

**IUCN/SSC
ASIAN RHINO SPECIALIST GROUP
(AsRSG)
MEETING**

BRIEFING BOOK

**JALDAPARA SANCTUARY
WEST BENGAL, INDIA
6-10 DECEMBER 1993**

**SECTION 15
TRADE ISSUES**



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



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Our ref.:
Your ref.:

NOTIFICATION TO THE PARTIES

No. 774

Geneva, 15 October 1993

CONCERNING:

Decisions of the Standing Committee on
Trade in Rhinoceros Horn and Tiger Specimens

At its 30th meeting, held in Brussels, Belgium, from 6 to 8 September, the Standing Committee again discussed the trade-related problems of conservation of rhinoceros species (Rhinocerotidae) and the tiger (*Panthera tigris*). The Committee reviewed the progress that had been made in response to its previous decisions (see Notification to the Parties No. 738 of 20 April 1993), and the information that had become available since then. The Committee received a report from the Chairman of the IUCN/SSC Cat Specialist Group on the status of the tiger and threats to its future, and a report from the Secretariat including the results of the UNEP conference of rhinoceros range States, consumer States and donors, which took place in June 1993.

The Standing Committee made a series of decisions, which are attached to this Notification.

The Secretariat draws the attention of the Parties in particular to the decisions numbered 12 and 16, which affect all Parties.

8. agrees that a letter should be sent from the Chairman of the Standing Committee to the noted consumer countries, to impress upon them the gravity of the situation, advise them of the criteria set down by the Standing Committee to be met for the adequate implementation of protection measures, offer technical assistance on implementation and enforcement and seek their co-operation with the Parties to the Convention;
9. suggests that, within available resources, a technical delegation with a focus on implementation and enforcement be offered to interested consumer countries;
10. agrees that a high-level delegation should be sent to assess progress achieved by consumer countries, as soon as possible after the end of November 1993, and should report to the Standing Committee, which may make further recommendations as appropriate;
11. agrees that a letter should be sent from the Chairman of the Standing Committee to the Russian Federation urging improved implementation of domestic measures to prevent poaching of Siberian tiger and to shut off the illegal transborder movement of tiger specimens into south and east Asia;
12. urges that the draft Lusaka Agreement be refined with the assistance of UNEP and adopted by all African States to improve law enforcement against illegal trade in wild fauna and flora, and further urges other Parties to offer financial assistance with enforcement;
13. agrees that a letter should be sent from the Chairman of the Standing Committee to Zambia urging it to take effective measures with a view to ending the transborder poaching and illegal trade in rhinoceros horn;
14. notes that the UK has undertaken to pursue with the appropriate authorities in Hong Kong the concerns about illegal movement of rhinoceros horn and tiger specimens across its borders, in order to improve the effectiveness of enforcement;
15. agrees that a letter should be sent from the Chairman of the Standing Committee to Myanmar, Viet Nam and the Lao People's Democratic Republic urging adequate control of trade in wildlife and especially of the movement of rhinoceros horn and tiger specimens across their borders, and strengthening of enforcement capabilities accordingly, as well as their soonest possible accession to CITES;
16. urges all Parties to fully comply with the measures outlined in Resolution Conf. 6.10 and requests that Parties holding stockpiles report their actions in this regard to the Secretariat.

Decisions of the Standing Committee on
Trade in Rhinoceros Horn and Tiger Specimens

Brussels (Belgium), 6-8 September 1993

The Standing Committee:

1. notes that, at recent meetings, it has received information on the plight of rhinoceros and tiger populations which, despite listing in CITES Appendix I, have been subject to considerable pressure from poaching, in particular to supply an illegal trade for use in oriental medicines, and has called for reports from the countries which represent the market for these wildlife products;
2. notes the progress that has been made by the authorities in consumer countries to strengthen domestic control of this illegal trade and to educate their communities about the risk which is placed on the survival of rhinoceroses and the tiger from continued demand for parts and derivatives for use in such medicines;
3. notes with approval that the Republic of Korea has, since the 29th meeting of the Standing Committee, acceded to CITES and sought to strengthen its domestic legislation and enforcement action in respect of smuggled rhinoceros products in particular;
4. notes the information received from the Secretariat regarding progress in Yemen, in particular regarding moves to strengthen the capability of the Environmental Protection Agency to enforce the ban on use of rhinoceros horn and regarding the decline in use of rhinoceros horn, but expresses concern that Yemen has not yet taken all necessary steps to accede to the Convention;
5. notes with some concern that the Standing Committee's request made at its 29th meeting, for information on the control of illegal trade in rhinoceros horn and tiger specimens drew an inadequate response from the People's Republic of China;
6. reports concern that the measures taken by the People's Republic of China and the competent authorities in Taipei are not adequate to sufficiently control illegal trade in rhinoceros horn and tiger specimens and failed to comply with measures outlined in Resolution Conf. 6.10. Parties should consider implementing stricter domestic measures up to and including prohibition of trade in wildlife species now;
7. agrees that the minimum criteria to be met for the adequate implementation of protection measures before the end of November 1993 within the consumer countries are as follows:
 - a) identification and marking of stocks of rhinoceros horn;
 - b) consolidation of both rhinoceros horn and tiger bone stocks and their adequate control by the State;
 - c) adoption and implementation of adequate legislative measures; and
 - d) provision for adequate enforcement of the above measures;

