The First Asian Rhino Range States Meeting

Bandar Lampung, Indonesia, 2-3 October 2013

Bandar Lampung Declaration

The Governments of Bhutan, India, Indonesia, Malaysia and Nepal, meeting in Bandar Lampung on 2-3 October 2013 at the First Asian Rhino Range States Meeting, have agreed the following:

A. Background

Significant attention has been paid by the international community in recent years to the plight of the Black Rhinoceros and the White Rhinoceros in Africa, while there has been relatively less focus on the three Asian species: the Greater One-horned Rhinoceros (Rhinoceros unicornis); the Javan Rhinoceros (Rhinoceros sondaicus), and the Sumatran Rhinoceros (Dicerorhinus sumatrensis). Yet the Asian species occur in much smaller numbers. As of March 2013, there were over 25,000 rhinos in Africa, compared with only about 3,500 rhinos in Asia. Furthermore, of these Asian rhinos, 3,339 of them are Greater One-horned Rhinos, almost entirely in India and Nepal. The Javan Rhino became extinct on the Asian mainland in 2010 (when the last animal was killed in Vietnam), and it now survives only in a single, possibly declining population in the Ujung Kulon National Park, Indonesia, numbering approximately 50 animals. The Sumatran Rhino probably now numbers fewer than 100 animals, mostly in Indonesia, with a declining population trend. The species is close to extinction in Sabah, Malaysia, and no confirmed populations remain on the Asian mainland. All three species are listed as threatened on the IUCN Red List of Threatened Species, the Greater One-horned Rhino being Vulnerable, and the Sumatran and Javan Rhinos being Critically Endangered.

Despite this bleak situation, effective conservation measures and significant political will and conservation expenditure in India and Nepal have led to a marked population increase in the Greater One-horned Rhinos, demonstrating that determined conservation measures for these species can work.

Nevertheless, pressure from illegal hunting on all species of rhinos has grown seriously in recent years, linked to a significant increase in non-traditional use of rhino horn and a significant rise in the price of rhino horn in Asian markets, especially in Vietnam and China. A continued increase in illegal hunting of rhinos and in rhino horn demand could rapidly jeopardize the improvements that have been achieved in the status of Greater One-horned Rhino over the last two decades, and could easily cause the extinction of the Javan and Sumatran Rhinos in the foreseeable future. Measures taken by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) to bring the illegal trade in rhino products under control still require continued commitments across source and transit states, and a commitment from key rhino horn consuming countries is also sought.

Importantly, the Governments of Bhutan, India, Indonesia, Malaysia and Nepal have all agreed to the 2010-2020 Strategic Plan for Biodiversity, including Aichi Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

B. Goal

The populations of the Greater One-horned, Javan, and Sumatran Rhinos will each be managed for an annual growth rate of at least 3%.

In other words, maintaining populations and preventing extinction is not enough. The aim is to bring about the recovery of these species.

C. General Asian Rhinoceros Conservation Needs

The price of rhino horn is too high for these species to survive, except where they are under the strictest possible level of protection. The following measures need to be in place for the conservation of all rhinos in Asia:

