, Republic of | Current | | Hydrocarbons |
| 40 | Ecuador | Current | | Hydrocarbons |
| 41 | Indonesia | Current | Minerals | Hydrocarbons |
| 42 | Iran, I.R. of | Current | | Hydrocarbons |
| 43 | Iraq | Current | | Hydrocarbons |
| 44 | Jordan | Current | Minerals | |
| 45 | Mongolia | Current | Minerals | |
| 46 | Namibia | Current | Minerals | |
| 47 | Palestinian Territory | Prospective | | Hydrocarbons |
| 48 | Peru | Current | Minerals | |
| 49 | Syrian Arab Republic | Current | | Hydrocarbons |
| 50 | Timor-Leste | Current | | Hydrocarbons |
| 51 | Turkmenistan | Current | | Hydrocarbons |

| | | | | | |
|---|---|---|---|---|---|
| *Memorandum* | | | | | |
| *Totals* | *Current* | *Prospective* | *Minerals* | *Hydrocarbons* | *Both* |
| *LIC* | 17 | 15 | 16 | 9 | 7 |
| *LMC* | 17 | 2 | 5 | 13 | 1 |
| *Overall* | 34 | 17 | 21 | 22 | 8 |

1/ Countries listed as "current" are those that are already producing hydrocarbons or minerals and earning substantial income from them (see Annex 1). Prospective means there is a reasonable expectation that the country will be producing signficant hydrocarbons and/or minerals. Going forward, LIC or LMC EITI Candidate Countries are automatically included as "prospective".

## Annex 5. Trust Fund on Managing Natural Resource Wealth—A Logical Framework for Results Management

| Objectives | Inputs | Outputs | Outcomes | Verifiable Indicators | Risks |
|---|---|---|---|---|---|
| **Module 1: EI Fiscal Regimes, Licensing and Contracting** | | | | | |
| An EI fiscal regime that maximizes revenue flows for the government over the project life-cycles, while providing predictability and stability to companies, and preserving incentives for investment and production. | HQ-led missions with IMF staff and experts.<br><br>HQ follows up.<br><br>HQ review of legal texts. | TA reports<br><br>Advice<br><br>Description of roles and responsibilities in MNRW<br><br>Draft amended taxation accounting conventions<br><br>Framework for evaluating government equity participations<br><br>Draft amendments to EI fiscal regime, incl. legal texts<br><br>Draft fiscal parameters for model PSC for oil and gas<br><br>Draft amendments to tax regime for mining | **Preparation**<br>-Clarity of roles and responsibilities between government agencies, separating policy, regulatory and commercial roles.<br>- Harmonization of taxation accounting conventions with international accounting standards.<br>-Strategy for enhancing country's international credibility in the EI taxation area.<br>- Evaluation of merits of government equity participations.<br><br>**EI fiscal regime**<br>- Adoption of an EI fiscal regime that minimizes distortions, maximizes revenue, is progressive and simple, and adjustable.<br>- Properly drafted legal texts and procedures.<br>- A framework for fiscal investment incentives.<br>- Harmonization of terms of existing EI contracts.<br>- Coordination of national tax system with foreign tax rules (e.g. to counter abusive transfer pricing or ensure availability of foreign tax credits).<br><br>**Oil and gas**<br>**-** Promulgation of a model Production Sharing Contract.<br>- Quantitative assessment of prevailing or | Official promulgation of roles and responsibilities in MNRW<br><br>Adoption of amended taxation accounting conventions<br><br>Utilization of framework for evaluating government equity participations<br><br>Adoption of amendments to EI fiscal regime<br><br>Promulgation of model PSC for oil and gas<br><br>Adoption of amendments to tax regime for mining | Change in government commitment to reform<br><br>Resistance by vested interests |

