Resource Extraction Fees

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1 UNDERSTANDING THE RESOUCE EXTRACTION FEES – HOW DO THEY WORK?

1.1 Overview

Fees on natural resource extraction represent an important potential source of funding for conservation. Governments generally levy resource extraction fees in order to capture the economic "rent" generated by natural resource exploitation. Ideally, governments then use the resulting income to fund long-term investments in their countries' sustainable development and natural resource conservation. Methods of capturing the economic rent from natural resource extraction include a number of instruments, including:

- Severance fees or taxes
- Profit-related taxes
- Royalties
- Lease bonuses
- Resource rent taxes
- "Brown taxes"

These fiscal instruments, even when they produce income for conservation, are not, and should not be confused with, environmental or "green" taxes designed to mitigate or prevent pollution and other adverse effects on the environment.

The concept of using resource fees for conservation suggests that a resource extraction project near a protected area will produce economic rent that the government can capture and devote to better conserving the protected area. Establishing such a program can begin with an initiative within the government agency charged with protected areas management, or it can begin with an effort by a conservation organization to build consensus in support of this measure. Using resource rent to conserve protected areas not only represents an important new source of income for conservation, it provides an opportunity for traditional adversaries, such as environmentalists and oil or mining companies, to find common ground. Though the model is very rare, it has provided important new resources for conservation projects in the state of Michigan, U.S.A., and for the U.S. federal government. In countries where channeling rent to government agencies is inappropriate, a private non-profit conservation trust fund may provide additional transparency and gains in efficiency. (See Guide Chapter on Conservation Trust Fund)

There are powerful reasons for devoting the economic rent from nonrenewable natural resources to sustainable development and conservation. Extracting oil, minerals or natural gas is a "one-shot deal," an activity that will provide employment, income and taxes only once, until the site is tapped out. Their extraction, or severance, is thus a permanent loss to the nation's stock of natural capital, a loss which resource fees such as severance taxes help compensate.

The "resource fees for conservation" equation allows governments and the private sector to devote income from exploiting one natural resource to conserve a host of other resources. In essence, the use of resource extraction fees to fund conservation represents a reinvestment of the profits from resource exploitation into the natural environment that produced those resources. In cases where the resource extraction takes place in or near a protected natural area, the equation takes on a compelling logic for conserving the habitats closest to – and most likely to be affected by -- the extraction. A portion of the economic rent captured from these activities could flow directly to the administration of the protected area, or could flow into a central or specific fund charged with funding conservation activities in and around the area.

Yet governments rarely devote resource extraction fees to conservation, and indeed it is not easy to achieve the ideal of using resource extraction fees for the more general goal of sustainable development. (See Advantages and Disadvantages.) On the one hand, there are a host of political challenges to meet, arising from the often conflicting interests of a range of domestic as well as foreign actors. Cash-strapped governments often see rent as just another source of revenue to tap for current spending needs. Even a government willing to use economic rent for sustainable development must confront the demands of a

number of constituencies and the resistance of the entrepreneurs asked to surrender the rent. On the other, effectively capturing rent presents major technical challenges in determining the amount of rent generated and the most effective way to capture it. Though many governments try to capture economic rent, few capture all rent. Thus, the success of any policy to dedicate rent collections to environmental investments demands a two-pronged strategy. First, those designing the strategy must start by meeting stakeholders where they are, "getting into their heads," and moving them toward a consensus that will support both the implementation of the resource fee and its dedication to conservation. Second, the instruments adopted must meet high standards of technical efficacy.

For countries where the challenges to a government resource fees scheme prove insurmountable, one possible alternative is to set up a voluntary program, in which corporations voluntary donate a portion of their economic rent to a trust fund for a protected area near their extraction project. This alternative is discussed in Appendix A.

THE CONCEPT OF ECONOMIC RENT

Economic rent is that extra, unearned income that accrues to the exploiters of a natural resource after they have recovered their investment and earned a reasonable profit on it. It is what comes to investors as a "gift of nature," for its central characteristic is its "unearned" nature. The economic rent from oil and minerals is equal to the international commodity price minus all marginal factor costs from extraction and transport, including a normal return to capital and excluding taxes and royalties. Moreover, exploitation of non-renewable resources such as oil or minerals should generate enough income to spur additional investment in new fields and mines. Thus, some authors exclude from rent the additional profits needed for investment in future ventures.

The inclusion of a "normal return to capital" in this list of costs is key to understanding rent. Capital investments have an opportunity cost: the rate of return an investment would earn in its next most profitable use, assuming the alternative use presented the same degree of risk. Thus, because the cost of capital is higher for a risky oil venture in a developing country, an investment there might well earn less rent than the same investment in an industrialized country. But nonrenewable resource projects that earn no rent at all are rare indeed.

All of these factors are important to consider in the design of a policy designed to capture rent for conservation by using resource fees, for they mean that the fees should never affect shareholders' ability to get a competitive return on their investment. Because rents are profits in excess of what investors demand, they can be collected without discouraging further investment.