- 1. All three Asian rhino species have very specific habitat requirements. The strict protection of adequate areas of grassland habitat for the Greater One-horned Rhino, and of suitable tropical forest habitat for the Javan and Sumatran Rhinos is essential (the Javan Rhino possibly favouring more open forest habitat than the Sumatran Rhino). Habitat conservation and expansion plans need to include the needs of new rhino populations that will need to be established as populations increase. Habitat protection also requires the removal of invasive plant species that can cause a serious deterioration to the habitat quality of the Greater One-horned and Javan Rhinos (and possibly the Sumatran Rhino).
- 2. Strict anti-poaching operations need to be in place for all Asian rhino populations in order to reduce illegal killing to as close to zero as possible. Crime prevention is the responsibility of governments and as such effective and suitably intense anti-poaching operations should be led by governments. Crime prevention efforts should be monitored for effort, coverage and efficiency using software such as SMART (www.smartconservationsoftware.org). In some cases, rhinos might need to be moved to Intensively Managed Zones (IMZ) where the highest level of protection can be enforced. Sub-fertile rhinos (those with reproductive tract pathology or low sperm production) may need to be retained in closely-managed fenced facilities in order to maximise their potential to contribute to production of embryos through techniques such as artificial insemination or other advanced reproductive technology.
- The outcomes of CITES 16th meeting of the Conference of the Parties, held in Bangkok in March, 2013, need to be fully implemented, and in particular the decisions and resolutions that are relevant to the rhinoceros species. This includes international cooperation to improve enforcement of CITES controls, and anti poaching measures.
- 4. For those that illegally kill Asian rhinos or trade in rhino parts, the consequences of breaking the law need to be treated seriously. This requires rapid criminal investigations and tough penalties that are enforced consistently through the courts.

- Countries should raise red corner notices via Interpol for suspects operating across national boundaries.
- 5. The CITES ban in the international trade of all rhino products needs to be maintained and enforced, including by those countries where rhino products are used, any countries that act as intermediate points in the trade, and all rhino range states.
- 6. In order to maximize the growth rate of Asian rhino populations, sound principles of biological management need to be followed. The breeding rate of rhinos is reduced if their densities are either too high or too low. Sound biological management includes concentrating and/or combining populations where their densities and/or numbers are too low, and starting new populations in suitable habitats using animals from populations where the densities are too high.
- 7. Ex-situ conservation within the range countries is an important supplement to in-situ conservation efforts, especially in the case of the Sumatran rhino. Ex-situ populations should be based on a sufficient number of founder animals to ensure the genetic and demographic health of the populations. As far as possible, animals brought into captivity from the wild should be from sub-populations which have no or little long-term viability. Capturing of animals for ex-situ populations should not jeopardize the survival of a species in the wild.
- 8. To achieve the goal of a 3% annual increase in Asian rhino populations, the establishment of new populations within the former ranges will be essential for each species. This requires a long-term plan to identify suitable sites for new populations and to prepare such sites for future releases.
- 9. The successful conservation of each species depends on rigorous and effective monitoring of the numbers and trends in each Asian rhino population. Within each country, the results of monitoring should be shared with all those with involvement in the management of, and research on, the species in question so that the effects of conservation measures can be assessed, and new management measures taken, as needed, to address new emerging problems and threats. However, it is also important to maintain appropriate confidentiality on data on Asian rhinos to prevent it being used by those involved in illegal killing of animals.
- 10. Capacity building is an essential component of effective Asian rhino conservation. Each range states needs to have sufficient capacity in anti-poaching, law enforcement, invasive plant control, biological management of rhino populations, reintroductions and *ex-situ* management, including good husbandry, veterinary care and reproductive technologies. Exchange visits involving field conservation staff from the five Asian rhino range countries should be implemented to provide exposure to broader situations, build capacity and create incentives to improve management.
- 11. Close engagement with local communities living around rhino areas is essential in order to build support for rhino protection. This should include livelihood enhancement programs, compensation scheme, and education.
- 12. International cooperation is required for sharing expertise and information, for addressing illegal trade, for developing joint plans (both *in-situ* and *ex-situ*) for the species they share, for raising necessary funding, and for training and building capacity.

- 13. The implementation of these urgent measures to save the three species of Asian rhinos should be monitored closely and frequently, and plans should be adjusted in the light of changes in the status of the species, or to respond to changing threats, or to take account of new knowledge, in order to ensure that the conservation actions taken have the maximum likelihood of success.
- 14. Each species needs more specific actions if the Goal of an annual growth rate of 3% is to be met, and these actions are outlined below.

