

## 7 CONCLUSIONS & RECOMMENDATIONS: towards more effective interventions to reduce the illegal and unsustainable wildlife trade in South-east Asia

*Following on from the data and analysis presented in earlier sections of this report, this chapter draws conclusions about the nature of the economic and social drivers of the wildlife trade in south-east Asia, including consideration of beliefs regarding the most effective way to address them. It provides a series of recommendations, targeted at conservation and wildlife policy-makers, planners and managers, donor agencies and NGOs, suggesting how interventions might be better designed and/or applied to reduce illegal and unsustainable trade in the future. While specific to this study of south-east Asia, the following are likely to apply to wildlife trade more generally.*

This study was undertaken in response to concerns that, despite the efforts of governments, inter-governmental organisations, NGOs and others, the illegal and unsustainable wildlife trade continues to drive declines in the populations of many species subject to trade. This not only threatens the species in trade, but also the health of the ecosystems in which they occur. Further, it reduces the availability of wildlife resources to people who depend on them as a source of goods and/or income, including their ability to serve as a “safety net” in times of hardship. The study did not set out to prove the existence of such declines, or of human reliance on the use and trade of wild species, areas well documented by numerous other studies and authors. However, it is worthwhile to note that, like this other work, the views of experts consulted during this study indicate that a wide range of species subject to commercial trade are declining, including species used for food and medicinal purposes. As noted by Roe (2008), further declines will not only affect the status of traded species and the ecosystems in which they occur, undermining achievement of Millennium Development Goal 7 (environmental sustainability), but will also hamper efforts to achieve the Goals related to poverty, hunger and health.

Despite the evidence that, thus far, those seeking to stop illegal and unsustainable trade are, for the lack of better terminology, “losing the war”, there are also numerous examples demonstrating that individual battles are being won. The key motivation for this study was the desire to increase the number of battles being won, and, ultimately, to win the war, by improving the targeting and design of efforts to reduce illegal and unsustainable wildlife trade, bearing in mind both conservation and development priorities. This was based further on the recognition that resources to address illegal and unsustainable trade are limited, and therefore it is critical to consider how and where best to invest those resources to achieve the conservation and development aims of the people and countries concerned.

As noted in the introduction, this study is not unique in posing such questions, which are increasingly being asked within conservation more generally, and in the context of promoting development based on extraction of non-timber forest resources. However, it is believed to be the first review of the wildlife trade focusing on drivers and interventions across multiple countries and products in south-east Asia, and to seek answers to these questions in relation to the trade. This research has highlighted both the complexity of the trade and perceptions of the effectiveness of various intervention types. It points to the need for a greater effort to understand more fully this complexity and thereby how best to respond to it to achieve conservation and development aims.

Eight preliminary conclusions relevant to improving the effectiveness of interventions to reduce the illegal and unsustainable wildlife trade in South-east Asia made on the basis of this review are provided below. These are by no means definitive. They may not, for example, be universally applicable to individual products, or to the situation within different countries, the latter point highlighted by government staff considering the findings of this research. They are therefore proposed as a starting point for further investigation and refinement, including through collecting more detailed data on wildlife

harvest, trade, consumption and the application and impact of associated interventions. Recommendations for action based on these preliminary conclusions are also provided, in the belief that increased action is required alongside increased research in order to reduce illegal and unsustainable trade. A more detailed breakdown of expert suggestions for actions needed to reduce such trade provided during the second project workshop has also been included as Annex 2.

### **7.1 The evidence base for wildlife trade interventions needs to be strengthened**

While not in any way definitive, this study has nevertheless provided additional insights into the workings of the wildlife trade, and indicates that the assumptions and hypotheses that inform the way in which interventions are designed are often common across product types. It also appears that in some cases they may be misplaced. The economic and social drivers of the wildlife trade are in reality far more complex than the way in which they are often conceptualised or acted upon. The challenge of responding to this complexity is complicated further by the fact that many of the individuals and agencies who are actively trying to reduce illegal and unsustainable trade have only partial, and often very specialised, knowledge of the trade and of the factors influencing it in different conditions, places and points in time. Cross-referencing between these actors is often negligible.