In the case of natural resources, the legitimacy of rent capture rests on their status as a collective inheritance (the "natural heritage theory"). Moreover, in most countries except the U.S., natural resources are the property of the state. Thus, these resources should serve broader economic objectives. This does not mean that the state itself must exploit the resource. Instead, by collecting rents the government can share in the benefits of exploitation without diminishing its attractiveness to private investors or curtailing their rights under concession.

Because they are in some sense collectively owned, rent from natural resources should contribute to the well-being of future as well as present citizens through investments in long-term sustainable development, such as in the formation of human capital or the conservation of threatened natural capital. The emphasis on the rights of future generations to a share in resource rents arises from the one-time nature of resource extraction. Other economic activities, such as computer software production, can provide employment and tax revenues for an indefinite time into the future. Making one CD-ROM does not make it impossible to produce another ten years hence. But natural nonrenewable natural resources can only be extracted and taxed once. Their severance is a permanent loss to the state, which severance taxes compensate.

1.2 Key Actors and Motivations

Recognizing and identifying stakeholders affected by the use of resource fees to fund conservation is crucial to building support for the fees and their dedication to conservation.

Actor	Factors to Assess	Motivations for Supporting Fee
Domestic Government. The central executor of a resource fee for conservation.	Political will to support conservation Degree of regulatory capture Relative power of ministries or agencies overseeing resource extraction and conservation Relative power of sectors likely to compete for new income (e.g., conservation and education) Tax collection capacity Corruption Relationship between government and NGOs Capacity of state conservation agencies to effectively utilize income	New source of income International image Relative power in government of conservation-minded officials Support for fee for conservation schemes by groups deemed politically significant
Foreign Governments. Can provide political support, technical assistance, and dissuade corporations from resisting the adoption of this model.	Willingness to support conservation with a new tax on transnationals Capacity to lobby domestic government Relationship with transnational NGOs	Win support from conservation-minded constituencies in their own government and society
Domestic NGOs. In-country conservation NGOs are likely to be the strongest domestic constituency for this instrument, but some may be less enthusiastic because of the linkage with resource exploitation.	Capacity to mobilize support Capacity to watchdog government and corporations Institutional strength Capacity to build coalitions with other NGOs that might lobby for fees to be spent on their own constituency Existence of NGOs opposing resource extraction project	Support for conservation, sustainable development Getting a “seat at the table” in resource development discussions New sources of income
Foreign NGOs. Can provide technical and material support and lobby corporations, governments, and IFIs.	Number of foreign NGOs with ties to country Capacity to provide material or technical support.	Support for conservation New sources of income

Local communities. Local communities must play a role in designing the program in order to assure a constituency to the program.	Who legitimately represents local communities. Candidates include local government, local community based organizations (CBOs), farmer or peasant guilds or indigenous peoples' organizations, NGOs. Traditional relationship with central government. Traditional relationship with resource extraction firms. Traditional relationship with conservation NGOs. Traditional relationship with the protected area.	New income. Support for a protected area which may be an important source of renewable resources. A seat at the table in negotiations including government and corporations.
Corporations.	Stage of concession negotiations between corporation and government. Corporate culture regarding negotiating with civil society Corporate culture and record regarding the environment	Win support from adversaries and defuse potential opposition Project image of good corporate citizen supporting conservation Clarify roles of government, NGOs and corporation in conservation.

1.3 Types of Resource Fees

Resource fees all attempt to capture the economic rent produced by the extraction of natural resources. They must be distinguished from the payments governments impose on industries which pollute the atmosphere or degrade the land. Such “green taxes” or “mitigation taxes” do not capture rent. They are a sort of insurance policy against the day when society must repair the damage caused by the extractive activity. Mitigation taxes seek to force producers to internalize what economists call externalities — costs that neither producers nor consumers pay in an unregulated market, and which are passed on instead to the broader collective. They are, in essence, an effort to make prices more realistic by incorporating social and environmental costs into the cost of production. Resource fees include the following fiscal instruments:

1.3.1 Severance Fees or Taxes

Severance taxes are taxes on the extraction of natural resources, particularly mineral resources. They are not a tax on income, nor do they represent ownership of the resource, as a royalty does. Instead, severance taxes (known occasionally as conservation taxes) are a type of production tax directly triggered by the act of removing a natural resource from the ground.

In the U.S., fuel resources represent by far the largest source of severance tax receipts. In 1980, roughly 92 percent of severance tax collections in the U.S. came from oil, gas and coal exploitation. For some states, these receipts are a critical source of income. Almost 50 percent of Alaskan state tax receipts in 1993 came from oil and gas severance taxes. Severance taxes base their legitimacy on the “natural heritage” of the people of a state or nation, rather than on direct ownership of the resource. Since nonrenewable resources are part of a country or state’s “natural account,” their removal depletes the country’s resource base, wealth, and future potential for taxes and economic activity.