D. Specific Rhinoceros Conservation Needs

D1. Greater One-horned Rhinoceros

The Greater One-horned Rhinoceros is now distributed primarily in India and Nepal and its population ranges in between 3300-3350 as on end August 2013. The recovery of the Greater One Horned Rhino is one of the greatest conservation success stories in India and Nepal. Despite some serious threats, including civil war faced by India and Nepal in past few decades, both the countries have successfully managed to reduce the poaching pressure and grow rhino population numbers. It is the only Asian large mammal species in recent history whose IUCN Red List status has actually been down listed from Endangered to Vulnerable.

That only one rhino has been poached in the last 20 months in Nepal is a testament to the increased investments by the Government and enhanced coordination between law enforcement agencies in Nepal in the fight against rhino poaching. In India, law enforcement efforts have ensured that the rhino poaching remains below a level that can affect the population growth of rhinos. However laudable initiatives such as Indian Rhino Vision 2020, which has the aim is of establishing additional populations through translocations, are being threatened by increasing illegal demand for rhino horn. A recently established population of 18 rhinos in Manas National Park has already lost 5 rhinos to poaching.

In the Indian context, the responsibilities for protection and conservation of the Greater One-horned Rhino mainly lies with the State Governments, as the species is only found in three states of India. However the Wildlife (Protection) Act 1972, enacted by Government of India and adopted by States, includes the Greater One-horned Rhino in Schedule 1 which gives maximum protection to the species. As part of attempts to counter the lucrative, illegal wildlife trade, the Government of Assam has taken some landmark legal initiatives to protect rhinos in the state. The enactment of Wildlife (Protection) (Assam Amendment) Act 2009 provided a substantial increase in the punishment to the poachers. A first-time rhino poacher will now be convicted with 7 to 10 years imprisonment and a fine of up to Rs 50,000/. If the same person is convicted second time for poaching of rhinos, he/she will be punished with 10 years to life imprisonment and a fine of Rs 75,000/. Such offences have also been made cognizable and non-bailable through this act. Furthermore, the Government of Assam has given all forest officers the power to use firearms for the protection of forests and wildlife in the state under the provisions of Criminal Procedure Code 1973. Immunity

from prosecution without prior government sanction has also been granted to them in the case of use of firearms by them in course of discharging their duty. This has given a big morale boost to the forest staff engaged in rhino protection work. Workshops to sensitize judicial officers to these issues have also been organised in the state. There is strong political commitment at the highest level for conservation of rhinos in Assam.

In West Bengal, commitment from the highest political level for the conservation of wild animals and their habitat has resulted in effective rhino conservation. The addition of adjoining non-forest government land to the protected areas has expanded available rhino habitat. Whenever possible, this sort of intervention will help in the expansion of habitat. Active involvement of forest-fringe communities in rhino conservation through alternative income generating programmes, including ecotourism, has resulted in a better information-gathering network, and in enhanced protection to the animals. Speedy trial and prosecution of wildlife offenders (custody trial and conviction) is acting as a deterrent to rhino poaching.

With the above status, threats and conservation measures as context, the following actions are needed urgently:

- 1. Continue to increase the level of protection in the protected areas with rhino populations and in potential translocation sites to ensure that poaching does not threaten the growth of the population. This will require building more capacity in anti-poaching, especially as the number of populations increases.
- 2. Ensure the maintenance and restoration of habitats in corridors in order to enhance the connectivity between rhino populations through integrated landscape planning.
- 3. Set up a coordination body on rhino conservation in India (comprising of Chief Wildlife Wardens, protected area managers and relevant state police and other relevant enforcement agency officials of the States with rhino populations, representatives of the National Wildlife Crime Control Bureau, representatives of the Ministry of Environment and Forests and relevant NGOs and individuals involved in rhino conservation) so a national rhino conservation plan, including the combating rhino poaching and rhino horn trade, can be drafted and implemented as soon as possible.
- 4. As a matter of highest priority, increase the population to over 4,000 rhinos spread over three countries (India, Nepal and Bhutan) by 2020, as opposed to just over 3,300 in 2013, by building on the current successful recovery efforts and promoting an active population management strategy (mainly through translocations into new sites).
- 5. Urgently study the degradation of rhino habitats due to invasive alien species, and design and implement management interventions to recover prime rhino habitats in India, Nepal and Bhutan.
- 6. As a matter of urgency, set up a project through the relevant ministries in India and Nepal, under the aegis of the Environmental Crime Programme of Interpol, so that information on criminal suspects is shared without delay between rhino range states (in anticipation that known criminals who are still at large, and who have been active in South Africa, might refocus their attempts to acquire poached rhino horns in India and Nepal).

