#### CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA



Fifteenth meeting of the Conference of the Parties Doha (Qatar), 13-25 March 2010

Interpretation and implementation of the Convention

Species trade and conservation issues

**Elephants** 

#### MONITORING OF ILLEGAL TRADE IN IVORY AND OTHER ELEPHANT SPECIMENS

The attached document has been submitted by submitted by the Secretariat, at the request of TRAFFIC\*.

The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

#### The ETIS data and African and Asian Elephant range States

This information document provides sub-regional summaries of the Elephant Trade Information System (ETIS) data for the 37 African and 13 Asian elephant ranges States. It serves the purpose of linking ETIS with the analyses from Monitoring Illegal Killing of Elephants (MIKE), the other monitoring programme for elephants under CITES, which are found in document CoP15 Inf. 41. Whilst the CoP15 ETIS analysis (CoP15 Doc. 44.1 Annex) assesses countries or territories that are most heavily implicated in the illicit trade in ivory through a cluster analysis technique, those findings are not presented as sub-regional groupings of elephant range States. This update report from ETIS allows for the Parties to compare the characteristics and roles of the six sub-regional range State groupings and to assess the findings of ETIS more directly with the results of the MIKE analysis.

*Number of Records*: ETIS data, as of 28 February 2010, comprised 15,416 elephant product seizure records from 87 countries or territories since 1989. In comparison to the CoP15 ETIS analysis (CoP15 Doc. 44.1 Annex), which was based on the data at 24 August 2009, this assessment is based upon 1,052 additional seizure records, mostly provided by China, the United States, Australia, Tanzania, Kenya, Zambia, Zimbabwe, South Africa, Cameroon and Indonesia. Botswana, Central African Republic, Congo, the Czech Republic, Eritrea, Ethiopia, Hong Kong (SAR), India, Japan, Philippines, Switzerland, Taiwan (Province of China), Thailand, United Kingdom and Viet Nam also provided new data.

*Methods:* The summary profiles of the sub-regional groupings of African and Asian elephant range States are based on ivory seizure data and other information contained in the subsidiary databases of ETIS, which are used to generate the characteristics of the various groups highlighted in the cluster analysis in CoP15 Doc. 44.1. The following variables are presented:

- (1) <u>Frequency</u> is measured, firstly, by assessing the number of seizures each country has made and reported to ETIS itself between 1989 through February 2010, labelled as 'seizures in'. This measure tells us how often seizures are made and reported to ETIS by individual countries.
- (2) <u>Frequency</u> is measured, secondly, by assessing the number of seizures made and reported elsewhere in the world that have implicated the same country as the country of origin, export, re-export or import between 1989 through February 2010, labelled as 'seizures out'. This measure helps us understand how often ivory is moving out of or through a country without being detected.
- (3) <u>Scale</u> is measured by assessing the 'total weight of ivory seized' that is represented by the seizures data in 'seizures in' and 'seizures out' for each country from 1989 through February 2010. This measure helps us understand how much ivory is involved in the seizures data assessed in (1) and (2) above.
- (4) <u>Period of activity</u> is measured by the 'percentage of weight in recent period' which is calculated by dividing the weight of the ivory seized in the period 1999-2010 by the weight of ivory seized in both periods 1989-2010. The percentage reflects the weight that represents ivory trade activity in the recent period. This measure helps us understand whether the trade (by weight) is declining, stable or growing over time.
- (5) <u>Involvement of organised crime</u> is measured by 'percentage of large-scale ivory seizure weight to total weight in recent period' and is calculated by dividing the total weight of ivory that derives from those seizures which comprised 1,000 kg of ivory or more in the most recent period 1999-2010 by the total weight that was represented by all seizures in the most recent period 1999-2010. High percentage values indicate the presence of organised crime in the movement of ivory, whilst low values indicate the absence of organised crime in the movement of ivory. This measure is a relative proxy value for assessing the involvement of organised crime in the ivory trade.
- (6) <u>Law enforcement effort, effectiveness and rates of reporting</u> is measured, firstly, by the 'law enforcement effort ratio', which is calculated by dividing the number of in-country seizures (i.e. 'seizures in') by the total number of seizures (i.e. 'seizures in' + 'seizures out'). Law enforcement effort ratios range from:

00.00-10.00 **No effective law enforcement** – virtually all illicit ivory trade leaves the country without being seized.

10.01-25.00 Very poor law enforcement - most illicit ivory trade leaves the country without being seized.

25.01-40.00 **Poor law enforcement** – most illicit ivory trade leaves the country without being seized, but seizures sometimes occur.

40.01-60.00 **Fair law enforcement** – some illicit ivory trade leaves the country without being seized, but seizures regularly occur.

60.01-75.00 **Good law enforcement** – some illicit ivory trade leaves the country without being seized, but seizures usually occur.