TRAFFIC USA



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→ Copy Stuart/McShane/
(ICCN) (WWF)
Brooks/Forie
(SSC) (SSC)

F A X

TO: All TRAFFIC Offices
CITES Secretariat

FROM: Andrea Gaski *AG*

SUBJECT: U.S. Statement on Pelly Sanctions

DATE: 9 November 1993

CC: James Martin-Jones, WWF-UK
Simon Lyster, WWF-Brazil

Due to a series of mishaps and Ginette's departure for vacation, the attached White House statement by President Clinton on the Pelly sanction decision was not faxed to all offices.

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TO THE CONGRESS OF THE UNITED STATES:

On September 7, 1993, the Secretary of the Interior certified that the People's Republic of China (PRC) and Taiwan are engaging in trade of rhinoceros and tiger parts and products that diminishes the effectiveness of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Five rhinoceros species and the tiger are listed in appendix I of CITES, which means that the species are threatened with extinction and no trade for primarily commercial purposes is allowed. Although recent actions by the PRC and Taiwan show that some progress has been made in addressing their rhinoceros and tiger trade, the record demonstrates that they will fall short of the international conservation standards of CITES. This letter constitutes my report to the Congress pursuant to section 2(b) of the Fisherman's Protective Act of 1967, as amended (Pelly Amendment) (22 U.S.C. 1970(b)).

The population of the world's rhinoceros has declined 90 percent within the last 20 years to the present level of less than 10,000 animals, and the tiger population has declined 95 percent within this century to the present level of about 1,000. Neither the PRC nor Taiwan has fully implemented the international standards established by CITES for controlling the trade in these species, and the poaching of rhinoceros and tigers continues in their native ranges fueled in part by the market demand in the PRC and Taiwan. These populations will likely be extinct in the next 2 to 3 years if the trade in their parts and products is not eliminated.

To protect the rhinoceros and tiger from extinction, all countries and entities that currently consume their parts and products must implement adequate legislative measures and provide for enforcement that effectively eliminates the trade, including taking actions to comply with the criteria set down by CITES in September 1993 and fully cooperating with all CITES delegations. The PRC and Taiwan have made good faith efforts to

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stop the trade in rhinoceros and tiger parts and products, and have, since the announcement of fully certification, undertaken some positive legislative and administrative steps in this regard. These efforts, however, have yet to yield effective reductions in trade.

I wish to support and build on these good faith efforts undertaken by the PRC and Taiwan. At the same time, I would like to make clear the U.S. position that only effective reductions in the destructive trade in these species will prevent the rhinoceros and tiger from becoming extinct. Accordingly, I have established an Interagency Task Force to coordinate the provision of U.S. technical assistance to the PRC and Taiwan to help them eliminate their illegal wildlife trade. I have also instructed the Department of the Interior, in coordination with the Department of State and the American Institute in Taiwan, to enter immediately into dialogue with the PRC and Taiwan regarding specific U.S. offers of trade and law enforcement assistance.

Actions by the PRC and Taiwan that would demonstrate their commitment to the elimination of trade in rhinoceros and tiger parts and products could include: at a minimum, consolidation and control of stockpiles; formation of a permanent wildlife or conservation law enforcement unit with specialized training; development and implementation of a comprehensive law enforcement and education action plan; increased enforcement penalties; prompt termination of amnesty periods for illegal holding and commercialization; and establishment of regional law enforcement arrangements. I would expect that in taking these actions, the PRC and Taiwan would take account of the recommendations by the CITES Standing Committee and other CITES subsidiary bodies. In that regard, I am pleased to announce that the United States will participate in a delegation to the PRC and Taiwan organized by CITES to evaluate their progress between now and the March 1994 CITES Standing Committee meeting.