| Objectives | Inputs | Outputs | Outcomes | Verifiable Indicators | Risks |
|---|---|---|---|---|---|
| | | | proposed fiscal regime and/or contract terms against international benchmarks.<br><br>**Mining**<br>- Move from special tax regimes to general taxation system. | | |
| A framework for awarding licenses to oil, gas and minerals competitively so as to maximize revenue for the country. | HQ-led missions with IMF staff and experts<br><br>HQ follow up | TA reports<br><br>Advice<br><br>Draft rules and procedures for awarding licenses | **Oil and gas**<br>- Adopt procedures for awarding exploration and exploitation licenses, either by auction or negotiation, that emphasize competition, simplicity and transparency<br><br>**Mining**<br>- Create registration system for mineral rights that applies clear and simple licensing rules; and is transparent, non-discretionary and objective. | Adoption and promulgation of procedures for awarding licenses in oil gas and mining | Change in government commitment to reform<br><br>Resistance by vested interests |
| A high degree of transparency of EI fiscal regime, and licensing and contracting procedures. | HQ-led missions with IMF staff and experts<br><br>HQ follow up | Advice<br><br>Report on assessing EI fiscal regime transparency | - Publication of fiscal regime and contracts, or contractual arrangements, wherever confidentiality agreements permit.<br>- Publication of licensing procedures for oil and gas exploration and exploitation, and rules for the minerals exploration and exploitation.<br>- Independent assessment of transparency of EI fiscal regime, licensing and contracting against IMF *Guide on Resource Revenue Transparency*. | Publication of report assessing EI fiscal regime transparency | Change in government commitment to transparency |
| Fiscal decentralization | HQ-led missions with IMF staff and experts<br><br>HQ follow up | TA reports<br><br>Draft framework for fiscal decentralization. | - Legal framework for fiscal decentralization that balances funding and spending mandates, and preserves central government macroeconomic policy capacity. | Adoption of framework for fiscal decentralization by Government | Obstacles to decentralization thrown up by political process |

| Objectives | Inputs | Outputs | Outcomes | Verifiable Indicators | Risks |
|---|---|---|---|---|---|
| **Module 2: EI Revenue Administration** | | | | | |
| Efficient collection of all EI revenues due to the government under the existing EI fiscal regime, contracts, and regulations. | HQ-led missions with IMF staff and experts.<br><br>HQ follow up. | TA reports<br><br>Advice<br><br>Draft framework of institutional responsibilities<br><br>Draft design of LTO for EI companies<br><br>Draft design self-assessment system for income tax from EI companies<br><br>Contract-based model for tracking payments by EI companies<br><br>Draft protocols for determination official prices<br><br>Draft integrity standards for collection agencies<br><br>Draft national system for dispute resolution | **Information**<br>- Organize circulation and processing of EI revenue information<br><br>**Responsibilities**<br>- Assign institutional responsibilities for collecting and verifying all EI revenues across government agencies and/or national resource company.<br>- Build LTO in tax administration to deal with EI companies with necessary skills to capture abusive transfer pricing and thin capitalization.<br>- Strengthen sector-specific revenue administration units (address issues of recruitment, training, performance management, IT, facilities, and funding).<br>- Centralization of all EI revenue information in unit in ministry of finance with overall responsibility for budget reporting (incl. to EITI).<br><br>**Collection**<br>- Self-assessment system for income tax from EI companies.<br>- Continuous tracking of payments received from EI companies against payments due using contract-based model.<br>- Organize collection of all non-resource taxes from EI companies and from service contractors by general tax department.<br>- Organize fiscal agency functions of NRCs.<br>- Organize transfer to the budget of equity | Promulgation of institutional responsibilities<br><br>Establishment of LTO for EI companies<br><br>Production of comprehensive report by ministry of finance on EI revenue collection<br><br>Ministry of finance reporting on EI revenues in budget<br><br>Ministry of finance reporting on EI revenues to EITI consistent with budget reporting<br><br>Regular reports on payments received against payments due<br><br>MOU on fiscal agency functions of NRCs<br><br>MOU on transfer of NRCs' equity income to budget<br><br>Inclusion accounting for in-kind revenues in budget documents<br><br>Promulgation protocols | Change in government commitment<br><br>Insufficient resources made available to ministry of finance |

| Objectives | Inputs | Outputs | Outcomes | Verifiable Indicators | Risks |
|---|---|---|---|---|---|
| | | | income collected by NRCs.<br>- Robust treasury systems for collecting resource revenues.<br>- Proper budgetary accounting for in-kind revenues (valuation, material balances, marketing arrangements, fiscal reporting).<br>- Protocols for the determination of official prices for commodities extracted.<br><br>**Integrity functions**<br>- Introduce integrity standards in all agencies collecting EI resource revenues.<br>- Conduct international standard tax, cost and volume audits on a routine basis of all EI companies.<br>- Conduct independent international standard audits of NRCs.<br>- National system for objective and timely dispute resolution complemented with international arbitration.<br>- Routine physical audits of production, storage, and lifting or exports. | on determination of official prices.<br><br>Regular conduct of audits of EI companies, NRCs, and production/storage/lifting | |