75.01-90.00 **Very good law enforcement** – very little illicit ivory trade leaves country.

90.01-100.00 Excellent law enforcement – virtually no illicit ivory trade leaves the country.

This measure helps us understand governance by assessing the degree of law enforcement effort being made by individual countries to curtail illicit trade in ivory.

- (7) <u>Law enforcement effort, effectiveness, and rates of reporting</u> is measured, secondly, by the Corruption Perception Index score given by Transparency International for each country. Under this scoring system, 1.0 (the lowest score) represents the highest perception of corruption, whilst 10.0 (the highest score) represents the lowest perception of corruption. This measure helps us understand the broader governance environment of a particular country.
- (8) <u>Internal ivory trade</u> is measured by the 'domestic ivory market score' with scores ranging from -4, indicating no or very small, highly-regulated domestic ivory markets and carving industries, to 20, indicating extremely large, completely unregulated domestic ivory markets and carving industries. This measures helps us understand the relative scale and degree of regulation of ivory trade in particular countries.

Using the above factors, the sub-regional groupings of range States can be compared concerning the attributes of their participation in ETIS and involvement in the illicit ivory trade.

*Elephants in Africa and Asia:* The African Elephant Status Report 2007 provides the most recent comprehensive population assessment of African Elephants (Blanc *et al.*, 2007). Managed by the IUCN Species Survival Commission's African Elephant Specialist Group and based upon data and information held in the African Elephant Database (AED), four categories are used to characterise elephant numbers depending upon the degree of certainty that can be placed on a given population estimate based on survey type and

reliability. Thus, whilst the AED does not produce a single continental, sub-regional or national population estimate, it is possible to present totals at each of these levels as 'Definite', 'Probable', 'Possible' and 'Speculative', the four mutually exclusive categories used to express elephant numbers. Table 1 presents the most recent estimate of elephant numbers for each of the African sub-regions, indicating that there were 'definitely' 472,269 elephants, but there could be as many as 689,671 elephants throughout Africa.

| Dogion   |          | African Elephant Numbers |          |             |  |  |  |  |  |
|----------|----------|--------------------------|----------|-------------|--|--|--|--|--|
| Region   | Definite | Probable                 | Possible | Speculative |  |  |  |  |  |
|          |          |                          |          |             |  |  |  |  |  |
| West     | 7,487    | 735                      | 1,129    | 2,939       |  |  |  |  |  |
| Central  | 10,383   | 48,936                   | 43,098   | 34,129      |  |  |  |  |  |
| East     | 137,485  | 29,043                   | 35,124   | 3,543       |  |  |  |  |  |
| Southern | 297,718  | 23,186                   | 24,734   | 9,753       |  |  |  |  |  |
|          |          |                          |          |             |  |  |  |  |  |
| Total    | 472,269  | 82,704                   | 84,334   | 50,364      |  |  |  |  |  |

### Table 1: Continental and regional African Elephant population estimates from the African Elephant Status Report 2007

With respect to Asian Elephants, an initiative to use the AED system for presenting population data is currently underway, but results are not yet available. Previous methods of deriving elephant numbers in Asia have been disputed for a number of technical reasons and many populations have not been surveyed in years, if ever. For that reason, it is not possible to present comparable elephant population data at the sub-regional level for Asian elephants at this time. However, it needs to be noted that recent survey work in these two regions through MIKE and the NGO community, especially the Wildlife Conservation Society, has improved elephant censusing methods and credible population estimates are now emerging for some populations in some countries.

## Table 2: Continental and regional Asian Elephant population estimates fromHedges and Blake, 2004

| Region    | Asian Elephant Numbers |         |  |  |  |
|-----------|------------------------|---------|--|--|--|
|           | Minimum                | Maximum |  |  |  |
|           |                        |         |  |  |  |
| Southeast | 12,020                 | 16,700  |  |  |  |
| South     | 29,390                 | 35,645  |  |  |  |
|           |                        |         |  |  |  |
| Total     | 41,410                 | 52,345  |  |  |  |

In the absence of an AED for Asian elephants, Table 2 presents the minimum and maximum estimates found in Blake and Hedges (2004), but with the compelling caveat that these data were very poor across the entire range of the species making a range-wide population estimate impossible; they also noted that global estimates had not been revised for 25 years, although all evidence suggests significant decline across much of range. These data are presented here to provide a comparative reference point for Asian elephant numbers.

#### ETIS summary data for African and Asian sub-regions:

#### West Africa

The 13 West African elephant range States collectively hold the smallest elephant population of the four African sub-regions, according to the African Elephant Database (Table 1). Summary ETIS data are presented in Table 3.