There are two basic types of severance tax. The first, and most common, is the **ad valorem tax** based on the value of the resource extracted, which may be measured at various points from source to final sale. The ad valorem tax may allow producers to deduct a variety of costs. A simpler tax is the **specific tax**, which levies a set fee per unit of production, such as barrel of oil, thousand cubic feet of gas, or ton of coal. Receipts from ad valorem severance taxes depend on market prices as well as production levels, both of which can vary considerably, while receipts from specific taxes depend only on production levels. Ad valorem mechanisms provide a less stable source of income but greater security to a company concerned that its tax commitments remain flexible enough to decline when prices do. On the other hand, specific mechanisms provide more stable funding and allow the company to retain a higher proportion of the resource rent during price booms.

1.3.2 Profit-related Taxes

Another method of capturing rent is a modification of the corporate income tax. Under the profit-related tax, as profits rise, the tax increases. The benefit of basing taxes on profits is that there is no danger that a corporation will be forced to pay beyond its means: if profits fall below a certain level, no fees are charged.

1.3.3 Royalties

Resource extractors pay royalties to the owners of the resource they are exploiting. Royalties give resource owners a right to receive a specified part of the production free of the expense of production. Royalties apply to ownership of a wide variety of goods, ranging from natural resources to intellectual property. The copyright owner of a novel receives royalties — a share of the income from sales — from future reprints of her book regardless of whether she contributes to producing the new edition. The same goes for state-owned oil, gas or mineral resources. A logical consequence of the difference between severance taxes and royalties is that a state may receive both royalties and severance taxes from the exploitation of oil it owns, but it can receive only severance taxes from oil belonging to a private owner. In

most countries, subsoil natural resources are the property of the state, and governments generally include royalties within concession contracts.

Royalty rates vary widely between and within countries and are often charged on a sliding scale: lower during the early years of a contract while investors recover their stake, higher in later years after the investment has paid off. One study found that royalty rates on mineral resources in developing countries varied from 2 percent of sales value on copper in Chile to 9 percent on Mexican gold. But the key issue is not the rate. The key issue in determining royalties is "a percentage of what?" Whether or not to allow certain costs to be deducted before a royalty is assessed is a critical question.

1.3.4 Lease Bonuses

Around the world, governments license rights to exploit state-owned natural resources in two basic ways: they either auction them off, a system rarely used outside the U.S., or they allocate the licenses under a "discretionary allocation" system. Under the former, rights are sold to the highest bidder. Under the latter, government officials apply a variety of economic, administrative and political criteria in choosing a licensee. States use auctions as a way to capture economic rent by pitting one bidder against another, under the assumption that bidders will outbid each other up to the limit of the expected economic rent, since bidding higher than the rent would render the investment unprofitable.

Some economists feel that the most effective way for governments to capture resource rent is through a lease bonus or lease auction system. They argue that when firms must compete to lease resource rights, the "invisible hand" of the market will ensure that bidders pay up to the full value of anticipated rent. Unlike production taxes, auctions should not discourage the development of marginal fields because bidders are not obliged to pay more than the field's estimated worth. Moreover, though one auction may fall short of capturing the full amount of rent, in the aggregate the system will lead bidders to bid up to the full expected value of the economic rent.

Unfortunately, whatever its theoretical attractions, the auction system is not always feasible in developing countries or high risk areas. In Peru, for instance, while the government has auctioned off working oil fields by privatizing the state-owned Petroperu's holdings, efforts to auction licenses to explore and exploit new oil blocks have proven far less successful.

1.3.5 Unconventional Fiscal Instruments

Royalties and severance taxes, the most common rent-capture tools, have a number of drawbacks. Most troublesome is their difficulty in adapting to changing circumstances. Because costs are rarely deducted from value in calculating royalties, they may push an otherwise profitable activity into the red. A flat-rate royalty or severance tax may ignore falling commodity prices or rising production costs, collect more than the economic rent and diminish the profits needed as a return on investment. In extreme cases, these payments may take place even in the absence of profits. In response to these concerns, governments and economists have proposed innovative instruments which help minimize the risks inherent in rent capture.

Under the "**resource rent tax**," payment does not begin until the investor has recovered the investment and is receiving a normal (discounted) rate of return on the project. In other words, until and unless the investment is generating a positive cash flow beyond a normal rate of return, the investor does not pay the tax. Though the resource rent tax has the advantage of guaranteeing investors that they will not lose normal profits to a tax, by allowing deductions for capital investments it may promote "gold-plating" (the famous $200 screwdrivers) or over investment. Likewise, the tax demands a great deal of information about market conditions, investments and production.

The "**Brown tax**" represents an even bolder proposal to target rent capture without affecting returns or discouraging investment. Under the Brown tax, the government taxes positive cash flows at a flat rate, but subsidizes exploration and production at that same rate when the investor is suffering from a negative cash flow. While this proposal is probably unfeasible in most developing countries, which would have difficulty providing the government's share, it represents a unique effort at sharing investment risk among the public and private beneficiaries of production.

