SUPPORTING PFM with NATURAL RESOURCE RISK MANAGEMENT

2018 ICGFM 32nd Annual International Training Conference
Miami, Florida
Natural Resource Risk Management

Allows public financial managers to:

• Facilitate better outcomes across government
• Increase government revenue
• Reduce costs
• Obtain better information with which to make public finance decisions
Agenda

- Convergence of PFM and Natural Resource Management
- Risk Management Overview
- Natural Resource Overview
- Risk Identification
- Risk Assessment
- Risk Treatment
- Control Structure Activity
Convergence of:

PUBLIC
FINANCIAL
MANAGEMENT
and
NATURAL
RESOURCE
MANAGEMENT

PFM
- Budget Allocation
- Expenditure Management
- Debt Management
- Resource Mobilization

NRM
- Revenue Collection
- National Company Management
- Sovereign Wealth Fund Optimization
- Efficient Capital Conversion
- Geologic Evaluation
- Industry Promotion
- Industry Operations
- Regulation

Efficient Capital Conversion
Risk Management Overview

**Risk**

is the impact of uncertainty on objectives

-ISO 31000 2009

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**Risk Management**

is the set of activities and methods to control risks

-Adapted from ISO 31000 2009
Risk Management Overview

1. Define the Objective
2. Identify Risk
3. Assess Risk
4. Control Risk
5. Plan Reactions
6. Review and Monitor
Natural Resource Overview

- Natural resource revenue can represent up to 98% of fiscal revenue
- With optimization plans, countries can increase resource revenue by 200%
- The resource curse can devastate public value
- Environmental damage can be catastrophic
- Industry is uncertain
Natural Resource Overview

Objective:
Efficient Conversion of Resource to Public Value
Natural Resource Overview

Uncertainty

- Resource
- Production
- Investment
- Return

Public Value

Limited Negative Effect
Responsible Economic Activity
Reasonable Government Take
Risk Identification

Primary Objective

Strategic Plan

Rights and Obligations

Stakeholder Expectations

Core Processes

Key Dependencies

Significant Risks

Significant Risks (ex)

Unidentified Resources

Inefficient Production

Inefficient Investment

Reduction of Public Value

Low Commodity Price
Risk Treatment

Controls

<table>
<thead>
<tr>
<th>Directive</th>
<th>Preventive</th>
<th>Detective</th>
<th>Corrective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directions in support of the objective</td>
<td>Prevention of negative events/ Support of positive events</td>
<td>Detection of event occurrence</td>
<td>Correction of event impact</td>
</tr>
</tbody>
</table>
Risk Treatment

Controls Example:

<table>
<thead>
<tr>
<th>Source</th>
<th>Directive</th>
<th>Preventive</th>
<th>Detective</th>
<th>Corrective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure Costs</td>
<td>Law</td>
<td>Regulation</td>
<td>Approval</td>
<td>Fees</td>
</tr>
<tr>
<td>Production Costs</td>
<td>Regulation</td>
<td>Contract</td>
<td>Comment</td>
<td>Fines</td>
</tr>
<tr>
<td>Transport Costs</td>
<td>Process</td>
<td>Approval</td>
<td>Edit</td>
<td>Penalties</td>
</tr>
<tr>
<td>Competitive Production</td>
<td>Training</td>
<td></td>
<td></td>
<td>Termination</td>
</tr>
<tr>
<td>Technology Used</td>
<td></td>
<td></td>
<td></td>
<td>&gt; Controls</td>
</tr>
</tbody>
</table>

Impact

- Low Exploration
- Low Total Production
- Lower Profit
- Lower Gov Profit
- Lower Public Value

Inefficient Investment

Used

Law
Regulation
Contract
Process
Training

Heck
Review
Audit
Media

Penalties
Termination
> Controls

Fees
Fines

Public Value

Regulation
Process
Contract
Training
Introduce yourself to the colleagues at your table

Open BAG 1 and take out the Legos

We are now going to manage risk for a country with newly discovered natural resources
1. Each table form 4 groups (1-3 people)
2. Each group build a wall using only the blocks in BAG 1
   - Red    Directive
   - Blue   Preventive
   - Green  Detective
   - Grey   Corrective
3. As a table, put your walls together and build a box
4. Attempt to contain your natural resources (coffee beans)
5. One person, test the structural integrity of the box

6. As a table, rebuild the box as strong as possible using any parts in BAG 1 and BAG 2

7. Pass the box around the table for each person to test and improve
Activity
Discussion
Conclusion

By participating in and supporting natural resource risk management activities, public financial managers can:

• Facilitate better outcomes across government
• Increase government revenue
• Reduce costs
• Obtain better information with which to make public finance decisions
Thank you for your attention

Questions?

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