 <u>Frequency</u> – West African countries rarely, if ever, make and report ivory seizures. Only 30 seizures have been reported to ETIS since 1989, but these same countries have been implicated in 1,347 ivory seizures that were made elsewhere in the world. Two countries, Nigeria and Cote d'Ivoire, account for three-quarters of the total number of seizures reported by this sub-region, but Nigeria has not reported any ivory seizures over the last 19 years. Benin, Guinea-Bissau, Liberia, Senegal and Togo have never made and reported an ivory seizure to ETIS.

|             |                | ure of<br>Jency | Measure<br>of Scale                           | Measure of<br>Period of<br>Activity            | Measure of<br>Organised<br>Crime   | Measure<br>Enforcemer<br>Efficiency ar<br>Repor | nt Effort &<br>nd Rates of        | Measure<br>of Internal<br>Ivory<br>Trade |
|-------------|----------------|-----------------|---|--|--|---|-----------------------------------|--|
| Country     | Seizures<br>In | Seizures<br>Out | Total<br>Weight of<br>Ivory<br>Seized<br>(kg) | Percentage<br>of weight<br>in recent<br>period | Percentage of<br>large-scale<br>ivory seizure<br>weight to total<br>weight in<br>recent period | Law<br>Enforcement<br>Effort Ratio              | Corruption<br>Perception<br>Index | Domestic<br>Ivory<br>Market<br>Score     |
| West Africa |                |                 |   | -  |  |   |                                   |  |
| Nigeria     | 12             | 709             | 18,771  | 0.67   | 0.49   | 0.02  | 2.7                               | 16.0                                     |

# Table 3: West African elephant range States: Summary data from ETIS(1989 - February 2010)

| Cote d'Ivoire                  | 11 | 209   | 4,124  | 0.37 | 0.00 | 0.05 | 2.0 | 10.5 |
|--------------------------------|----|-------|--------|------|------|------|-----|------|
| Ghana                          | 2  | 113   | 2,286  | 0.80 | 0.77 | 0.02 | 3.9 | 8.0  |
| Benin                          | 0  | 38    | 768    | 0.94 | 0.00 | 0.00 | 3.1 | 6.0  |
| Senegal                        | 0  | 95    | 551    | 0.58 | 0.00 | 0.00 | 3.4 | 11.0 |
| Mali                           | 1  | 41    | 515    | 0.83 | 0.00 | 0.02 | 3.1 | 5.0  |
| Guinea                         | 1  | 40    | 374    | 0.68 | 0.00 | 0.02 | 1.6 | 5.0  |
| Тодо                           | 0  | 47    | 291    | 0.40 | 0.00 | 0.00 | 2.7 | 4.5  |
| Niger                          | 1  | 10    | 282    | 0.13 | 0.00 | 0.09 | 2.8 | 5.0  |
| Sierra Leone                   | 1  | 17    | 114    | 0.17 | 0.00 | 0.06 | 1.9 | 5.0  |
| Liberia                        | 0  | 13    | 69     | 0.41 | 0.00 | 0.00 | 2.4 | 6.0  |
| Burkina Faso                   | 1  | 14    | 67     | 0.61 | 0.00 | 0.07 | 3.5 | 4.5  |
| Guinea-Bissau                  | 0  | 1     | 3      | 1.00 | 0.00 | 0.00 | 1.9 | 4.0  |
| Regional Totals<br>or Averages | 30 | 1,347 | 28,215 | 0.64 | 0.42 | 0.02 | 2.7 | 7.0  |

- <u>Scale</u> Over 28 tonnes of ivory are represented by the ETIS data for West Africa, with Nigeria, Cote d'Ivoire and Ghana the source for nearly 90% of the illicit ivory interdicted abroad.
- <u>Period of activity</u> A total of 64% of the ivory moving within and from West Africa has occurred over the last decade since 1999, indicating that illicit trade in ivory is contemporary.
- <u>Organised crime</u> In terms of large-scale ivory flows that are associated with the presence of organised crime, only 10% of the ivory seized falls within this category. However, for Nigeria this figure is 49% and for Ghana it is 77%. In fact, Nigeria has been the source of at least six large-scale ivory seizures and Ghana was the source of one large-scale ivory seizure that occurred in China in 2002.
- <u>Law enforcement effort & efficiency and rates of reporting</u> Collectively, West Africa's law enforcement
  effort ratio in ETIS is 2%, the poorest of any elephant range State grouping in ETIS. This means that 98%
  of the ivory seizures that relate to this sub-region have taken place outside of the sub-region. With a mean
  Corruption Perception Index score of 2.7, there is also a high perception of corruption in West Africa, but
  the sub-region fares marginally better than two of the other African sub-regions.

<u>Internal ivory trade</u> – With an overall mean score of 7, West Africa harbours some large ivory markets which are poorly regulated, especially in Nigeria, Cote d'Ivoire, Senegal and Ghana. These markets are generally not implementing the criteria for internal trade in ivory as stipulated in Resolution Conf. 10.10 (Rev. CoP14). For example, as mentioned in previous ETIS analyses, Nigeria reportedly allows ivory products to be sold within the duty free lounge area of its main international airport in Lagos in continued violation of CITES.