2 ADVANTAGES AND DISADVANTAGES OF RESOURCE EXTRACTION FEES

Advantages	**Disadvantages**
The model uses income from a resource –depleting activity to conserve other resources.	The model may encourage governments to permit nonrenewable resource extraction IUCN Protected Area Management Categories I to IV
Potential exists for high levels of income.	Corporate actors may resist them politically during the design process, and then by obfuscating the implementation process.
If rent capture mechanism is successful at capturing only rent and not diminishing rate of return, resource fees are a win-win proposal for conservationists and business.	Unless the rent capture mechanism and its collection are both efficient and credible, they may discourage investment.
Adopting and implementing resource fees for conservation can help build consensus among diverse actors for finding a practical balance between resource extraction and conservation, between the need for short-term economic growth and the need for long-term sustainable development.	Competition for income obtained through resource fees is likely to be heavy, with many stakeholders expressing legitimate claims.
Promotes promotion by civil society through stakeholder workshops.	May make process of granting resource concessions more open and democratic.
Because this instrument offers corporations an opportunity to provide support directly to conservation, they may see it as a valuable investment in positive image-making in a field (the environment) where their image is traditionally very negative.	Resource fees rely on and may legitimize extractive activities that have historically had, and may continue to have, negative impacts on the environment. As a result, some environmentalists may oppose their use.
Can provide resources for sustainable development around protected areas, thereby obtaining greater local support for conservation.	Up-front investment in analyzing and designing policy is heavy. Though potential payoff is great, the model is still untested in the developing world.

3 SUCCESS FACTORS:

- Relations between government, corporations and the majority of the environmental community must not be so adversarial that co-operation is impossible.
- Political support for the measure exists among the most powerful actors in the executive branch.
- Sufficient technical assistance is available to support the costly and time-consuming stakeholder consultation and policy design processes.
- Local communities must be willing to support the use of this income for conserving a protected natural area. In order to obtain this support, it can be helpful to use part of the funds to support local sustainable development, a measure which often contributes to reducing pressures on the protected area.
- Corporations see and are willing to seize an opportunity to improve their environmental image.
- Government has the technical capacity to assess and levy rent-capture instruments efficiently and effectively.
- Government agency or NGO which will administer the funds' have the capacity to use them effectively.
- The country's political institutions are stable enough to assure corporations that the fee will be used as intended.
- Corruption is minimal or unlikely to affect the collection of the fee.

- An oil or mineral deposit exists sufficiently close to a protected natural area to create a logical nexus with it without impacting it so severely that environmentalists would be likely to oppose it.Step-By-Step Methodology

4 CASE STUDIES

4.1 Peru's Canon

Most governments try to collect economic rent from resource development projects, and many seek to devote them to development (sustainable or otherwise) but very few specifically earmark a portion of the rent for conservation. The Peruvian government's use of royalties and income taxes from mineral and hydrocarbon production is a more typical example of how central and local governments seek a share of resource income. The central government redistributes a portion of its income taxes from mineral and hydrocarbon production back to local governments.

This distribution is known as the *canon (minero* or *petrolero),* and is distributed as follows: 20 percent goes to the regional government, 20 percent goes to the district or districts (local municipal governments) where the resource project is located; 60 percent is divided among all provincial and district governments in the department where the project is located. In 1994, still relatively early in the mining boom, mining companies paid approximately US$300 million in income taxes, about 31.1 percent of the total corporate income tax collected in Peru. The *canon minero* that year, a percentage of the income tax paid by mining and oil companies, totaled about $60 million, and was distributed among nine of Peru's 12 regional governments and forty provincial governments.

In addition, mining companies pay an annual fee of US$2 per hectare of land to which they have staked a recognized claim. Sixty percent of the income remains with the central government, while 40 percent is distributed to local (district) and provincial governments.

4.2 The U.S. Federal Land and Water Conservation Fund

An early example of a conservation fund is the Federal Land and Water Conservation Fund (LWCF), established by law in 1964. Originally, income for the LWCF came from sales of federally-owned real estate, motorboat fuel taxes and recreational fees for Federal lands. But in 1968, concerned that insufficient income was accruing to the LWCF, Congress mandated that Outer Continental shelf mineral leasing receipts also support the fund. Since then, the LWCF has enjoyed uneven fortunes. On average, it has provided grants worth some $100 million annually since it was founded. The LWCF has had an enormous impact on American conservation. LWCF grants have funded the acquisition of 3.4 million acres of new Federal lands, including 55 new national seashores, lakeshores, trails, rivers and recreation areas. The LWCF has provided 37,000 grants to state and local governments and financed the development of 27,000 basic recreation facilities in every state and territory in the nation. Overall, over the life of the fund, it has provided $8.8 billion for conservation activities in the United States.

