1. This document has been prepared by the Standing Committee’s Clearing House.

2. Decision 13.78 of the Conference of the Parties states that:

   The Standing Committee shall, through its clearing-house mechanism, decide on the appropriate way to continue consideration of the relationship between ex situ production (of animals and plants) and in situ conservation in the context of CITES. It shall establish precise terms of reference for the CITES bodies that should be involved in this work, set timelines for the work to be done, and report on progress at the 14th meeting of the Conference of the Parties.

3. The Standing Committee, at its 53rd meeting (Geneva, June – July 2005), instructed its Clearing House to submit recommendations at the 54th meeting to fulfil Decision 13.78. The Clearing House submitted document SC54 Doc. 34 recommending that the Standing Committee seek the approval of the Conference of the Parties for a study on the issue. Terms of reference for such a study were presented and discussed. The Committee agreed to the proposal in principle and requested the Clearing House to amend the Terms of Reference in the light of the discussions that took place.

4. In preparing the present document, the Clearing House took account of previous documents of the Conference of the Parties and the Standing Committee relating to economic incentives, as well as synergies between CITES and the Convention on Biological Diversity (CBD). In doing so, it was noted that a number of these documents included consideration of the issue of Access to Genetic Resources and Benefit Sharing (ABS). In dealing with ex situ production from a CITES perspective, the objective should be to maximize the benefits of such production for wild populations. This may or may not involve sharing the profits – if any – of such production but that is not the primary objective. In so far as the possibility of transferring benefits back to range States is considered, this is only with a view to furthering conservation of the relevant species in the wild. It is not the intention of the Clearing House, in carrying out the task assigned to it in Decision 13.78, to try to influence the outcome of the current negotiations regarding ABS in CBD. That Convention is entitled to make its own decisions regarding benefit sharing arising from the granting of access to genetic resources in range States. Accordingly, this document takes no position on ABS per se except to the extent that it relates directly the objectives of CITES.

5. Although the Standing Committee and the Clearing House were tasked with this issue, it became obvious to the latter that the scientific aspects could not be put entirely to one side. Accordingly, documentation from both scientific committees was taken into account and the Chairmen of both Committees were consulted.
6. The Clearing House has taken account of the documentation submitted to the Animals Committee detailing case studies with regard to ex situ production. While this documentation was useful, it was very difficult to draw general conclusions. Nearly all of the case studies were submitted by the World Association of Zoos and Aquariums and there was no means of verifying whether or not they were representative. In fact, the documentation highlighted one of the chief difficulties that pertains to this issue, namely that the arguments advanced by the various interest groups are anecdotal or else are based on assumptions that may be plausible but are difficult to verify. It seems unlikely that any further wisdom can be gleaned at this stage from case studies that are submitted voluntarily. That is not to say that case studies are not important but a more strategic view of the issue is required before they can be considered in context.

7. Earlier documentation (in particular, document PC14 Doc. 15) also looked at the issue of production systems and source codes. However, although it is important, it merits consideration in a separate context and is more appropriate to the scientific committees. That is not to say that all ex situ systems are equal in terms of their risks and benefits for wild populations. However, the Clearing House has been assigned responsibility for this issue in response to perceived problems with ex situ production per se that the scientific committees were unable to resolve fully.

Benefits of ex situ production

8. Consideration of the balance of benefits and risks associated with ex situ production is crucial to any outcome on this issue. The most frequently cited benefit, and the one used to justify lighter procedures in CITES for specimens derived from such production, is that it relieves pressure on wild populations. This is an assumption that was effectively written into the Convention at the outset (although it is not always clear to what extent it is really the case – see below). There are certainly many taxa for which the bulk commercial trade is predominantly in artificially-produced specimens (crocodilians and orchids for example). Otherwise, the probability is that this assumption is more likely to be true for specimens of modest value.

9. Another benefit that is sometimes cited is the possibility that ex situ production can provide a source of founder stock for re-introduction of the species to suitable habitat from which it had been lost. Such production can also be a source of breeding stock to re-vitalize depleted populations with a reduced gene pool. However, in order for this to hold true, the gene pool of the relevant ex situ population must be sufficient for restocking or re-introduction purposes, as in the case of official zoo breeding programmes that manage populations cooperatively. Ex situ production that is not specifically managed for re-introduction or re-stocking purposes (including most commercial breeding and sale of surplus by hobbyists) would not normally provide an adequate gene pool.

10. Properly managed ex situ facilities that are re-stocked in a regulated and sustainable fashion can add value to the wild harvest and thus enhance the economic incentives to conserve the habitat, especially where it would be difficult to meet demand entirely from wild specimens. Butterfly ranching in Papua New Guinea is an example; there is a demand for these specimens in ex situ butterfly exhibits all over the world. The butterfly ranches serve to conserve and even improve the habitat (because these butterflies represent financial value), and thus are beneficial for the survival of these species. Crocodile ranching often achieves the same goal although, since it is practiced across a range of species and countries, the benefits are variable by species and country. In other words, sustainable use of in situ populations may contribute to in situ conservation.