#### **Central Africa**

The seven countries that comprise the Central African region have held significant numbers of elephants in the past, but the lack of reliable survey information throughout substantial parts of the mostly forest elephant range largely confounds estimates of the status of the species (Table 1). Overall, however, this sub-region has far fewer elephants than either the East or Southern African sub-region. Summary ETIS data are presented in Table 4.

### Table 4: Central African elephant range States: Summary data from ETIS(1989 - February 2010)

|         |                | Measure of Measu<br>Frequency of Sca |   | Measure of<br>Period of<br>Activity            | Measure of<br>Organised<br>Crime   | Measure of Law<br>Enforcement<br>Effort/Efficiency and Rates<br>of Reporting |                                   | Measure<br>of Internal<br>Ivory<br>Trade |
|---------|----------------|--------------------------------------|---|--|--|--|-----------------------------------|--|
| Country | Seizures<br>In | Seizures<br>Out                      | Total<br>Weight of<br>Ivory<br>Seized<br>(kg) | Percentage<br>of weight<br>in recent<br>period | Percentage of<br>large-scale<br>ivory seizure<br>weight to total<br>weight in<br>recent period | Law<br>Enforcement<br>Effort Ratio   | Corruption<br>Perception<br>Index | Domestic<br>Ivory<br>Market<br>Score     |

| Central Africa                     |    |     |        |      |      |      |     |      |
|------------------------------------|----|-----|--------|------|------|------|-----|------|
| Cameroon                           | 65 | 238 | 17,681 | 0.76 | 0.45 | 0.21 | 2.3 | 8.0  |
| Democratic<br>Republic<br>of Congo | 6  | 398 | 15,562 | 0.66 | 0.75 | 0.01 | 1.7 | 14.5 |
| Gabon                              | 8  | 75  | 11,029 | 0.77 | 0.80 | 0.10 | 3.1 | 10.0 |
| Congo                              | 7  | 119 | 2,852  | 0.63 | 0.00 | 0.06 | 1.9 | 7.0  |
| Central African<br>Republic        | 6  | 41  | 1,839  | 0.42 | 0.00 | 0.13 | 2.0 | 7.5  |
| Chad                               | 4  | 10  | 425    | 0.23 | 0.00 | 0.29 | 1.6 | 7.0  |
| Equatorial<br>Guinea               | 0  | 55  | 418    | 0.73 | 0.00 | 0.00 | 1.7 | 7.0  |
| Regional Totals<br>or Averages     | 96 | 936 | 49,807 | 0.71 | 0.59 | 0.09 | 2.0 | 8.7  |

- <u>Frequency</u> Ivory seizures appear to be infrequent events in Central African countries, according to the ETIS data. Collectively, only 96 ivory seizures have been made and reported to ETIS since 1989. In fact, Cameroon alone accounts for two-thirds of these seizures. Equatorial Guinea has never made an ivory seizure, according to the ETIS data. At the same time, these same countries have been implicated in 936 ivory seizures which were made in other countries outside of the region, indicating frequent movements of ivory out of the sub-region.
- <u>Scale</u> Collectively, the seizures that relate to Central Africa represent nearly 50 tonnes of ivory, with the largest illicit flows emanating from Cameroon, Democratic Republic of the Congo and Gabon.
- <u>Period of activity</u> Over two-thirds of the ivory trade by weight (71%) has occurred in the recent period since 1999, the highest value for any of the African sub-regions, indicating that illicit ivory trade flows are currently a major problem in the Central African region.
- <u>Organised crime</u> Overall, 59% of the ivory seized in the recent period has been in the context of large-scale ivory seizures, suggesting the presence of organised crime as a potent force in the region. Totalling seven large-scale ivory seizures, all but one of which were made outside of the sub-region, these ivory flows have involved Cameroon, Democratic Republic of the Congo and Gabon.
- <u>Law enforcement effort & efficiency and rates of reporting</u> The law enforcement effort ratio for the subregion as a whole is 9%, indicating that only one in ten illicit ivory trade seizures are taking place within the region. Marginally better than that for West Africa, it is the second lowest ratio amongst the four African sub-regions. At 2.0, the mean Corruption Perception Index is the lowest of any of the range State groupings, indicating the highest perception of corruption.
- <u>Internal ivory trade</u> The mean score of 8.7 is the highest of any of the other African sub-regions, indicating that unregulated domestic ivory markets are a major feature throughout the sub-region. In particular, the Democratic Republic of Congo harbours the largest unregulated ivory market. There is recent evidence to suggest that Cameroon, Congo and, most recently, the Central African Republic have all taken steps to suppress their domestic ivory markets.