- 7. Ensure increased cooperation for management of transboundary Greater Onehorned Rhino populations in the Terai Arc (India and Nepal) and Manas (India and Bhutan) to ensure a minimum growth rate of 3% per annum of the rhino population.
- 8. Some local communities living in proximity to Greater One-horned Rhino populations suffer from stray animals that raid crops, and injure and even kill people. It is necessary to build support from such communities for the conservation of the species, and to ensure that significant benefits flow to these communities, including from sustainable livelihood programmes and tourism.

D2. Javan and Sumatran Rhinoceros joint needs

Because the future of the Javan and Sumatran Rhinos depends on actions taken in Indonesia, there are some actions that need to be taken at a higher level to benefit both species, as follows:

- Establish a high-level National Rhino Conservation Task Force of senior Indonesian government decision makers supported by an advisory body of national and international experts on rhino population and habitat management, which will make decisions on conservation management proposals in a timely manner and report each year to the President of Indonesia through the Minister of Forestry on the progress achieved in rhino conservation;
- 2. Appoint a full-time secretariat to support the Indonesian high-level National Rhino Conservation Task Force;
- 3. Allocate sufficient resources, including adequate staff numbers, to the National Parks to enforce protection of remaining rhino populations in Ujung Kulon, Bukit Barisan Selatan, Way Kambas and Gunung Leuser National Parks, Ulu Masen, and Samar Kilang Protection Forests;
- 4. Monitor all rhino protection efforts using appropriate tools such as the SMART law enforcement monitoring database to evaluate patrol effort, patrol coverage and patrol efficiency and share results confidentially with all those directly involved in the conservation of the species on a monthly basis;
- 5. Ensure regular, frequent and intensive monitoring of all rhino populations in Indonesia, involving collaboration between all those directly involved in the conservation of the species, in order to detect population trends, and to inform future conservation and management decisions;

D3. Javan Rhinoceros

Approximately 50 Javan Rhinos remain in Ujung Kulon National Park, Java's largest remaining lowland forest tract, and no more than 4-5 breeding females in the population. Javan Rhinos have been monitored over the past decade. The population is thought to be stable, but is the last population in the wild (there being no animals in captivity). The main threat to the Javan Rhino is that the reproducing population exists only in this one location,

which makes it susceptible to catastrophic losses from disease or natural disasters. The park sits just south of Anak Krakatau, which is an active volcano. The suitability of the habitat in Ujung Kulon for the Javan Rhino is deteriorating because of the spread on the invasive Arenga Palm (*Arenga obtusifolia*). The population is also believed to have reached its maximum possible level in the current habitat and probably cannot grow any larger without intervention. Because of this, a new project has been launched, the Javan Rhino Study and Conservation Area (JARHISCA), to expand the usable habitat available to Javan rhinos in Ujung Kulon Peninsula, which should allow the population to increase and lay the groundwork for eventual translocations to a second site within the species' historic range. Specific actions required for the Javan Rhino are, in addition to those listed in section D2 above, are:

- Agree, and implement a policy for the control the spread of Arenga Palm(using suitable methods) from the core of Ujung Kulon National Park to increase the park's Javan Rhino population carrying capacity;
- Continue developing the Javan Rhino Study and Conservation Area (JARHISCA) in Ujung Kulon National Park to maximise the breeding potential of the remaining animals;
- 3. Establish a second population in an appropriate site within Indonesia; and,
- 4. Permit the active management of wild rhino populations through the movement of animals within and between Ujung Kulon National Park and the second wild population.