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P.03

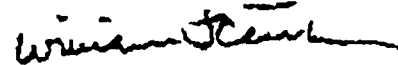
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At its last meeting, the CITES Standing Committee unanimously recommended that parties consider implementing "stricter domestic measures up to and including prohibition in trade in wildlife species new" against the PRC and Taiwan for their trade in rhinoceros and tiger parts and products. The United States is prepared, through close dialogue and technical aid, to assist the PRC and Taiwan. I hope that both will demonstrate measurable, verifiable, and substantial progress by March 1994. Otherwise, import prohibitions will be necessary, as recommended by the CITES Standing Committee.



THE WHITE HOUSE,
November 5, 1993.



**United Nations
Environment
Programme**

Distr.
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UNEP/TEB/CR.2/PP/Inf.4
14 May 1993

ORIGINAL: ENGLISH



UNEP Conference Between the
Rhinoceros Range States,
Consumer States and Donors
on Financing the Conservation
of the Rhinoceros

Nairobi, 28 June - 1 July 1993

CONSERVATION OF WILD POPULATIONS OF RHINOCEROS

COUNTRY PRIORITY PROJECTS

CHINA

Submitted by

The People's Republic of China
Endangered Species of Wild
Fauna and Flora Import &
Export Administrative Office
Ministry of Forestry
100714 Hepingli
Beijing, China

PROPOSAL

For the Study on Rhinoceros Horn Substitute for Medicinal Use

Drafted by: China National Institute for the Control of
Pharmaceutical and Biological Products
Office of the People's Republic of China for the
Management of Import and Export of Endangered Species

Submitted by: Office of the People's Republic of China for the
Management of Import and Export of Endangered Species

Implementing Agency: China National Institute for the Control of
Pharmaceutical and Biological Products

Field of Activity: Establishing a Laboratory for the Study of Rhinoceros
Horn Substitute, and Fulfilling the Study

Duration: 15 years

Estimated Cost: US\$ 1,600,000

Counterpart Input: US\$ 800,000

Donor's Input: US\$ 800,000

I. BACKGROUND AND JUSTIFICATION

With a long history of medicinal application in China, rhinoceros horn is one of the most important legacies of the traditional Chinese medicine, the curative effect of which is beyond any doubt. As a crude drug, the actions of rhinoceros horn were described in ancient Chinese medical literatures (e.g. Shennong Bencao Jing, Bencao Gangmu etc.) as follows: remove heat, cool blood, counteract toxicity and relieve convulsion. It is used in epidemic infectious diseases, stroke, heat and toxic wind, delirium etc.. The unique effect of rhinoceros horn is demonstrated by many first aid remedies such as Angong Niu Huang Wan, Xi Huang Wan, Jiuxin Dan, Xijiao Dihuang Tang, etc., which are used in the treatment of encephalitis B, upper respiratory tract infections, rheumatic and rheumatoid arthritis, etc..

However, the current drastic decline of rhinoceros population in the range countries is not neglected in China, the overriding cause of which is obviously poaching and smuggling. As a consumer country of rhinoceros horn,

China is now only using the registered pre-Convention stocks of rhinoceros horns for domestic pharmaceutical use, with no export of any products. While we believe that more effective and strengthened efforts on the conservation of a species and its habitat in the range countries as well as the measures for suppressing poaching and smuggling are most imperative, we also presume that the successful research on the rhinoceros horn substitutes may curtail the demand for rhinoceros horn, and ultimately replace it with substitutes. Furthermore, this will be significant for the welfare of both human being and wildlife.

In fact, efforts have already been made in China to use buffalo horn in lieu of rhino horn in in early 1970s. The study on buffalo horn in lieu of rhinoceros horn was monitored with patients of encephalitis B, typhoid fever, hepatitis etc., and the chemical composition of rhinoceros horn and buffalo horn was compared. analytical data of amino acids and adrenal gland and blood circulation have been studied. Buffalo horn has been used in epidemic encephalitis B, high fever, summer fever, primary thrombopenic purpura, rheumatic and rheumatoid arthritis, schizophrinia, hepatitis, coronary heart disease etc..