#### East Africa

The eight countries of East Africa collectively hold Africa's second largest population of elephants, according to the African Elephant Database (Table 1). Summary ETIS data are presented in Table 5.

|                                |                | ure of<br>Jency | Measure<br>of Scale                           | Measure of<br>Period of<br>Activity            | Measure of<br>Organised<br>Crime   | Measure of Law<br>Enforcement<br>Effort/Efficiency and<br>Rates of Reporting |                                   | Measure<br>of Internal<br>Ivory<br>Trade |
|--------------------------------|----------------|-----------------|---|--|--|--|-----------------------------------|--|
| Country                        | Seizures<br>In | Seizures<br>Out | Total<br>Weight of<br>Ivory<br>Seized<br>(kg) | Percentage<br>of weight<br>in recent<br>period | Percentage of<br>large-scale<br>ivory seizure<br>weight to total<br>weight in<br>recent period | Law<br>Enforcement<br>Effort Ratio   | Corruption<br>Perception<br>Index | Domestic<br>Ivory<br>Market<br>Score     |
| East Africa                    |                |                 |   | ł  | Ļ  | ł  | ł                                 |  |
| Tanzania                       | 416            | 65              | 76,293  | 0.61   | 0.68   | 0.86   | 3.0                               | -0.5                                     |
| Kenya                          | 512            | 168             | 28,848  | 0.81   | 0.32   | 0.75   | 2.1                               | -2.5                                     |
| Ethiopia                       | 208            | 306             | 14,215  | 0.41   | 0.00   | 0.40   | 2.6                               | 10.5                                     |
| Uganda                         | 37             | 37              | 12,064  | 0.96   | 0.66   | 0.50   | 2.6                               | -0.5                                     |
| Sudan                          | 112            | 80              | 6,703   | 0.92   | 0.25   | 0.58   | 1.6                               | 11.0                                     |
| Rwanda                         | 5              | 42              | 1,798   | 0.89   | 0.00   | 0.11   | 3.0                               | 5.0                                      |
| Somalia                        | 0              | 10              | 77  | 0.22   | 0.00   | 0.00   | 1.0                               | 7.0                                      |
| Eritrea                        | 2              | 7               | 35  | 0.26   | 0.00   | 0.22   | 2.6                               | 6.0                                      |
| Regional Totals<br>or Averages | 1,292          | 715             | 140,034                                       | 0.68   | 0.51   | 0.64   | 2.3                               | 4.9                                      |

# Table 5: East African elephant range States: Summary data from ETIS(1989 - February 2010)

- <u>Frequency</u> Collectively as a sub-region, East African countries have made and reported 1,292 ivory seizures. These countries have been involved in 715 additional seizures that were made elsewhere in the world but implicated East Africa as the source, country of export, re-export or destination of the ivory in question. In fact, nearly 97% of the in-country seizures in the region were made by Kenya, Tanzania, Ethiopia and Sudan, whilst Somalia has never made and reported an ivory seizure to ETIS.
- <u>Scale</u> The total weight represented by all of the ivory seizures that relate to East African countries since 1989 is 140 tonnes, the highest volume of any sub-regional grouping in Africa. This high value partially reflects the transit role many East African countries play in moving ivory from the Central African region to international destinations.
- <u>Period of activity</u> More than two-thirds (68%) of this ivory was traded in the period from 1999 onwards, which indicates that substantial illicit ivory trade flows are an important contemporary problem.
- <u>Organised crime</u> On the other hand, large-scale ivory seizures, the measure for assessing the involvement of organised crime in the trade, characterize just over half of the volume of ivory represented by this trade since 1999, with especially high values for Tanzania and Uganda. Overall, 22 large-scale ivory seizures have involved this sub-region with Ethiopia, Kenya, Sudan, Tanzania and Uganda acting as transit, export or destination countries; eight of these large-scale ivory seizures were made within the sub-region by Tanzania and Uganda.
- Law enforcement effort & efficiency and rates of reporting Largely due to the efforts of Tanzania and Kenya, at 64%, the East African sub-region has a high law enforcement effort ratio. Indeed, it is the highest of any of the African sub-regions. At 2.3, the mean Corruption Perception Index is very low, indicating a high perception of corruption in this sub-region, but that does not seem to impede the making and reporting of ivory seizures.
- <u>Internal ivory trade</u> Overall, East Africa harbours the smallest value for the domestic ivory market score, with Ethiopia and Sudan the only countries with prominent markets. The value for Ethiopia, however, is believed to have diminished considerably from that depicted in Table 5, as that country launched a major law enforcement crackdown in late 2009. Likewise, Sudan has also reportedly taken action against ivory trading.