11. The benefits for in situ conservation of observations and research carried out on ex situ specimens should also be noted. Such specimens can provide a wealth of information on the behaviour, genetics, husbandry and veterinary requirements of such species, much of which can be applied to in situ populations. In addition, the continued development of breeding and propagation skills makes it ever easier to breed or propagate vulnerable taxa where this was difficult in the past.

12. Last, but by no means least, is the issue raised by Mexico in document CoP13 Doc. 56.3.2, namely the potential for transfer of some benefit back to range States for in situ conservation work. At present, this is largely a potential rather than an actual benefit in most cases.
Risks of ex situ production

13. One risk has already been noted, namely that the existence or purported existence of breeding facilities can facilitate the laundering of specimens taken illegally from the wild. For highly desirable species with high market value, the existence of a legitimate source of ex situ specimens can act as an incentive for illegal trade (through laundering of wild-caught specimens) unless the scale of ex situ production is such that it can meet demand. The fact, for instance, that under Resolution Conf. 12.5 (Conservation of and trade in tigers and other Appendix-I Asian big cat species), trade in tiger parts and derivatives even from captive-bred specimens is discouraged demonstrates the concern that this risk can outweigh any conservation benefits.

14. The trade in Australian cockatoo species also illustrates this problem. Here there is some evidence that the demand, which could not be met entirely from bona fide captive breeding facilities, stimulated systematic smuggling of eggs from that country. It is difficult to assess how frequently this arises but it is an undoubted risk of threatening the species. In the European Union, Scientific Authorities have frequently encountered dubious claims of captive breeding and this is likely to be encouraged by the belief that such claims will secure an easier passage for the specimens concerned. Nevertheless, it is not clear to what extent such fraud arises because there are really insufficient specimens available from the wild. In some cases it may arise in response to stricter measures on the part of importing or exporting countries that are intended to eliminate or greatly reduce trade in live wild specimens per se. It is not the purpose of this document to open a debate on such stricter measures. Suffice it to say that they are undermined if the existence of a legitimate supply of ex situ specimens facilitates the laundering of specimens derived in situ.

15. Another frequently cited risk is that bulk ex situ production can ‘undercut’ sustainable harvest from the wild and thus remove the main incentive for communities to conserve the species in its habitat. Again, examples have been cited at previous Animals Committee meetings (AC19 for example) and it is undoubtedly a perceived issue for some range States but the extent of this phenomenon is unclear.

16. A third risk is that specimens held in breeding or propagation facilities may escape and become invasive or at least become a source of genetic pollution.

Economic aspects

17. In previous discussions these were the most contentious aspects and they draw in many of the considerations discussed above. Although the stated intention of this document is to remain neutral on ABS issues per se, there are a number of economic or quasi-economic factors that could impact on the achievement of CITES objectives and these need to be addressed. The most pressing questions are the following.

18. What magnitude of profit is being generated by ex situ production?
   - Clearly, in some cases it is substantial. But, taken across the board, it is unclear whether there really is a large untapped resource that could be harnessed for in situ conservation purposes. Or are we going to find that, behind the few headline cases where ex situ production is generating large profits (in the horticultural, perfume and pharmaceutical industries for example), there are numerous other cases where these are marginal, e.g. hobbyists simply disposing of surplus stock? Some ex situ production - such as conservation-oriented breeding programmes - could even be loss-making in economic terms. In the United States of America, a zoo-based loan programme for giant pandas (regulated by the U.S. Fish and Wildlife Service) returns millions of dollars annually to China for conservation work directly related to the species in the wild, while specifically prohibiting participating zoos in the United States from making a financial profit on the loan of the animals.

19. In so far as the production is not profitable, to what extent is it balanced out by some of the non-financial benefits referred to above?
   - Non-financial benefits would include the provision of stock for re-introductions, transfer of veterinary and behavioural knowledge, etc.
20. Why is it that so many large-scale ex situ production systems (with the possible exception of those for crocodilians) are not located in the relevant range States but instead are found in industrialized countries?
   - For example, why are there so many commercial parrot-breeding facilities in Europe and the United States, as compared to the number in Africa, Asia or Latin America? Why is it that so much of the industrial-scale production of succulent plants is located in Europe rather than in the range States? Is there scope for transferring some of the skills and expertise back to those countries? Are there circumstances in which the CITES provisions on captive breeding and registration are acting as a barrier to conservation-oriented ex situ production in these countries? In this regard, the Conference of the Parties at its 13th meeting (Bangkok, 2004) took the decision to extend slightly the definition of ‘artificially propagated’ to facilitate trade in ex situ-produced, long-lived species in range States. Are there other instances under which such proportionate easements could be considered?