II. PROBLEMS AND SOLUTIONS

1. Problems to be addressed

The research work on rhinoceros horn substitute in China has been hindered by the lack of fund and modern instrument. Moreover, almost nothing valuable can be found in the existing literature. Therefore, modern instruments and new biochemical, molecular biological, immunological, pharmacological and bioengineering techniques should be used to compare the horn of rhinoceros with that of other animals and find out the substitute products which are acturally analogous to rhinoceros horn.

2. Solutions

1) It is imperative to establish an independent laboratory for the research on the substitute for rhinoceros horn, which is suggested to be composed of the section of physico-chemical analysis, biochemistry and molecular biology, pharmacology and toxicology, cytoimmunology, dosage form etc.. The total number of the staffs will be around 25.

2) Research activities

i. On the basis of traditional Chinese medicine

- Selection of substitutes: a number of substitutes will be selected which are analogous to rhinoceros horn in their actions, such as bovine horns(buffalo horn, cattle horn), ovine horns(goat and sheep horn);
- physico-chemical and biochemical analysis: corny protein peptides, amino acids, guanidine derivatives, steriods and trace elements;
- isolation of the active ingredient in the form of a lyophilized or dried products;
- verify the effect of the active ingredient with molecular pharmacological models, test its actions on the central nervous system(sedative, anticonvulsant, antipyretic) and cardiovascular system(heart, blood vessels, anticoagulant) , test for its antitoxic, liver protecting and immunizing functions;
- develop a formulated products which is ananalogous to rhinoceros horn in chemical coposition and effect;
- pilot processing: provide a definate quantity of the new products for use in chemical, biochemical, pharmacodynamic, pharmacological, toxicological, stability and clinical investigations, also in the elaboration of the quality standard;
- clinical trial and clinical verificaiton: to be conducted in accordance with the provisions for new drug approval;
- complete the stability tes, packaging etc, in compliance with the requirements of new drug approval;
- put into large scale production;

ii. The active ingredient of rhinoceros horn will be isolated by means of bioengineering technique. If the active ingredient is a protein or peptide, DNA recombinant technique can be used to determine its sequence and express it in Escherichia coli or Sacobaromyces. The active ingredient is isolated and purified after fermentation, its quality standard is then elaborated and submitted for approval.

III. WORK PLAN

- 1st year: establish laboratory, collect samples, search literature, work out the research plan;
- 2nd-3rd year: carry out physico-chemical and biochemical analysis, establish the pharmacological model of rhinoceros horn;
- 4th-7th year: carry out physico-chemical, biochemical and pharmacological study on the active ingredient;
- 8th-11th year: carry out pharmacodynamic study on the existing formula of rhinoceros horn substitute, prepare all the data and information needed for clinical investigation (physico-chemical analysis, effect, toxicity, quality standard, technical process, stability, etc.)
- 12th-13th year: clinical verification of the formulated rhinoceros horn substitute;
- 14th-15th year: replenish the cases of clinical trial, apply for new drug approval.

IV. BUDGET

i. Capital construction of a independent laboratory	800,000
ii. Instrument and Equipment	
1) multifunctional electrophoretic apparatus: 2 sets	20,000
2) HPLC: 2 sets	80,000
3) UV spectrophotometer: 1 sets	25,000
4) isoionic atomic emission spectrometer: 1 set	150,000
5) protein sequence analyzer: 1 set	100,000
6) computer-486: 2 sets	10,000
7) freeze drier: 2 sets	50,000
8) supercentrifuge (80,000 rpm): 1 set	35,000
9) centrifuge (20,000 rpm): 1 set	20,000
10) capillary capsule electrophoretic apparatus: 1 set	30,000
11) PCR: 1 set	20,000
12) electroencephalograph: 1 set	15,000
13) automatic drug feeding system: 1 set	15,000
14) multifunctional biochemical analyzer: 1 set	15,000
15) automatic blood oxygen measuring apparatus: 1 set	15,000

sub-total: US\$ 600,000

iii. Research expenses (incl. sample, reagent material, reagents, animals, etc.)	100,000 .
iv. Training and international exchange	50,000
v. unforeseeable expenses	50,000
=====	
GRAND TOTAL	1,600,000 USD