| Objectives | Inputs | Outputs | Outcomes | Verifiable Indicators | Risks |
|---|---|---|---|---|---|
| High standard of political and public accountability for EI revenue collection | HQ-led missions with IMF staff and experts<br><br>HQ follow up | TA reports<br><br>Advice<br><br>Report assessing transparency of EI revenue administration | -Public informed on EI revenues and its determinants (production, prices, exports, exchange rates) accurately, regularly and timely.<br>- Public informed on results of all audit activities (companies/contracts subject to audit, audits carried out, names of audit firms, main conclusions and follow up).<br>- Public informed on all official prices for all mineral resources.<br>-International data dissemination, incl. to IFIs<br>- Public informed on all quasi taxes and direct contributions by EI companies and any payments to sub-national governments<br>- Independent assessment of transparency in resource revenue administration against IMF's *Guide on Resource Revenue Transparency*. | Publication report assessing transparency of EI revenue administration<br><br>Quarterly detailed publication of resource revenue received plus determinants<br><br>Annual reporting on results of audit activities. Discussion of results of audit reports in parliament.<br><br>Regular publication of all official prices for all mineral resources.<br><br>Regular publication of all EI quasi taxes, direct contributions, and payments to sub-national governments<br><br>Publication assessment report on transparency in resource revenue administration | Change in government commitment to transparency |

| Objectives | Inputs | Outputs | Outcomes | Verifiable Indicators | Risks |
|---|---|---|---|---|---|
| **Module 3: EI Macro-Fiscal, Public Financial Management, and Expenditure Policy** | | | | | |
| Macroeconomic and fiscal policies for the medium-term, consistent with the country's long-term development program, based on realistic estimates of resource revenues available, and taking into account absorptive capacity. | HQ-led missions with IMF staff and experts<br><br>HQ follow up | TA reports<br><br>Advice<br><br>Draft budget system laws, and supportive regulations.<br><br>Quantitative framework for determining and potentially targeting government savings. | - Capacity in ministry of finance for making medium-term and long-term macro-economic projections with alternative assumptions for prices of natural resources and rates of extraction.<br>- Budget system laws, and supportive regulations that frame the conduct of fiscal policy given finite natural resources and uncertainty and volatility regarding their prices.<br>- Occasional long-term projections (at least 20 years) that show the impact on the economy and public finances of alternative assumptions about the rate of extraction of natural resources under a specified fiscal regime; the returns from public savings funds; the profile of public expenditure and the productivity of public investment; and other factors of macroeconomic relevance.<br>- Capacity for determining and potentially targeting government savings in the long term in the context of volatile and uncertain natural resource revenues. | At least two medium-term macroeconomic projections per year based on realistic assumptions about resource extraction, economic capacity, external and domestic developments, and fiscal policy<br><br>Long-term projection showing impact on economy of natural resource extraction under alternative assumptions | Change in commitment government<br><br>Insufficient resources available to ministry of finance |

| Objectives | Inputs | Outputs | Outcomes | Verifiable Indicators | Risks |
|---|---|---|---|---|---|
| The transparent formulation, management, and execution of the budget so that the potential and actual impact of resource revenues is clear to the public. | HQ-led missions with IMF staff and experts<br><br>HQ follow up | TA reports<br><br>Advice<br><br>Report assessing transparency of budget formulation, management and execution | - Capacity to produce annual budgets based on realistic projections of resource revenues and of income from savings funds, and whose expenditure plans are insulated from unanticipated volatility in resource revenues.<br>- Capacity to integrate off-budget entities, quasi-fiscal activities—including retail petroleum product subsidies-- and tax expenditures associated with management of natural resources systematically and transparently into the budget process.<br>- Systematic identification, measurement, and management of the fiscal risks associated with resource revenues, incl. preparation of alternative revenue scenarios, and disclosure in budget documents.<br>- Capacity to produce in-year updates on EI revenues.<br>- Evaluation of fiscal implications of infrastructure-for-commodity deals.<br>-Data dissemination, incl. to IFIs.<br>- Independent assessment of transparency in budget formulation, management and execution benchmarked against the IMF's *Guide on Resource Revenue Transparency*. | Publication of budget documents including realistic projections of resource revenues, information on off-budget entities, quasi-fiscal activities, and tax expenditures related to EI, and discussion of fiscal risks<br><br>Publication of in-year updates on EI revenues<br><br>Publication of report assessing transparency of budget formulation, management and execution | Change in commitment government to transparency |

