The Arcus Foundation’s Wild-Meat Threat Matrix

Dr Josephine Head
What is the wild-meat threat matrix?

Practical document to provide guidance:

• Determine drivers of hunting and consumption

• Cultural context

• Enable detailed interpretations of local hunting drivers
What the wild-meat threat matrix is **not**...

~A basis for behaviour change intervention~

Lack of robust evaluation

**It does:**

- Provide a framework for systematic measurement
- Prerequisite for longer term monitoring
- Enable the development of informed strategies
Why do we need the threat matrix?

Social Marketing
- Status
- Tradition / Custom
  - Medicinal
  - Taste
  - Fashion

Education Programs

Alternative Protein Sources
- Variable soil fertility
- Weak community governance
- Lack of Knowledge
- High Living Costs
- Inadequate Market Access
- Limited Alternative Protein Sources
- Poverty
- Limited Economic Opportunities

Law Enforcement

WIDESCALE

LOCAL

CULTURE

Urbanisation / Rapid Economic Growth
- Trade Commercialisation
- Conflict / Insecurity
- Growing Populations
- Expansion of Commercial Industry

Education Programs

Alternative Livelihoods

Social Marketing
Background to matrix development

• 3 years research and evaluation:
  - Literature review
  - In-depth research in Democratic Republic of Congo / Lao PDR
  - Multidisciplinary approach
  - Delve deep
  - Locally driven
  - Contextual understanding
## Results

<table>
<thead>
<tr>
<th>Lomami in Dem. Rep. of Congo</th>
<th>Nam Kading in Lao PDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunting = economic activity</td>
<td>Hunting = cultural activity</td>
</tr>
<tr>
<td>Wild-meat consumption a necessity</td>
<td>Wild-meat consumption a choice</td>
</tr>
<tr>
<td>Little access to markets/services</td>
<td>Good access to markets/services</td>
</tr>
<tr>
<td>Rapid economic development</td>
<td>Gradual economic development</td>
</tr>
<tr>
<td>High living costs ($200 per mo. avg)</td>
<td>Low living costs ($90 per mo. avg)</td>
</tr>
<tr>
<td>Reliant on natural resources</td>
<td>Reliant on agriculture and livestock</td>
</tr>
<tr>
<td>Wildlife = back up commodity</td>
<td>Credit = back up commodity</td>
</tr>
<tr>
<td>Non-local hunters commonplace</td>
<td>Non-local hunters absent</td>
</tr>
</tbody>
</table>
Why do we need the threat matrix?

**LEGISLATIVE**
- Law Enforcement Capacity
- Legislation
- Community governance
- Undemocratic distribution of wealth / land
- Rate of growth
- Poverty
- Education
- Demand
- Alternative Proteins
- Commercial Industry

**POLITICAL**
- Corruption
- Local conflict
- Instability
- Democracy
- Education
- Urbanisation
- Cost of Living
- Food Insecurity
- Alternative livelihoods

**CULTURAL**
- Medicinal
- Taboos
- Tradition / Custom
- Taste
- Culture
- Religion
- Fashion
- Human Migration

**ENVIRONMENTAL**
- Biodiversity
- Infrastructure
- H-W. Conflict
- Rate of change
- Soil fertility
- Distance to Markets
- Non-Selective Hunting

**ECONOMIC**
- Economic
- Status
- Pet Trade
- Food Insecurity
- Alternative Proteins
- Commercial Industry
- Demand
- Cost of Living
- Poverty
- Education
- Urbanisation
- Food Insecurity
- Alternative livelihoods
Defining hunting drivers

- Resource intensive
- Lack of multi-pronged approaches
- Effective, Rapid, Inexpensive
- Hunting overview / relevance to apes
- Detailed guidance for formal assessment
- IUCN “Best Practice” structure
- Appendices – discussion guides
What is the scope of the threat matrix?

- Audience
- Regional
- Comparative

- Emphasis on apes
- Relevant to all wildlife hunting
- Beyond conservation - Private Sector
Using the threat matrix

• Request from Arcus Foundation:
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  • aphillipson@arcusfoundation.org
  • jojohead@chameleon.uk.net

• Hosted on IUCN / SSC Primate Specialist Group website: http://www.primatessg.org/

• English and French

• Tier II – Analytical Tool
More in-depth analysis

- Quantification tool
- 68 “threat” factors
- Rankings on a 5 point scale
- 8 categories:
  - environmental-biodiversity
  - environmental-infrastructure
  - cultural
  - ape specific
  - insecurity
  - economic-rural
  - economic-urban
  - legislative

<table>
<thead>
<tr>
<th>Driver</th>
<th>Threat Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural availability / consumption of livestock</td>
<td>v. High</td>
</tr>
<tr>
<td>Equally paying alternative livelihoods</td>
<td>Many</td>
</tr>
<tr>
<td>Economic incentive for hunting</td>
<td>v. Low</td>
</tr>
<tr>
<td>Cost of living</td>
<td>v. Low</td>
</tr>
<tr>
<td>Economic incentive for purchasing wild-meat</td>
<td>v. Low</td>
</tr>
<tr>
<td>Wildlife hunting legislation</td>
<td>v. Good</td>
</tr>
<tr>
<td>Wildlife hunting law enforcement</td>
<td>v. Good</td>
</tr>
<tr>
<td>Presence of logging / mining / oil concession (km)</td>
<td>None</td>
</tr>
<tr>
<td>Distance to markets (km)</td>
<td>&lt; 5km</td>
</tr>
<tr>
<td>Strength of rural religious adherence</td>
<td>v. High</td>
</tr>
<tr>
<td>Cultural traditions linked to ape consumption</td>
<td>Absent</td>
</tr>
<tr>
<td>Taboos against wild-meat consumption</td>
<td>v. Strong</td>
</tr>
</tbody>
</table>
Case study results

Drivers

- Ape specific
- Local insecurity
- Cultural
- Economic-rural
- Economic-urban
- Legislative
- Infrastructure (man-made environment)
- Biodiversity (natural environment)

Threat Rank

- Lomami
- Nam Kading
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