All of the intervention approaches used to date were believed by one or more of the experts consulted in this study to have been at least somewhat successful in reducing illegal and/or unsustainable trade in some situations. Unfortunately, and perhaps surprisingly, the analysis did not provide definitive results favouring one particular intervention approach over others, nor, in the case of enforcement of regulatory approaches, a particular part of the trade chain on which such efforts should be focused as a priority. Such information would seem critical to the better targeting of investments to reduce illegal and unsustainable trade in future.

Lack of a comprehensive and reliable information base, therefore, remains a key constraint in planning and designing wildlife trade interventions, and monitoring their impacts. Although this study provides an important step towards addressing this gap, it is only a single step, with further steps needed. The complexity of the wildlife trade dictates that there will never be a perfect knowledge base or a single “recipe” for achieving the desired conservation and/or development outcomes in relation to the trade in a particular species or from a particular place.

However, by further expanding and improving upon the existing knowledge base, including in relation to the outcomes of intervention efforts thus far, it will be possible to improve the design and targeting of future interventions and therefore the likelihood that they will be successful. There is growing support for moves toward a more “evidenced-based” approach to conservation (Sutherland, 2003), including through the work of Foundations of Success ([www.fosonline.org](http://www.fosonline.org)), CIFOR (e.g. see Kusters and Belcher, 2004), the Conservation Measures Partnership ([www.conservationmeasures.org](http://www.conservationmeasures.org)), the Cambridge Conservation Forum ([www.cambridgeconservationforum.org.uk](http://www.cambridgeconservationforum.org.uk)), and others. Various tools have been developed and/or are being refined by these and other institutions to support the collection and sharing of information related to the outcomes of wildlife based conservation and development projects, and to improve the ability to predict those outcomes under varying social, economic and biological conditions (e.g. see Marshall *et al.* 2006; see Kapos *et al.*, 2008).

Further research efforts are required, building on this study and the work of others noted above. In addition, there is a need to make this information more practical, policy-relevant and easily accessible to government agencies charged with designing and implementing wildlife trade controls, donor agencies supporting such efforts, NGOs, IGOs and businesses interested in addressing wildlife trade related concerns. This includes:

- a) **Investing in developing the evidence base for wildlife trade interventions, and moving towards approaches that more clearly link to and build on this evidence-base.** This requires generating specific data on key aspects of the wildlife trade that remain under-researched or unknown (see c) below), and undertaking the type of higher-level generalised analysis presented in this study to further understand the linkages and chains of causalities between the different factors and conditions that drive the wildlife trade. Where appropriate, systems and approaches to obtain this information should be integrated into on-going and future projects.
- b) **Making the communication of information and dissemination of research findings related to improving intervention effectiveness a priority.** Particular attention should be paid to generating practical and policy-relevant information for wildlife trade decision-makers and planners, and ensuring that it is shared in a useful and accessible form and in particular making it available in local languages. Mapping and models of wildlife trade dynamics and trade chains, for example, can serve as important tools for illustrating key features and intervention points, and providing decision-support information.
- c) **Expanding the knowledge base on specific species, products, locations and stakeholder groups considered a priority in conservation and/or development terms.** A number of data gaps and priority areas for research requiring urgent and immediate attention emerged during the course of this study, including:
- the status of wild populations subject to harvest and trade;
  - the impacts on human livelihoods of wildlife harvest and trade at different scales (e.g. household, community, country)
  - the characteristics of end-consumers and consumer markets shaping wildlife trade dynamics from the target countries
  - existing enforcement capacity and efforts; and
  - the potential acceptability and mechanisms for promoting substitutes for products from wild-harvested species.
- d) Increasing investigation of the potential to develop typologies for wildlife products in trade, and the use of scenarios, bioeconomic modelling, Bayesian Belief Networks and other analytical tools to assess the application of interventions under different conditions. Further discussion of these tools is provided in Annex 3. A particular emphasis should be placed on exploring the factors associated with specific interventions known to have been successful. Approaches that were considered by experts consulted in this study to have a relatively high rate of success in controlling the trade, but to be little-utilized, e.g. market-based instruments and local norms, should also be explored as a priority.