|                                |                | ure of<br>Jency | Measure<br>of Scale                           | Measure of<br>Period of<br>Activity            | Measure of<br>Organised<br>Crime   | Measure of Law<br>Enforcement<br>Effort/Efficiency and Rates<br>of Reporting |                                   | Measure<br>of Internal<br>Ivory<br>Trade |
|--------------------------------|----------------|-----------------|---|--|--|--|-----------------------------------|--|
| Country                        | Seizures<br>In | Seizures<br>Out | Total<br>Weight of<br>Ivory<br>Seized<br>(kg) | Percentage<br>of weight<br>in recent<br>period | Percentage of<br>large-scale<br>ivory seizure<br>weight to total<br>weight in<br>recent period | Law<br>Enforcement<br>Effort Ratio   | Corruption<br>Perception<br>Index | Domestic<br>Ivory<br>Market<br>Score     |
| Southern Africa                |                |                 |   |  |  |  |                                   |  |
| Namibia                        | 636            | 74              | 33,207  | 0.10   | 0.00   | 0.90   | 4.5                               | 1.5                                      |
| Zambia                         | 229            | 93              | 24,869  | 0.66   | 0.66   | 0.71   | 2.8                               | 3.0                                      |
| South Africa                   | 483            | 554             | 23,529  | 0.44   | 0.39   | 0.47   | 4.9                               | 6.0                                      |
| Zimbabwe                       | 380            | 415             | 14,234  | 0.73   | 0.29   | 0.48   | 1.8                               | 11.5                                     |
| Mozambique                     | 29             | 157             | 12,767  | 0.97   | 0.71   | 0.16   | 2.6                               | 12.5                                     |
| Malawi                         | 154            | 35              | 12,100  | 0.67   | 0.88   | 0.81   | 2.8                               | 6.0                                      |
| Botswana                       | 105            | 23              | 4,327   | 0.86   | 0.00   | 0.82   | 5.8                               | -1.0                                     |
| Angola                         | 0              | 163             | 4,205   | 0.37   | 0.00   | 0.00   | 1.9                               | 15.0                                     |
| Swaziland                      | 3              | 3               | 190   | 0.01   | 0.00   | 0.50   | 3.6                               | -1.0                                     |
| Regional Totals<br>or Averages | 2,019          | 1,517           | 129,427                                       | 0.51   | 0.51   | 0.57   | 3.4                               | 6.2                                      |

# Table 6: Southern African elephant range States: Summary data from ETIS(1989 - February 2010)

The nine elephant range States in Southern Africa have Africa's largest elephant population (Table 1). Summary ETIS data are presented in Table 6.

- <u>Frequency</u> With 2,019 in-country ivory seizures, since 1989, the Southern Africa sub-region has made and reported more ivory seizures than any of the other African sub-regions; Angola, however, has never made and reported an ivory seizure to ETIS. During this same time period, the countries in this region have been implicated in another 1,517 ivory seizures that occurred elsewhere in the world.
- <u>Scale</u> Collectively, these ivory seizures represented nearly 130 tonnes of ivory, of which just over half was seized over the last decade.
- <u>Period of activity</u> By volume, the ivory represented by the seizures that relate to the Southern African subregion is equally distributed between the two periods of time. This indicates that, at the sub-regional level, illicit ivory trade flows are not increasing.
- <u>Organised crime</u> About half of the ivory seized in the period 1999-2010 was in the context of large-scale ivory seizures. Totalling ten events in total, eight of these seizures were made within the region by Namibia, South Africa, Zambia and Zimbabwe. This suggests that organised crime plays a role in ivory trade flows from this region.
- <u>Law enforcement effort & efficiency and rates of reporting</u> At 57%, the aggregated law enforcement effort ratio is fairly high for the region overall, although Angola and Mozambique stand as very weak links. The mean Corruption Perception Index is 3.4, which is better than that for all of the other African sub-regions but still indicates that the perception of corruption is considerable.
- <u>Internal ivory trade</u> At 6.2, the mean domestic ivory market score is comparatively low overall, but large unregulated ivory markets are found in Angola and Mozambique. Zimbabwe's market, which is currently shut down and under review, also has a high value.