TRAFFIC INTERNATIONAL

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TRAFFIC TELEFAX

27 October 1993
Ref. T/V/4

To: Jacques Berney, CITES Secretariat
Martin Brooks, IUCN/SSC
David Cummings, WWF Zimbabwe
Holly Dublin, WWF Kenya/IUCN/SSC
Tom Foose, IUCN/SSC
Chris Hails, WWF International
John Hanks, WWF RSA
Tom De Meulenaer, TRAFFIC Europe
Ginette Hemley, TRAFFIC USA
James Martin Jones, WWF UK
Ashok Kumar, TRAFFIC India
Peter Kramer, WWF International
Arnold van Kraveld, TRAFFIC Europe/Netherlands
Nigel Leader-Williams, IUCN/SSC
Joe Loh, TRAFFIC Taipei
Simon Lyster, WWF Brazil
Tom McShane, WWF International
Tom Milliken, TRAFFIC E/S Africa
Stephen Nash, TRAFFIC S/E Asia
David Newton, TRAFFIC E/S Africa/Jo'burg
Alison Rosser, TRAFFIC E/S Africa/Dar es Salaam
Mike Sutton, WWF US
Simon Stuart, IUCN/SSC

From: Jorgen Thomsen

Subject: Rhino Economics

1. At last year's meeting of the IUCN/SSC Rhino Specialist Group, it was agreed that a project aimed at understanding the economics of the trade in rhino horn was of high priority and essential for our on-going rhino conservation efforts.

2. This was confirmed at the meeting of the WWF Rhino Working Group, which met earlier this year, and subsequently re-confirmed at the meeting of the Africa sub-committee of WWF. Funds were programmed for this purpose by the Africa team (from funds provided by WWF Netherlands), and subsequently approved by the Programme Committee. TRAFFIC International was asked to develop and supervise the project, which was given project number 9F0084.04.

3. Recently, the basic idea of this project was discussed in the WWF CITES Working Group. Concerns were raised that moving ahead with this project might send confusing or contradictory signals at a time when WWF is actively lobbying for political and economic pressures to be put on those countries which still provide a market for the illegal trade in rhino horn. After a full discussion of the merits of the project, it was decided not to recommend



against the execution of the project, and that some of the information, which was likely to result from the project, would indeed be useful for our rhino conservation efforts and CITES preparations. However, the CITES Working Group asked to be kept informed of the project and be given a chance to review the project concept.

4. On the basis of these endorsements and discussions, we have begun to develop the project. At this time, we would like to request your comments to the attached project concept, which was developed by Michael 't Sas-Rolfes. Our intention is to contract Michael as project leader, and that he will work in collaboration with two other economists from the UK, Julian Morris and Roger Bats. A brief CV for each of them is also attached.

5. As agreed earlier, TRAFFIC International will supervise this project for WWF International. The actual contract for the project will be established between the consultants and the WWF Africa Programme.

6. Once the project moves into its third and fourth phases, it is envisaged that other economists and appropriate experts also be involved. An initial request has been made for assistance from commodity management specialists at De Beers, who seem genuinely interested in the idea.

7. In addition to the project concept, we intend to ask the project leader to develop specific outlines or work programmes for each phase of the project. We will submit these documents to you for information and comment as they become available.

8. We would appreciate receiving your comments to the project concept by 3 November 1993. We will then pass the comments to Michael so that he can finalise the proposal. He and the two other economists are scheduled to meet with us in Cambridge on 15 November.

9. I hope this information is useful and look forward to receiving your comments. We, in turn, will continue to keep you informed about the project's progress.

Best wishes.

PROJECT PROPOSAL

RECEIVED
18 OCT 1993
TRAFFIC INTERNATIONAL

TO : TRAFFIC International
FROM : Michael 't Sas-Rolfes
PROJECT TITLE : RHINO ECONOMICS
(An Analysis of Policy Options for Rhino Conservation)
PROPOSAL DATE : 15 October 1993

PROJECT DESCRIPTION :

Synopsis

The overall objective of this project is to determine appropriate policies to address the ongoing loss (through poaching) of the world's wild rhinoceros populations. To assist decision-makers, the project will provide a comprehensive survey and economic analysis of all existing information relating to the conservation of the world's five rhinoceros species, the world trade in rhino horn, and the relationship between these two activities.

The project will consist of four phases. Phases 1 and 2 are to be commenced upon approval, and completed by April 1994. Phases 3 and 4 will depend on outside inputs from conservation agencies, but may be complete by mid-1994. This proposal concentrates on the first two phases, which will require estimated funding of £ 18,000.

Background

The depletion of the world's wild rhinoceros populations is currently one of the most pressing international conservation issues. The debate over appropriate policies to prevent the extinction of rhinos in their natural habitat, is growing. In addition to conservationists, economists and politicians are starting to have their say (See, for example, the recent article in *The Economist*, 9 October 1993). Unfortunately, the emotive nature of this subject, and an apparent lack of accurate information have clouded the debate on what action should be taken. A further complication is the different positions taken by different interest groups, and even nations, on the subject.