## **7.2 Wealth appears to be a stronger driver of illegal and unsustainable wildlife trade in south-east Asia than poverty**

Some wildlife trade interventions are designed on the premise that efforts need to be concentrated on the rural poor in order to reduce unsustainable and illegal harvesting. However, the majority of experts consulted for this study believe that such endeavours have been relatively limited in their effectiveness. Furthermore, attributes associated with wealth, rather than poverty, were seen as a stronger stimulus for the current levels of demand for wildlife products. These survey findings are in line with a common conclusion in the literature that it is the high and rising demands of increasingly large and affluent urban populations that are the main drivers of the wildlife trade. At a macro level, rapid economic growth and infrastructure expansion are also having a significant impact, because they are increasing access to wildlife habitat and markets (see also under 7.3).

However desirable it is to target livelihood-based wildlife trade interventions at the rural poor living in areas from which wildlife is harvested, the impact of these interventions alone on wildlife trade seems likely to be low as long as other groups and processes that exert a major influence on the wildlife trade – and that are fostering the market opportunities to which others involved in the wildlife trade are responding – remain unaddressed. This is not in any way to say that efforts to achieve poverty reduction and improved livelihoods in the countries covered under this study are not necessary, but rather to point out that, unless combined with other measures, such efforts seem unlikely to significantly reduce illegal and unsustainable trade.

In the light of the above, there is a critical need to ensure that interventions are better targeted to, and more cognisant of, the dynamics of the increasing affluence and wealth, rising aspirations and demands, and wider processes of economic growth in the region that are believed to drive a major share of the trade. This need can also be seen in relation to the persistence of markets for wildlife goods from unsustainable and/or illegal sources in key consumer markets. Greater attention is therefore required to the following actions if wider dynamics are to be addressed successfully:

- e) **Improving the targeting of interventions towards urban consumers of wildlife products.** This should include interventions aiming to improve awareness and enforce legal restrictions, and to the broader markets, products and commodities that reflect their growing affluence and changing aspirations (see also under 7.6);
- f) **Targeting interventions towards those richer, more powerful and/or influential groups that exert a high level of control over the wildlife trade chain.** This should include consideration of the need to improve enforcement and support efforts backed by the high-level political support required to influence these groups (see also under 7.8); and
- g) **Ensuring that interventions supporting improvements in rural livelihoods are based on a clear understanding of local harvest and trade dynamics where these interventions are aimed at reducing illegal and unsustainable wildlife harvest.** Such interventions should be packaged with other intervention approaches, e.g. those linked to harvest controls and tenure, in such a way as to address harvest and trade dynamics.

### 7.3 The design of wildlife trade interventions needs to take into account the broader conditions and trends that act to drive illegal and unsustainable wildlife trade

Most wildlife trade interventions have focused on changing the behaviour of particular groups, e.g. harvesters, traders, consumers, and/or enforcers, without taking into account broader conditions and trends within which these groups operate, such as improvements in transport infrastructure, economic growth in consumer markets, or technological advances. Questionnaire respondents noted the importance of these factors in shaping supply and demand, points also echoed in numerous references (see, for example: Redford, 1992; Davies, 2002). Wider issues of governance, e.g. in relation to tenure and corruption, also shape the wildlife trade and therefore need to be addressed in the design and implementation of interventions (see below). In the light of these findings, long-term solutions to the problems associated with illegal and unsustainable wildlife trade need to incorporate a much deeper understanding of underlying conditions and trends, including:

- h) **Investigating and considering the broader conditions and trends that influence both supply and demand for wildlife products.** These include increasing wealth, economic growth, infrastructure development, law enforcement, and governance. Such investigations should take place alongside interventions to tackle the direct manifestations and barriers associated with illegal and unsustainable wildlife trade (e.g. regulations, awareness or resource management practices); and

i) **Making strong efforts to ensure that wildlife trade concerns and safeguards are integrated into the planning and implementation of infrastructure development and trade promotion.** This includes working to increase the understanding of wildlife trade issues among development decision-makers and measures to promote regional co-operation in addressing the wildlife trade (see also under 7.4 and 7.8).