4.3 Michigan's Natural Resources Trust Fund

In 1984 Michigan voters approved a constitutional amendment requiring that royalties from oil, gas and other mineral leasing on state land be placed in a conservation and recreation trust fund. The Trust Fund originally arose as a compromise in a dispute over allowing oil and gas leasing in protected areas. (See the IUCN position on mining and similar development in protected natural areas.) With strict environmental controls, the development was allowed, but the income from these nonrenewable resources was earmarked to conserve Michigan's natural heritage. Over the years, the Trust Fund has provided over $300 million in funding for over 900 natural and recreational areas.

Under the original legislation regulating the trust fund, one-third of the royalties covers annual program costs, such as administration and grants for land acquisition, while the other two-thirds are deposited into the Natural Resources Trust Fund. Additional funding for annual programming comes from interest on the trust fund. In 1994, during another constitutional referendum, Michigan voters established the State Park Endowment Fund, which receives up to $10 million annually from oil and gas royalties.

Reports on the Trust Fund read like a primer on careful fund design. A five-member Board oversees the Trust, which selects projects on a competitive basis from nominations by the state's natural resource agency, local governments, citizens and conservation organizations. Each year, the Trust must spend not less than 25 percent of its expenditures on land acquisition, and not more than 25 percent on developing public recreational facilities. When it purchases — and thereby makes public — privately-owned land, that property disappears from the tax rolls, so the Trust Fund also makes annual payments to local governments in lieu of the lost tax revenue.

4.4 The Baltic Nations

Estonia and Latvia both devote a portion of their natural resources taxes to their national environmental funds. For instance, Latvia's Environmental Protection Fund, which began working in 1996, receives 40% of the proceeds of the natural resource tax. Estonia's National Environmental Fund receives 30% of the natural resources tax. (In both countries, the balance of the tax receipts remains in the hands of the local government in the area where the resource extraction project is located).

Latvia's Environmental Protection Fund is administered by a Board approved by the Cabinet of Ministers and chaired by the State Minister for Environment, and an Executive. The Fund provides grants to in the areas of water and air quality protection, waste management, nature protection, biological diversity, and environmental education.

5 STEP-BY-STEP METHODOLOGY

Phase 1: Pre-Feasibility Assessment

Step 1: Determine who takes the lead in developing the proposal for Resource Fees for Conservation and building consensus in favor of it.

- Conservation NGO
- Government environmental or protected areas agency

Step 2: Identify protected area and resource project. Are there nonrenewable natural resources slated for exploitation that could generate resource fees located near or logically linked to a protected natural area?

- If yes, go to Step 3.
- If no, go to Step 2A.

Step 2a: Is there a large natural resource exploitation project slated for an area that is vulnerable or represents particularly important habitats? Such a project might produce economic rents that could go into a more general conservation fund to promote conservation and sustainable development in similar habitats.

- If yes, go to Step 3.
- If no, resource fees are unlikely to be an appropriate instrument for supporting a particular protected area.

Step 3: Assess institutional capacity in government to capture and effectively use new funding.

- If sufficient, go to Step 5.
- If insufficient, resource fees are unlikely to be an appropriate instrument for supporting a particular protected area.

Step 4: Lead actor (government agency or NGO) should secure funding and technical assistance to make possible the following activities:

- Technical analysis
- Stakeholder identification
- Stakeholder workshops

Step 5: Conduct technical analysis to determine the most efficient methods of assessing and capturing rent.

Step 6: Prepare informational materials and presentations describing the Resource Fees for Conservation Proposal.

Phase 2: Stakeholder Analysis

Step 7: Determine which individuals or agencies in central government would play a role in levying a resource fee for conservation. Potential actors include:

- The Ministry of Finance
- The Ministry in charge of overseeing the resource in question
- The Ministry(ies) or agency(ies) in charge of environment, conservation and protected areas management
- Parliament

Determine other stakeholders outside the central government, including:

- Local and state or regional governments near the extraction site
- Local communities
- Local peasants, farmers, and/or indigenous peoples and guilds (such as unions), community-based organizations (CBOs), or NGOs representing them or their interests
- Other government sectors whose responsibilities promote sustainable development, such as the education sector
- Business stakeholders
- Conservation organizations
- Foreign governments or NGOs which might support the process.

Step 8: Meet with core stakeholders individually to present initial proposal for the Resource Fees for Conservation model and determine level of interest and opposition.

Step 9: Based on the assessment of the country's institutional capacity and the stakeholder analysis, determine if measure is politically feasible

Step 10: Design preliminary proposal based on initial stakeholder analysis and technical analysis.

Phase 3. Stakeholder Workshops.

Step 11: First stakeholder workshop to present proposal, receive input, and select a smaller group of stakeholders to participate in subsequent meetings.

Step 12: Second (and/or subsequent) stakeholder workshops to advance proposal.

Step 13: Third (or final) stakeholder workshop to adopt proposal.

Phase 4. Adoption.