The main reason for the rapid decline in rhino numbers over the past few decades has been poaching for the purpose of obtaining the horn. There has been a substantial demand for rhino horn both for medicinal and ornamental uses in Asia. Since the late 1970's, various attempts have been made to prevent the trade in rhino horn, both between countries, and within countries. A key element of this strategy is the CITES Appendix 1 listing of all rhino species. To date, these attempts have been unsuccessful in eliminating the poaching of wild rhino populations, and there have been considerable reductions in the number of wild black rhinos in Africa.

In recent years, there has been increasing scepticism over the ability of trade bans to protect the status of wild rhino populations. Critics of this policy have argued that it ignores the economic incentives faced by the individuals who control the rhino. The trade ban has only driven the illegal market price of horn to higher levels, thereby increasing the incentive to poach. Since rhino horn is a resource that can be harvested on a renewable basis, much like sheep's wool, it would seem more sensible to limit rhino and supply the market. This strategy would not only reduce the illegal market price of horn, but would also provide an added incentive to invest in rhino conservation. This notion has been rejected by most conservationists, who seem determined to make the existing policy direction work.

The inability of conservationists to stem the continuing onslaught on rhino populations has led to the adoption of some drastic measures such as Zimbabwe's recent large-scale dehorning programme. Unfortunately, such measures only provide a short term solution at best; they have a high economic cost and are unsustainable. In recent months, the USA has attempted to coerce certain Asian countries to impose further domestic restrictions on the sale and use of certain wildlife products, under the so-called *Pelly Amendment* which provides for the imposition of selected trade sanctions on non-cooperative nations. It remains to be seen whether this latest attempt will have the desired effect of eliminating the demand for rhino horn products, but this is considered unlikely in the short term.

In essence, the present situation is such that conservationists are hoping that the combination of measures such as dehorning with the efforts aimed at banning the trade will be sufficient to deter poachers in the future. Since a considerable amount of time and money has been spent pursuing this strategy, the costs of reversing the policy on trade, political and otherwise, are considerable. For any alternative approach to be adopted, decision-makers would need to be convinced that the costs and risks are warranted. Hence any proposal for an alternative approach would need to be thoroughly researched and carefully planned.

If the existing trade ban approach continues to fail (and this seems quite likely), the option of a controlled legalized trade may be pursued. If this is the case, this should be done with extreme caution. Conservationists have already suggested a number of fairly radical measures, such as dumping existing stockpiles of horn at very low prices or releasing poisoned horn or take substitutes onto the market. Such proposals display considerable ignorance as to the economic consequences of these actions - an even worse situation could result. It is crucial that relevant decision-makers are presented with all the options and their probable outcomes, based on a thorough understanding of the market dynamics involved, before any action is taken.

It is thus necessary to conduct an overall economic analysis of rhino conservation and the international trade in rhino horn, which fulfils several functions. First, it is necessary to model the dynamics of the market. Second, a complete analysis of all existing data is needed, to gain some indication as to the existing state of the market and any noticeable patterns and trends. Third, the analyzed data should be used to compare the effects of various possible future scenarios and strategies. Finally, this could be used to formulate approaches to the problem which take full account of the economic realities involved.

Proposed project outline

The key question to be addressed is as follows :

Having taken full account of the economic factors affecting the destiny of the rhino, what policies are most likely to secure the existence of the largest populations of all rhino species in the wild?

The approach to address this question can be split into four phases :

PHASE 1 : Conduct a comprehensive literature review of existing work.

PHASE 2 : Model the existing market, and describe trends.

PHASE 3 : Using the models, project the effects of various scenarios.

PHASE 4 : Devise appropriate strategies to achieve the objective, and evaluate.

Phases 1 and 2 can be conducted with relative ease, using existing accumulated data and information, by a small team of economists. Phases 3 and 4 will require further inputs from conservation organisations (including CITES) and possibly commodity experts and industry specialists. Work on Phase 1 can commence immediately, as well as preparations for Phase 2. It would make sense to work simultaneously on parts of Phases 2 and 3, but at this stage it is not possible to estimate the amount of inputs required for Phase 3 without further consultation with relevant parties.