#### **7.4 Laws and regulations stand little chance of success unless they are effectively implemented and enforced, and wider issues of governance are also tackled**

The majority of wildlife products in trade are subject to one or more regulatory controls on harvest and/or trade. However, the survey of expert opinion indicates that the success of regulatory interventions as they are being applied is highly variable. Consultation with experts, including during project workshops, consistently pointed to poor implementation and enforcement and weak governance as posing the largest barriers to controlling illegal and unsustainable wildlife trade. This finding is strongly and repeatedly backed up by the literature. Even if interventions are well designed and correctly target the drivers and causes of illegal and unsustainable wildlife trade, they will have little or no long-term impact if they cannot be implemented in practice. This includes not only the detection of wildlife trade-related crime, but also the prosecution of offenders, increased awareness of which was believed by some experts to act as a deterrent to illegal activity. Low capacity and will to enforce controls on the wildlife trade, which in turn is underpinned by a range of factors associated with weak governance (such as corruption, breakdown of the rule of law, inadequate political will), remain critically important reasons why wildlife trade interventions fail in practice.

In the light of these findings, it is imperative that concerted efforts are made to strengthen the implementation and enforcement of measures to control the illegal and unsustainable wildlife trade, including promoting the good governance that is required to ensure their equitable and effective application, including:

j) **Integrating policies on management of wildlife harvest and trade with implementation and enforcement of that policy along the trade chain.** This is relevant to the full range of policy applications, e.g. defined chains of custody for legal trade, harvest controls, national-level trade bans, and tenure arrangements. Unless there are adequate staff resources and technical capacity, backed up by budget allocations, policy will make little difference on the ground;

k) **Ensuring that implementation and enforcement of wildlife trade policies and controls is targeted at those points in the trade chain likely to have the greatest impact.** As noted above, further work is required to identify these points in relation to the products in trade;

l) **Strengthening the judicial sector's understanding of the significance of illegal and unsustainable wildlife trade.** Such understanding is necessary to promote the foundations of good environmental governance, particularly the establishment of sufficient deterrents in the form of penalties and prosecutions;

m) **Focusing on the building of multi-agency law enforcement capacity.** This includes multi-agency taskforces and other mechanisms to promote cross-jurisdictional co-operation and reduce the likelihood of collusion; and

n) **Supporting expansion of multi-lateral enforcement efforts in the region.** Of particular importance are efforts being undertaken under the umbrella of the Association of Southeast Asian Nations (ASEAN) through the ASEAN Wildlife Enforcement Network. Multi-lateral efforts should be expanded to include also countries that are major markets for products from south-east Asia, e.g. China, Japan, the USA and the EU.

## 7.5 Non-regulatory approaches to controlling illegal and unsustainable trade, e.g. market-based interventions and support for improvements in resource management, are under-used

As indicated above, questionnaire results and the literature both point to the dominance of regulatory approaches in efforts to control the wildlife trade. However, experts surveyed believed that, where they were in place, non-regulatory mechanisms, e.g. local norms and traditions and market-based mechanisms such as buying agreements, were frequently effective at reducing illegal and unsustainable harvest and trade. The same was believed to be true of interventions designed to improve management of the resource, e.g. through species management plans. Greater emphasis should therefore be given to such approaches, including by:

- o) **Increasing support for research regarding, and improvements in, the management approaches used for harvest of those wild species for which harvest is permitted.** This support should be linked to greater consideration of the links between management measures and local norms and traditions; and
- p) **Encouraging greater investigation of, and where appropriate, investment in voluntary and market-based measures.** Instruments such as buying agreements and product certification should be explored, building on experiences thus far, including in relation to timber and fisheries products. Consideration should be given to the links between these measures and those aimed at awareness-raising.