Step 14: Government adopts measure; government and resource company sign agreement.

Step 15: Government establishes program for fund use.

Phase 5. Implementation.

Step 16: Stakeholders set up oversight committee to monitor collection and use of funds.

6 ASSESSMENT PHASE

6.1 Overview of Technical Analysis

Unless government agencies charged with taxing and granting concessions to resource extraction companies are already committed to this process, the NGO or government agency taking the lead in sponsoring a Resource Fees for Conservation scheme will probably have to contract a consultant to analyze the technical feasibility of the measure and design a proposal for the specific instrument used. What follows is a proposed terms of reference for the analysis and proposal.

6.2 Generic Terms of Reference for Technical Analysis

[SUMMARY OF FINANCIAL/CONSERVATION CONDITIONS LEADING TO STUDY.] To explore these opportunities, [NAME OF CONTRACTING ENTITY] is commissioning a technical analysis. The consultant will work with [FILL IN RELEVANT PARTIES]to conduct a technical analysis of the potential adoption of a fiscal instrument designed to capture economic rent from [NAME OF RESOURCE EXTRACTION PROJECT] in order to devote it to conservation and sustainable development projects in and around [NAME OF PROTECTED AREA]. The analysis will evaluate the effectiveness of existing rent-capture instruments used by the government, the legal and institutional potential for adopting additional instruments, the amount of rent likely to be generated by the project, the amount likely to be captured by existing instruments, and the amount likely to remain available for capture by this instrument.

Terms of Reference

Objectives:

The overall objective of the consultancy is to explore the technical feasibility of implementing a Resource Fees for Conservation program by capturing economic rent from [NAME OF RESOURCE EXTRACTION PROJECT] and spending it on conservation and sustainable development projects in and around [NAME OF PROTECTED AREA]. The analysis should focus on (i) identifying existing rent-capture instruments already in use in [NAME OF COUNTRY] and, if relevant, in the project concession; (ii) estimating the amount of economic rent not likely to be captured by existing instruments; (iii) estimating the amount of additional economic rent that might be captured for conservation without discouraging new investment; and (iv) proposing an instrument for capturing this rent.

Tasks:

1. Identify existing rent-capture instruments in use
- List existing major mineral and hydrocarbon concessions
- Identify rent-capture instruments used in concessions, including [NAME OF PROJECT], if relevant
- Review legal and administrative constraints on the adoption of rent-capture instruments

2. Select three major concessions and analyze effectiveness of these instruments in capturing economic rent from these projects

3. Analyze rent levels which government has failed to capture in the three concessions

4. Determine extractors' willingness to surrender additional rent
- Analyze returns on investment from the three projects
- Analyze country's success at attracting new investment in past 3 years
- Analyze country's image and credibility among mining and hydrocarbon investors

5. Recommendations
- Recommend whether or not new rent-capture instrument is technically feasible and unlikely to discourage new investment
- Recommend preliminary design for rent-capture instrument.

Deliverables

1. Report on Technical Analysis. A preliminary report capturing all of the task points outlined above will be submitted to a "Review Team" for comments and discussion prior to the finalization of the report for submission to the contractor. A final report will be submitted in written and electronic form.

2. List of contacts and sources. A list of key contacts and sources (name, title, address, email, phone number) will be attached to the final report.

3. Briefings. Consultant will provide up to a total of 5 briefings (for contractor, government agencies, resource extractor, and first stakeholder workshop), to be held in [LIST CITIES].

Overview of Non-Technical Elements of Pre-Feasibility Assessment and Stakeholder Identification

The lead actor in this process is likely to possess sufficient knowledge and resources in-house to identify stakeholders, though additional funding will probably be needed to free up the staff time needed. What follows are worksheet tools for collecting and analyzing stakeholder information. The worksheets contain bookmarks which link them to the step-by-step methodology, above.

WORKSHEETS [UNDER DEVELOPMENT]

Step 2: Resource Projects

Resource Project	Type	PNA or Habitat	Level of Impact

Instructions for Worksheet for Step 2, Resource Projects.

- List names of resource projects.
- List type of resource projects.
- List associated protected areas or habitats.
- List level of the project's likely impact on the habitat or protected area, ranging from 0 (none) to 5 (unacceptably high.)
- This worksheet will provide a ready reference for projects suitable for the resource fees for conservation instrument. A project with an unacceptable high impact on the habitat or protected area is an inappropriate candidate. Impact scores between 1 and 4 may provide useful talking points for proposing the instrument. A project with an impact score of 0 can still be an appropriate candidate based on the natural heritage theory of rent capture and usage.

Step 3: Institutional Capacity

Indicator	**Measure**
Environmental Agency	Effectiveness 1-5
Parks Agency	Effectiveness 1-5
Environmental Fund	Effectiveness 1-5
Foreign Aid for Protected Areas	Y=2, N=0
Tax Agency	Effectiveness 1-5
Corruption	Corruption Perceptions Index
INSTITUTIONAL CAPACITY MEASURE	(SPREADSHEET TOTALS ROWS ABOVE)

Instructions for Worksheet for Step 3: Institutional Capacity.