Project team

The project team for Phases 1 and 2 would consist of three suitably qualified economists. The team leader would be Michael 't Sas-Rolfes. He would be assisted by Roger Bate and Julian Morris. Short CV's of the proposed team members are attached. The team would also be available for further work on Phases 3 and 4.

Proposed output

For Phases 1 and 2 : A document outlining the structure and nature of the market, making the best possible interpretation of available data. The document would be designed to be understood by conservationists as well as economists. All relevant technical details will appear in appendices so as not to confuse lay readers. Records will be kept of all econometric analytical work; procedures, key assumptions and parameters.

On completion of Phases 3 and 4, it should be possible to produce a document that provides comprehensive coverage of the economic aspects of the rhino conservation issue, and presents a choice of future policies and their probable effects.

Budget

For Phases 1 and 2:

Consultants

3 Economists, 60 days @ £200 per day £ 12,000

Travel

2 trips Africa/UK @ £800 each £ 1,600
Local and other travel expenses £ 400

Running expenses

Communications, stationary, photocopying etc. £ 2,000

Contingencies

Possible additional travel, input etc £ 2,000

TOTAL £ 18,000

Note: Additional work on Phase 3 should be possible without further substantial expense, since much of the groundwork will have been done during Phase 2. Depending on the input of others, a further 10 to 20 days work may be required, with a limited amount of travel.

Project support

This project is based on an application from the IUCN SSC African Rhino Specialist Group, who rated it as a priority. The project team will report to and liaise with TRAFFIC International.



Michael 't Sas-Rolfes

Date.....17/10/93

PROPOSED PROJECT TEAM :

CURRICULUM VITAE

Michael 't Sas-Rolfes

23 Eton Park
6 Eton Road
2196 Sandhurst
South Africa

Tel/Fax 010 27 11 883 9607

Education :

M.Sc. in Environmental and Resource Economics
University College London
Dissertation : "The Economics of Rhino Conservation"
(1992-1993)

B.Com. (Hons) in Business Economics
University of the Witwatersrand, South Africa
Dissertation : "Privatizing the Rhino Industry"
(1985-1989)

Relevant experience :

Founding member and director of Eco Plus, an environmental economics and management consultancy; work included projects in the energy, ecotourism and wildlife utilization sectors, as well as environmental impact assessment (1990-1992)
Previous experience working with several NGOs on various projects concerning wildlife conservation and sustainable development issues. Numerous conferences and workshops attended.
(1984-1990)

Recent relevant publications :

"Privatizing the rhino industry", Free Market Foundation Paper (1990)
"The Economics of Rhino Extinction" in *Endangered Wildlife* magazine (1990)

Further details (including a full CV) and references will be provided on request.

Curriculum Vitae

Name: Julian Morris

Address: Saltings
Creechsea Ferry Rd
Canewdon
Essex SS4 2EY

Telephones: 0702 258 249

Education:

1992-93 MSc Environment & Resource Economics
University College London
Specialist areas incl.: Resource Economics, Econometrics

1987-92 MA Economics (2.1)
University of Edinburgh
Specialist areas incl.: Econometrics, Quantitative Economics.

Papers:

1993 "Quantifying Disamenity from Landfill: A Critical Review,"
Dissertation in part fulfillment of MSc course.

1992 "Limiting CO2 Emissions: A Survey of Models and Policy
Options." Dissertation in part-fulfillment of MA course.

1991 "Efficiency in the FX Market: Some Econometric Tests."
Dissertation in part-fulfillment of MA course

Work Experience:

1993 Commerz International Capital Management:
Macroeconometric Forecasting.

1991 Mercury Asset Management:
Quantitative Portfolio Analysis.

Roger Bate
Wolfson College
Cambridge
CB3 9BB

CURRICULUM VITAE

EDUCATION

Reading for a Ph.D. at the University of Cambridge. Dissertation:
Topic: "The Role of Property Rights in the Protection of Species:
Optimal Institutional Structures." (September 1993 onwards)

M.Sc. in Environmental and Resource Economics at University
College: London University. (September 1992 to July 1993)

B.A. (Hons) Economics (First Class) at Thames Valley University.
(September 1989 to June 1993)

ACADEMIC EXPERIENCE

Lecturer in Environmental Economics at Thames Valley University.
(January 1993 to April 1993)

Environmental Research Associate at CEI, Washington DC, (June
1992 to September 1993)

BUSINESS EXPERIENCE

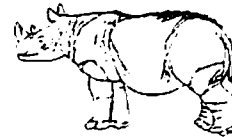
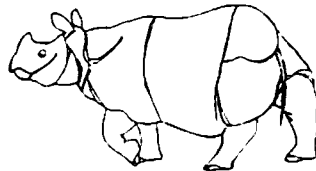
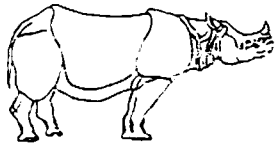
Financial Researcher at Minejust Ltd. I covered the banking and
investment sectors of S.E. Asia (January 1989 to September 1989)
and Europe (September 1986 to January 1989).