## 7.6 Awareness efforts to reduce illegal and unsustainable trade need to be targeted to specific audiences and their effectiveness evaluated over time

Awareness campaigns were believed to be effective in changing behaviour in approximately half the cases where they were targeted at consumers, and in less than a third of the cases where they were targeted at harvesters or traders. Very little information was available in the literature on the effectiveness of such campaigns. Greater understanding is required, therefore, regarding how best to communicate to the various stakeholder groups involved in the wildlife trade in order to shift their behaviour away from illegal and/or unsustainable activities.

- q) **Improving the knowledge base regarding the shaping of stakeholder attitudes towards the harvest, trade, purchase and consumption of wildlife products.** Particularly attention should be given to those species in trade of high conservation concern. The design of awareness efforts should be based on this knowledge, and pay attention to, e.g., the messaging likely to be most effective, the best communication channels to reach the desired stakeholder groups, and the minimum duration needed for such campaigns to have a lasting impact.
- r) **Incorporating a monitoring and evaluation component into awareness campaigns.** Awareness campaigns should be developed in a way that will enable their impact to be assessed and subsequent campaigns to be modified in order to strengthen their impact further.

## 7.7 Co-ordinated packages of mutually reinforcing interventions are required to address illegal and unsustainable wildlife trade in a more comprehensive manner

Numerous references in the wildlife trade literature as well as experts consulted during the study workshops recommended that a variety of interventions was needed to tackle illegal and unsustainable wildlife trade more effectively. When applied in isolation, specific categories of intervention may be both effective and necessary to halt illegal and unsustainable wildlife trade for specific actors, places or

products. However, they are more likely to provide sufficient conditions to control this trade at a broader level when applied in combination.

With this in mind, there is an urgent need for better research, as called for above (7.1), to understand the effectiveness of interventions applied in combination. There is also a need to co-ordinate the design and application of different trade interventions better. This will help ensure that, acting together, such interventions establish sufficient conditions to halt illegal and unsustainable trade in the target species and/or in relation to the target site. Steps required include:

- s) **Ensuring that interventions present a balanced mix of enabling and positive incentives together with more restrictive and punitive measures.** This mix should be considered whether applied to a single species, product, location or participant group in the wildlife trade chain;
- t) **Ensuring that interventions are inter-linked and targeted across the different species, products, countries, locations, actors and stages in the wildlife trade marketing chain.** This includes, for example, ensuring that regulatory controls support resource tenure arrangements, that awareness efforts increase support for regulatory approaches and/or promote markets for sustainably produced products, etc.
- u) **Actively fostering better co-ordination, data-sharing and joint efforts between different agencies, sectors and countries, according to their specific mandates, agendas, interests and capacities.** In particular, there is a need to promote improved collaboration between:
  - Development and conservation agencies, both to address the broader threats posed by the wildlife trade, as well as to improve the co-ordination of measures undertaken;
  - Countries that provide the source of wildlife that is traded, and those that are its major consumers. A regional framework of policy-related agreements would assist in this; such efforts in south-east Asia could be co-ordinated at least in part under the existing ASEAN Regional Action Plan on Trade in Wild Fauna and Flora, with links to China, Japan and other major consumer markets such as the EU and North America.

## **7.8 Increased attention and investment is required if wildlife trade is to be brought within sustainable levels and conducted according to national and international trade controls**

The survey results demonstrate that a variety of approaches are being used to reduce illegal and unsustainable wildlife trade in south-east Asia. However, as noted in much of the available literature and by participants in the study workshops, and as evidenced by the on-going decline of many wild species in trade, increased action, particularly with regard to enforcement of trade controls, is needed to bring the wildlife trade under more effective control. There is therefore an urgent need to affect a shift in the way in which wildlife trade is perceived, and to raise the priority that is accorded to the policies, interventions and resources that are targeted towards addressing it. These include:

- v) **Securing high-level political support to ensure that measures to address the wildlife trade are accorded a high priority in conservation sectors.** This includes ensuring that sufficient resources are allocated to implement these actions; and
- w) **Mainstreaming wildlife trade issues not only within conservation policies, programmes and budgets, but also within policies, programmes and budgets that are targeted towards meeting socio-economic development and poverty reduction goals.** This includes increasing the attention to the role that wildlife products play in relation to delivery of the Millennium Development Goals, particularly in, but not limited to, rural areas.