- Assess effectiveness of national environmental agency, from low to high (1-5), based on the degree to which the agency has proven able to enforce national environmental laws and regulations. If the country has no national environmental agency, enter 0.

- Assess level or protection afforded protected areas by protected areas agency, from low (paper parks) to high (protected areas are managed effectively) (1-5). If the country has no national protected areas agency, enter 0.
- Assess effectiveness of national environmental fund (if any), ranging from 1 (low) to 5 (high). If the country has no national environmental fund, enter 0.
- Determine whether protected areas receive overseas assistance (yes.=2, no=0)
- Assess effectiveness of national tax agency, ranging from ineffective (1) to highly effective (5). If the country has no national tax agency, enter 0.
- Enter country score on the Corruption Perceptions Index, a program of Transparency International and Gottingen University. (http://www.gwdg.de/~uwvw/icr.html.)
- Spreadsheet will total these for an overall institutional capacity measure. A perfect score for institutional capacity would be 32. Countries with scores ranging from 10 to 32 would be appropriate candidates for the instrument.

Phase 2: Stakeholder Analysis

	A. Support or Oppose	B. Influence over Policymaking	C. Stakeholder Rating
Government			(SPREADSHEET SUMS A x B)
Business			(SPREADSHEET SUMS A x B)
Local Stakeholders			(SPREADSHEET SUMS A x B)
Conservation Organizations			(SPREADSHEET SUMS A x B)
Foreign or International Organizations or Governments			
TOTAL STAKEHOLDER MEASURE			(SPREADSHEET TOTALS ROWS ABOVE)

Instructions for Worksheet for Phase 2: Stakeholder Analysis.

- List main stakeholders, including government, business, local actors and communities, domestic conservation organizations, and international governments and organizations.
- For each of these stakeholders, assess the following:
  - Whether the stakeholder is likely to strongly support (2), support (1), be neutral on (0), oppose (-1), or strongly oppose (-2) the resource fees for conservation instrument
  - The stakeholder's influence over policymaking, ranging from 1 (low) to 5 (high).

- The third column provides a measure, Stakeholder Rating, which captures both the stakeholder's support or opposition and the relevance that position is likely to have in determining whether the instrument is adopted.
- The total stakeholder measure provides an estimate of whether the country and/or the project in question are appropriate candidates for the instrument. A negative rating suggests they are not. A rating of 0-5 suggests they may be. Ratings above 5 suggests they are.

WCPA POSITION STATEMENT ON MINING AND ASSOCIATED ACTIVITIES IN RELATION TO PROTECTED AREAS (Welcomed by IUCN Council April 99)

Introduction

This position statement is put forward as a global framework statement which recognises that clear rules are easier to understand and defend than ones which depend too much on interpretation. It is considered more appropriate to provide clear global guidance in a statement such as this and leave it to countries to consider what adaptations are needed in local circumstances. This statement defines the position of IUCN's World Commission on Protected Areas (WCPA) towards mining[1] and associated activities in and adjacent to protected areas.[2]

WCPA is the world's largest network of protected area professionals with 1,300 members in 140 countries. This position statement acknowledged the increasing application of “best practices” environmental approaches and lower impact technology within the mining industry as well as examples of support for conservation activities. However, WCPA also notes that exploration and extraction of mineral resources can have serious long-term consequences on the environment.

WCPA has developed this position statement based on what it believes to represent best practice in respect of mining and protected areas. The guiding principle adopted in this statement is that any activity within a protected area has to be compatible with the overall objectives of the protected area. For this reason, this statement is based on the IUCN Protected Area Management Categories, which reflect management objectives focused on the protection and maintenance of biodiversity and associated natural and cultural values.

The IUCN category system is being increasingly recognised and applied around the world. The position statement relates to protected areas, which are one part of a spectrum of land use. This statement thus needs to be considered in the context of broader efforts on the part of the mining industry, conservation groups, governments and others to promote ecologically sustainable development on the part of the mining industry.

The process for preparing this position statement has involved: (a) preparation of a draft statement; (b) wide circulation of the draft to a range of different stakeholders; (c) consideration of comments and amendments; and (d) review by the IUCN Council before adoption by WCPA.

Position Statement

WCPA (The World Commission on Protected Areas) believes:

1. A comprehensive approach to planning should be adopted where possible to establish an adequate and representative protected area system set within the broader landscape. Assessment should be based on good science including assessments of natural and mineral values. This is particularly relevant to the establishment of new protected areas.

2. Exploration and extraction of mineral resources are incompatible with the purposes of protected areas corresponding to IUCN Protected Area Management Categories I to IV, and should therefore be prohibited by law or other effective means.