#### Southeast Asia

## Table 7: Southeast Asian elephant range States: Summary data from ETIS(1989 - February 2010)

|                                |                | ure of<br>Jency | Measure<br>of Scale                           | Measure of<br>Period of<br>Activity            | Measure of<br>Organised<br>Crime   | Measure of Law<br>Enforcement<br>Effort/Efficiency and Rates<br>of Reporting |                                   | Measure<br>of Internal<br>Ivory<br>Trade |
|--------------------------------|----------------|-----------------|---|--|--|--|-----------------------------------|--|
| Country                        | Seizures<br>In | Seizures<br>Out | Total<br>Weight of<br>Ivory<br>Seized<br>(kg) | Percentage<br>of weight<br>in recent<br>period | Percentage of<br>large-scale<br>ivory seizure<br>weight to total<br>weight in<br>recent period | Law<br>Enforcement<br>Effort Ratio   | Corruption<br>Perception<br>Index | Domestic<br>Ivory<br>Market<br>Score     |
| Southeast Asia                 |                |                 |   |  |  |  |                                   |  |
| China                          | 1,065          | 770             | 52,840  | 0.88   | 0.59   | 0.58   | 3.6                               | 11.5                                     |
| Thailand                       | 61             | 461             | 22,467  | 0.67   | 0.47   | 0.12   | 3.5                               | 16.0                                     |
| Malaysia                       | 18             | 34              | 11,967  | 0.96   | 0.91   | 0.35   | 5.1                               | 5.0                                      |
| Viet Nam                       | 13             | 55              | 10,138  | 0.99   | 0.90   | 0.19   | 2.7                               | 10.5                                     |
| Laos                           | 0              | 7               | 2,353   | 0.98   | 0.90   | 0.00   | 2.0                               | 10.0                                     |
| Indonesia                      | 11             | 51              | 1,864   | 0.53   | 0.00   | 0.18   | 2.6                               | 6.0                                      |
| Cambodia                       | 0              | 30              | 255   | 0.85   | 0.00   | 0.00   | 1.8                               | 10.0                                     |
| Myanmar                        | 0              | 6               | 24  | 0.78   | 0.00   | 0.00   | 1.3                               | 14.0                                     |
| Regional Totals<br>or Averages | 1,168          | 1,414           | 101,909                                       | 0.85   | 0.65   | 0.45   | 2.8                               | 10.4                                     |

Whilst the eight countries which comprise the Southeast Asian sub-region hold populations of Asian elephants, most are small and many are fragmented. Summary ETIS data are presented in Table 7.

- <u>Frequency</u> The eight countries which comprise the Southeast Asian sub-region have made and reported 1,168 seizures, but 91% of the total represents the efforts of China. On the other hand, Cambodia, Laos and Myanmar have never made and reported a single elephant product seizure to ETIS in 21 years. The countries of this sub-region have been implicated in 1,414 seizures made elsewhere in the world, with most seizures identifying Southeast Asian countries as the country of origin for worked ivory products or the destination for shipments of raw ivory.
- <u>Scale</u> Collectively, these seizures represent nearly 102 tonnes of ivory. Most of the ivory involved in this trade represents African elephants.
- <u>Period of activity</u> The Southeast Asian sub-region has the highest value for period of activity, with 85% of the ivory seized falling in the recent period since 1999. This indicated that this sub-region plays a very active contemporary role in the illicit trade in ivory.
- <u>Organised crime</u> Two-thirds of the total volume in the recent period since 1999 represents ivory seized in the context of large-scale ivory seizures. Overall, 23 large-scale ivory seizures have involved countries of the Southeast Asian sub-region, 20 of which were made by China, Viet Nam or Thailand themselves, whilst Malaysia was identified as a transit country. This sub-region, which includes both transit countries and enduse destinations, has the highest value (65%) of the six sub-regions for the presence of organised crime in the illicit trade in ivory.
- <u>Law enforcement effort & efficiency and rates of reporting</u> Collectively, the law enforcement effort ratio is 45%, but this results almost entirely from the very strong performance of China. Most other countries exhibit rather poor values in terms of national law enforcement effort. At the same time, the mean Corruption Perception Index score is 2.8, indicating a fairly high perception of corruption.

 <u>Internal ivory trade</u> – The mean domestic ivory market score is the largest of any sub-regional grouping, with unregulated ivory markets found in most countries, especially Thailand, but also including Myanmar, China, Viet Nam, Cambodia and Laos. The ETIS data demonstrate that China has been making seizures of illicit ivory products on the retail market (as well as at border crossings), but few data are available for other countries to demonstrate seizures taking place in the marketplace.

#### South Asia

The five elephant range States in the South Asian sub-region collectively hold substantial numbers of Asian elephants, with the largest population in India. Summary ETIS data are presented in Table 8.

- <u>Frequency</u> Collectively, these countries have made and reported 237 ivory seizures to ETIS, but 96% of these were law enforcement actions in India. Countries from the South Asia sub-region have been implicated in 132 ivory seizures made elsewhere in the world. Bangladesh and Bhutan have never made and reported any ivory seizures to ETIS, although Bhutan has formally stated on a number of occasions that no ivory seizures have transpired in various years and it is the only elephant range State that has never been implicated in a single ivory seizure made anywhere else in the world.
- <u>Scale</u> The total number of seizures which relate to the South Asian sub-region total slightly more than 14 tonnes of ivory, the lowest figure of any sub-regional grouping.
- <u>Period of activity</u> Slightly more than half of this ivory has occurred in the most recent period of time since 1999, indicating that illicit trade in ivory does not appear to be increasing.
- <u>Organised crime</u> None of the ivory that was seized in this sub-region was in the context of a large-scale ivory seizure, the proxy measure for the involvement of organised crime in the trade. South Asia is the only range State sub-region where there is no evidence of any large-scale flows of ivory.
- <u>Law enforcement effort & efficiency and rates of reporting</u> The aggregated law enforcement effort ratio is 64%, indicating that law enforcement effort is generally good. In contrast, the mean Corruption Perception Index score for the five countries is 2.8, indicating a fairly high perception of corruption.
- Internal ivory trade South Asian countries have the lowest scores for domestic trade in ivory, indicating that ivory products are generally suppressed on local markets.