RECENT PUBLICATIONS

"Coase's Lighthouse: The Role of Property Rights in Water
Pollution Prevention" in Economic Affairs (June 1993)

"What Am I Bid: A Critique of the Contingent Valuation Method"
in Economic Affairs (October 1993)

IUCN SSC ASIAN RHINO SPECIALIST GROUP



Chairman:

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Forestry Department, ITTO Unit
Fifth Floor, Wisma Sumber Alam.
Putra Jaya, Jalan Stadium 93660
Kuching, Sarawak, MALAYSIA
Telephone: 60-82-445105
Fax: 60-82-445639

Program Officer:

Thomas J. Foose, Ph.D.
International Rhino Foundation
The Wilds
85 E. Gay St., Suite 603
Columbus, OH 43215, USA
Telephone: 1-614-228-0402
Fax: 1-614-228-7210

31 October 1993

TO: Jorgen Thomsen
011-44-223-277237

FROM: Tom Foose

SUBJECT: **RHINO ECONOMICS**

Thanks for your fax of 27 October. The study appears to continue to develop in an extremely useful way. My only comment is a query. Is this study coordinated with the cost/benefit analysis Nigel leader-Williams, Esmond Martin, and Raoul du Toit are initiating with WWF/NYZS support?

Sorry to be so brief but I am about to depart for South east Asia for Sumatran rhino workshop and activities.

Please keep me informed.



IUCN
The World Conservation Union

Jorgen Thomsen
Traffic International

22 November 1993
Page2

I very much want to see this project go ahead, and have indeed been calling for it for a number of years. However lets make sure that it adopts the necessary neutral and objective stands right from the beginning. If it is seen as promoting a particular position, then no-one is going to take the result seriously.

Should you wish to discuss this further with me, we should be able to squeeze some time around the TRAFFIC Committee meeting coming up.

With best wishes.

(dictated by Simon N. Stuart and signed in his absence)

World Headquarters

Rue Mauverney 28

CH-1196 Gland

Switzerland

Tel: ++4122-9990001

Fax: ++4122-9990002

Telex: 419624 iucn ch

IUCN

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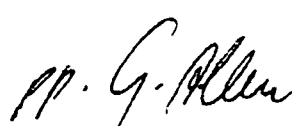
Ref: SSG/M25/1

TO: Jorgen Thomsen
Traffic International
00 223 277237

22 November 1993/clm

Copy to: Martin Brooks
Tom Foose
Simon Lyster

FROM: Simon N. Stuart
Head
Species Survival Commission



SUBJECT: Rhino Economics

Thank you for your memo of 27 October concerning this proposal. I have two basic responses :

1. I do not feel really qualified to discuss the technical details of the project, since it is definitely beyond my own expertise. It does look logical to me as an approach, but I think that a lot more detail as to the actual work to be done needs to be specified, as you have already made clear in your fax of 27 October to Tom McShane.
2. I find myself in agreement with some of the comments from Simon Lyster. This is not a neutral document, and I think that it is very important that it is. There is no point in doing this proposal (and I believe it should be done), if it is not clearly seen to be a neutral analysis of the different policy options from an economic perspective. There is a lot of loose wording (and Simon has pointed some of it out) that just need not to be there, and which shows a definite bias. This will seriously undermine the project. I know the suggested project leader, and I have confidence that he can do a good job, providing it is very heavily managed by TRAFFIC International. I think you are going to have to do a lot of work to ensure that this is a completely objective piece of work, and is not trying to promote one particular position. I have no doubt that you are capable of doing that from your office, but then I would like to see a specific budget line made available to your office. This does not appear to be the case at the moment.

Finally, I think the project needs to be clear as to whether it is talking about trade in African Rhino horn or Asian Rhino horn or both. There is not much point talking about a managed trade in either the Sumatran or Javan rhinos, for obvious reasons, but I suppose the possibility does exist with the Indian rhino. If that is the case, and if the project is to address this possibility, then it will need some re-focusing.