| Objectives | Inputs | Outputs | Outcomes | Verifiable Indicators | Risks |
|---|---|---|---|---|---|
| Effective PFM systems to handle the EI revenues. | HQ-led missions with IMF staff and experts<br><br>HQ follow up | TA reports<br><br>Advice | - Budget systems that integrate resource revenues and expenditures effectively and transparently into the planning and execution of annual budgets.<br>- A budget classification and chart of accounts that incorporate the specificities of revenues from natural resources and are in line with international accounting standards.<br>- An integrated cash plan and treasury management system that encompasses revenues from natural resources.<br>- Regular and time fiscal reporting, in line with legal requirements, on the authorities' management of revenue from natural resources. | Outputs from integrated cash plan and treasury management system encompassing revenues from natural resources.<br><br>Budget classification system and chart of accounts incorporating natural resources.<br><br>Reports on management of revenue from natural resources. | Change in government commitment.<br><br>Insufficient resources available to ministry of finance. |
| **Module 4: Natural Resource Asset and Liability Management (ALM)** | | | | | |
| Maximize the country's benefits from its natural resource wealth through investment income and appropriate asset-liability and risk management | HQ-led missions with IMF staff and experts<br><br>HQ follow up | TA reports<br><br>Advice<br><br>Draft reserves management guidelines incl. SSA framework<br><br>Report assessing SWF management against *Santiago Principles*.<br><br>Draft policies for safeguarding abandonment funds | **Reserves management**<br>- Capacity for sound reserves management, incl. SSA framework.<br>- Procedures for effective repatriation of export proceeds by natural resource companies<br>- Integration of natural resource wealth considerations in overall sovereign risk management.<br>- A SWF funded from natural resource income.<br>- Reducing sovereign risk through improved risk management. | Reserve management guidelines incl. SSA framework.<br><br>Publication report assessing SWF management.<br><br>Promulgation policy on abandonment funds and regular publication of status of such funds. | Change in government commitment.<br><br>Insufficient resources available to central bank.<br><br>Resistance by private parties to evaluation of structured finance agreements. |

| Objectives | Inputs | Outputs | Outcomes | Verifiable Indicators | Risks |
|---|---|---|---|---|---|
| | | | - Coordination of SWF investment decisions with macro-fiscal policies.<br>-Data dissemination, incl. to IFIs.<br>- Independent assessment of SWF management against *Santiago Principles*.<br><br>**Debt management**<br>- Evaluation of debt implications of structured-finance agreements involving natural resources (e.g. carried-interest equity investments, resources-for-infrastructure deals).<br>- Policy for borrowing against natural resources (e.g. collateral, indexation).<br>- Policies to safeguard clean-up or abandonment funds until they are needed. | | |
| **Module 5: Statistics for Managing Natural Resources** | | | | | |
| Improved capacity for assessing macroeconomic developments and formulating policy stance.<br><br>Well-informed policies on natural resource extraction based on appropriate data integrated into aggregate national data sets and coherent sectoral accounts. | HQ-led missions with IMF staff and experts<br><br>HQ follow up | TA reports<br><br>Advice<br><br>Draft amended statistical legislation.<br><br>Draft procedures for meeting users' needs for dissemination of metadata and data on natural resources within the context of macroeconomic statistics. | - Improved treatment and coverage of natural resources in national accounts statistics and other areas of macroeconomic statistics:<br>* Disaggregated presentation of natural resources by main types of resources (oil/non-oil, mining/non-mining) and institutional sectors.<br>* Proper recording of transactions from oil PSCs and joint exploitation arrangements for other natural resources in the national accounts. | Publication of disaggregated national accounts, balance of payments and government finance statistics.<br><br>Adoption of amended statistical legislation.<br><br>Reporting oil data to JODI. | Change in government commitment<br><br>Insufficient resources available to statistical agencies. |

| Objectives | Inputs | Outputs | Outcomes | Verifiable Indicators | Risks |
|---|---|---|---|---|---|
| | | | * Achievement of consistent treatment of natural resources in other macroeconomic statistics, particularly with the balance of payments and government finance statistics.<br><br>- Methodologies for comprehensive assessments of the macroeconomic impact of natural resource related activities.<br><br>- Sectoral balance sheets for natural resource assets. | Publication of metadata and data on natural resources within the context of macroeconomic statistics. | |
| Improved governance in the management of the country's natural resources.<br><br>Capacity to provide statistics on natural resources to external parties. | HQ-led missions with IMF staff and experts<br><br>HQ follow up | | - Statistical legislation and organization to facilitate adoption of best practices in data production and dissemination.<br><br>- Strengthen the role of the national statistical offices in the production of high-quality macroeconomic statistics for natural resources.<br><br>- Improved dissemination of metadata and data on natural resources within the context of macroeconomic statistics. | Statistics made available to decision makers in a useful form with routine periodicity. | Change in government commitment<br><br>Insufficient resources available to statistical agencies. |

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