|                                |                | ure of<br>lency | Measure<br>of Scale                           | Measure of<br>Period of<br>Activity            | Measure of<br>Organised<br>Crime   | Measure of Law<br>Enforcement<br>Effort/Efficiency and<br>Rates of Reporting |                                   | Measure<br>of Internal<br>Ivory<br>Trade |
|--------------------------------|----------------|-----------------|---|--|--|--|-----------------------------------|--|
| Country                        | Seizures<br>In | Seizures<br>Out | Total<br>Weight of<br>Ivory<br>Seized<br>(kg) | Percentage<br>of weight<br>in recent<br>period | Percentage of<br>large-scale<br>ivory seizure<br>weight to total<br>weight in<br>recent period | Law<br>Enforcement<br>Effort Ratio   | Corruption<br>Perception<br>Index | Domestic<br>Ivory<br>Market<br>Score     |
| South Asia                     |                |                 |   | 1  |  |  |                                   |  |
| India                          | 228            | 115             | 7,501   | 0.56   | 0.00   | 0.66   | 3.4                               | 2.5                                      |
| Sri Lanka                      | 4              | 9               | 86  | 0.71   | 0.00   | 0.31   | 3.2                               | 5.5                                      |
| Nepal                          | 5              | 3               | 46  | 0.72   | 0.00   | 0.63   | 2.7                               | 7.0                                      |
| Bangladesh                     | 0              | 5               | 41  | 0.73   | 0.00   | 0.00   | 2.1                               | 2.0                                      |
| Bhutan                         | 0              | 0               | 0   | 0.00   | 0.00   | 0.00   | 5.2                               | 1.0                                      |
| Regional Totals<br>or Averages | 237            | 132             | 7,674   | 0.51   | 0.00   | 0.64   | 2.8                               | 5.5                                      |

# Table 8: South Asian elephant range States: Summary data from ETIS(1989 - February 2010)

#### Discussion

Comparatively speaking, the Central Africa and West African sub-regions exhibit the most problematic variables. In these two sub-regions, ivory seizures apparently rarely ever occur but significant flows of illicit ivory are often moving through these regions. Law enforcement effort and high corruption values have persisted through four successive ETIS analysis with very few signs of improvement for most countries apart from Cameroon, where the number of ivory seizures has increased somewhat in recent years. Large-scale ivory trade flows that are suggestive of the involvement of organised crime are also a problematic feature of the trade in these regions. Domestic ivory markets occur throughout these two regions, but most remain unfettered by regulation or law enforcement.

In comparison, most countries in the East and Southern African sub-regions regularly make numerous seizures and overall exhibit much better values for law enforcement effort. Whilst the perception of corruption may remain high in many countries, this is counterbalanced by low domestic ivory market scores in most countries. The issue of organised crime, as evidenced by the fact that about half of the weight of ivory seizures in the recent period is in the context of large-scale ivory seizures, is a worrying sign.

In Asia, the Southeast Asian sub-region is heavily engaged in illicit trade in ivory, owing to its role as a major processing centre and retail outlet for worked ivory products. In fact, most ivory found in this region represents African elephants. Apart from China, few ivory seizures are being made, especially in the marketplace, law enforcement effort is generally poor and significant unregulated ivory markets predominate, especially in Thailand. Organised crime is very much involved in the movement of large volumes of ivory through and to many of the countries in this sub-region. For these reasons, this sub-region remains a problematic concern.

In sharp contrast, the South Asia sub-region plays a relatively minor role in the illicit trade in ivory. India accounts for the lion's share of the data, but overall there is little evidence to suggest that significant illicit ivory trade activity is taking place in this sub-region.

#### References

Blake, S. and Hedges, S. (2004). Sinking the Flagship: the Case of Forest Elephants in Asia and Africa. *Conservation Biology*, Volume 18, No. 5, October 2004. Pp 1191–1202.

Blanc, J.J., Barnes, R.F.W., Craig, G.C., Dublin, H.T., Thouless, C.R., Douglas-Hamilton, I., Hart, J.A. (2007). African Elephant Status Report 2007: An update from the African Elephant Database. Occasional Paper of the Species Survival Commission, No. 33. IUCN/SSC African Elephant Specialist Group, IUCN, Gland, Switzerland.