21. To what extent are range States, which might have a claim to any transfer of benefits, seeking to ensure that benefits from ex situ operations within their territory are being harnessed for in situ work?
   - On the one hand, if this is happening, perhaps we could learn from their experience. We might equally find that the reason there has not been success to date is that such mechanisms could place such production facilities within range States at a competitive disadvantage. On the other hand, it would be unrealistic to expect support for any mechanism – even a voluntary one – for transfer of benefits from non-range States if range States themselves are not willing to apply similar measures within their own territory.

22. Related to this, are there other cases involving harnessing of economic benefits for conservation that we can learn from?
   - The most obvious one would probably be the experience gained through managed trophy hunts.

Recommendation

23. It is recommended that Conference of the Parties approve the undertaking of an independent study on this issue. The terms of reference for this study are set out in the Annex to the present document. They have been revised in response to comments made during the discussions at the 54th meeting of the Standing Committee.

24. If the Conference of the Parties approves this proposal, the cost could be met from the Trust Fund. In the process for the selection of the consultant to carry out the study, the Secretariat should consult the Chairman of the Standing Committee, who should consult the Clearing House. The consultant selected should be the person or body recommended by the Chairman unless this is not possible under the rules of the United Nations.

25. The study should be undertaken in sufficient time for the matter to be brought back to the Chairmen of the Animals and Plants Committees so that they may offer comments and, if they see fit, bring it to the attention of those Committees. It should then be presented to the Standing Committee with those comments – and any comments from the Secretariat. The Standing Committee can then prepare recommendations for consideration at the 15th meeting of the Conference of the Parties (CoP15).

COMMENTS FROM THE SECRETARIAT

A. The subject of the relationship between ex situ production (or breeding) and in situ conservation has been the subject of five Decisions of the Conference of the Parties.

B. At CoP11, in Decision 11.102, the Animals Committee was instructed to examine this relationship and to identify ways in which registered ex situ breeding operations could contribute to enhancing the recovery or conservation of the species in the countries of origin, and to report at CoP12.

C. At CoP12, in Decision 11.102 (Rev. CoP12), as the Animals Committee had made no progress it was instructed to continue its examination of this issue, in collaboration with various organizations, and to report at CoP13. At the same time, the Animals Committee was instructed, in
Decision 12.78, to study how commercial captive breeding of Appendix-I species and the registration of breeding operations contributes to conservation of these species. Moreover, in Decision 12.11, a related instruction was given to the Plants Committee, to analyse the relationship between in situ conservation and ex situ production of plants.

D. At CoP13, the Animals Committee reported that, for a variety of reasons, it had been unable to reach any meaningful conclusions after several years of work on this subject. The Plants Committee also reported that it could not reach any decision. The Conference consequently adopted Decision 13.78 (see paragraph 2 of the present document) instructing the Standing Committee, through its Clearing House, to establish precise terms of reference for the CITES bodies that should consider this issue.

E. The result, in the present document is a proposal to conduct a further study of the subject, at a probable cost in excess of USD 25,000 (assuming a desk-based study of about two months).

F. The Secretariat believes that, although such a study would undoubtedly produce interesting results, the Conference of the Parties has really not clarified what is its aim with respect to the consideration of this issue. It therefore recommends that the Conference first determine its purpose in continuing discussion of the subject. When that is clear, it will be easier to decide on the appropriate steps to achieve the aim.
1. The study should examine the following issues in relation to international trade in ex situ-produced, CITES-listed species and its effect on wild populations of such species.

   a) **Evaluation of the benefits and scope of ex situ production**

      i) The extent to which it relieves pressure on wild populations by providing a substitute source of specimens (or the circumstances in which this does not occur);

      ii) The value of ex situ production as a source of founder stock for species re-introduction and/or recovery programmes;

      iii) The added incentive for habitat conservation resulting from the need for specimens for ranching purposes;

      iv) The benefits derived for conservation of the species from observation and research carried out on ex situ populations and the resultant improved husbandry techniques;

      v) The extent to which range States are able to transfer benefits from ex situ production in their territories to in situ conservation work;

      vi) The scope for transfer of benefits back to range States for in situ conservation purposes; and

      vii) The scope of economic activity generated by ex situ production.

   b) **Evaluation of the risks of ex situ production**

      i) The risk of creating a mechanism for laundering of wild taken specimens; and

      ii) The removal of the incentive to conserve the habitat of the wild population owing to the existence of an alternative ex situ source.

2. The study should provide recommendations for maximizing the benefits of ex situ production and minimizing the risks of ex situ production, taking care to ensure that recommendations are appropriate to the scope of CITES as a Convention whose purpose is to ensure that the survival of species is not put at risk as a result of international trade.

3. The study should also draw conclusions on the following issues:

   a) the value of and need for voluntary mechanisms for maximizing benefits and minimizing risks;

   b) the value of and need for a formal regime for maximizing benefits and minimizing risks; and

   c) the possibility of different approaches to different categories of species and/or production systems (e.g. different approaches for Appendix-I and Appendix-II species, different approaches for animals and plants, different approaches for range States and non-range States, etc.).