3. In Categories V and VI, exploration and minimal and localised extraction is acceptable only where this is compatible with the objectives of the protected area and then only after environmental impact assessment (EIA) and subject to strict operating, monitoring and after use restoration conditions. This should apply "best practices" environmental approaches.

[1] The term mining in this position statement describes all forms of mineral, salt and hydrocarbon extraction

[2] IUCN defines (IUCN 1994) protected area as "an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means"

4. That should exploration be permitted in category V and VI, an EIA should be required following such exploration before extraction is permitted. Approval for exploration should not imply automatic approval for extraction.

5. Proposed changes to the boundaries of protected areas, or to their categorisation, to allow operations for the exploration or extraction of mineral resources should be subject to procedures at least as rigorous as those involved in the establishment of the protected area in the first place. There should also be an assessment of the impact of the proposed change on the ability to meet the objectives of the protected area.

6. Exploration and extraction of mineral resources, and associated infrastructure, which are outside of, but negatively affecting the values for which protected areas were established should be subject to EIA procedures which consider, *inter alia*, the immediate and cumulative effects of the activity on the protected area, recommend operating and after use conditions, and ensure that the values of the protected areas are safeguarded.

7. In recognizing the important contribution the mining industry can play, opportunities for co-operation and partnership between the mining industry and protected area agencies should be strongly encouraged. Collaboration with the mining industry should focus on securing respect and support for this position statement; broadening the application of best environmental practice for mining activity; and exploring areas of mutual benefit.

7 RESOURCES

7.1 Bibliographic References

John Kellenberg, Accounting for Natural Resources in Ecuador, Environmental Department Paper No. 41 (Washington D.C.: World Bank, September 1996)

Alexander Kemp, Petroleum Rent Collection Around the World (Halifax: The Institute for Research on Public Policy, 1987)

Michigan Natural Resources Trust Fund, Annual Report (various years)

7.2 Web Sites

http://www.gwdg.de/~uwvw/icr.htm. The site provides the annual Corruption Perceptions Index, a program of Transparency International and Gottingen University.

"Outline the criteria for a tax system designed to extract economic rents from natural resource industries," Thomas Dickson. www.eraweb.net.

www.nps.gov/crweb1/lwcf. Provides an overview of the history and activities of the U.S. Federal Land and Water Conservation Fund.

7.3 Appendix A

If a government imposed resource fees program is not feasible, corporations could commit to a voluntary "severance donation," donating a small sum for each barrel of oil or ton of minerals removed from the ground to a private trust fund designed to conserve a protected area near their resource extraction project. Or they could agree to donate to such a fund a percentage of their royalty payments over and above what they pay the resource owner (usually the state). With safeguards built in to ensure that a corporation does not get caught in a donation schedule it cannot meet because of price fluctuations, these funds could support national parks, help local communities achieve sustainable development in fragile tropical lands, promote environmental education, or develop private land trusts. Committing to such a program would help a corporation:

- lessen the political risk that arises from perceptions that it is getting "something for nothing,"
- improve corporate image while returning a healthy profit to investors,
- build a new model for private sector philanthropy in conservation, establishing its credentials as a corporate leader, and
- establish a permanent source of funding for conservation and sustainable development

Of course, corporations may not want to admit to governments that they are earning rent, because if they do, governments will try to collect it. As noted above, rent capture is hard because it entails an information asymmetry: to calculate rent, governments must rely on information supplied to them by the firm, but the firm has an obvious incentive to retain as much of the rent as possible. Converting rent capture into a voluntary action which gives firms a powerful boost in stakeholder relations lessens (but does not eliminate) this principal-agent problem.

The rent capture instruments outlined in the discussion of government-run programs provide a useful gallery of mechanisms on which to draw for financing a voluntary conservation fund. Two of them seem most feasible:

Severance donations: The easiest type of donation to manage would resemble a specific severance tax, in which the corporation donates a set sum for each unit of production, whether barrel of oil or ton of minerals. In order to protect the company against price shocks, the mechanism could be designed to take effect only when per unit prices exceed a certain level.

Royalty donations: A mechanism for donating some fraction of a percentage of royalty payments to conservation would have the virtue of following a clear formula for calculating the firm's donations. In cases where the firm faces a high degree of risk, the royalty donation could be designed to "kick in" only when a certain price per unit is reached or a certain level of income had been attained.

The donation mechanism should be designed to guarantee long-term funding while protecting producers against price shocks. The discussion of resource rent taxes suggests some of the protections that can be built into either a severance-based or a royalty-based donation scheme. For instance, the agreement could stipulate that donations not begin until the investor has recovered the investment and begun to reach a discounted rate of return on the project.

The "Brown tax," with its risk-sharing elements, may also offer useful insights. One possibility is for the firm to make donations into a trust fund whenever unit prices rise above a certain level. Income from the trust could be used for conservation projects, while the principal would remain untouched. If unit prices fell below a certain level, the donor could withdraw from the principal according to a pre-determined formula for recovering donations.