D4.Sumatran Rhinoceros

From the 14 sites in Indonesia and Malaysia that recorded the presence of wild Sumatran rhinos in 1995, only five still had firm evidence of the species in 2012. In Indonesia, on the island of Sumatra, Sumatran rhinos are now restricted to Bukit Barisan Selatan (perhaps 30 animals), Gunung Leuser (perhaps 30 animals), and Way Kambas National Parks (perhaps as many as 35 animals). The initial decline was caused by poaching for horn for use in traditional Asian medicine. Now, the populations are primarily threatened by small population size, habitat encroachment, the potential for catastrophic events, and invasive plant species, as well as poaching. Indeed, experience in Malaysia suggests that once numbers of individuals of a solitary, slow-breeding species decline to a very low level, the various factors associated with very low numbers (narrow genetic base, locally skewed sex ratio, difficulty in finding a fertile mate, reproductive pathology associated with long non-reproductive periods) conspire to drive numbers even lower, to the extent that death rate eventually exceeds birth rate, even with adequate habitat and zero poaching. Wild populations may become "doomed" to extinction even with habitat and protection in place.

The 2013 estimate of Sumatran rhino numbers, based on surveys and density data, is now down to around 100 from an estimated 413-563 in 1995. A small population was lost from Kerinci Seblat National Park as recently as 2001; in Bukit Barisan Selatan, the range distribution has collapsed with the rhinos occupying no more than 30% of their former area. While the three remaining populations in Sumatra appear to be breeding, the rate of

reproduction is very low. Only the population in Way Kambas National Park appears to be slowly growing. In 1997, Rhino Protection Units (RPUs) were established in Bukit Barisan Selatan, Way Kambas, and Kerinci Seblat National Parks. RPUs are highly-trained, 4-person anti-poaching teams made up of one park guard with authority to carry a weapon and make arrests, and three highly-trained local community members. RPUs patrol key areas within the parks, monitoring wildlife and deactivating traps, apprehending poachers and intruders, and investigating crime scenes. No known poaching in Bukit Barisan or Way Kambas National Parks has occurred in the last 6 years, but it is clear now that anti-poaching efforts, though essential, are not going to be enough on their own to prevent the precipitous slide of the species toward extinction.

The Sumatran Rhino now needs intensive care. Its numbers in the wild are extremely low and individuals are scattered between several, small sub-populations across two range states. This situation, and the species' solitary nature and poor breeding record in captivity, all combine to make this a very challenging patient. Extinction is a very real prospect, and so urgent and decisive actions need to be taken immediately. A Sumatran Rhino Emergency Plan will be implemented in 2013-2015 to halt the decline, and to gather all necessary information so that a new Sumatran Rhino Recovery Plan can be developed and approved by the end of 2015, and implemented from 2016 onwards. The key points of the Sumatran Rhino Emergency Plan are summarized below (and are additional to the actions listed in D2 above):

Assumptions of the Emergency Plan

- 1. There must be available the fullest possible information on the species' biology, its habits, behaviour and interactions with its habitat,
- 2. The greatest threat for very small population is extinction through chance factors that operate on small numbers; thus, demographic aspects are more important than genetic or any other considerations; numbers must be increased in any ways possible,
- 3. It then follows that every single individual is valuable; each is a resource that can be used for certain purposes or techniques in the pursuit of increasing numbers.

Success Requirements for the Emergency Plan:

- High quality, standardised information is needed on the sex, age, location of every individual wild rhino, both through surveys at once and through continuing monitoring,
- 2. The governments of Indonesia and Malaysia are committed to preventing the species' extinction, and agree that all existing rhinos, whether in the wild, or under various confined conditions should be managed to maximize the rate of increase of the population,
- 3. Mechanisms to ensure decisive, high-energy conservation actions in range states are needed with further mechanisms for collaboration between ranges states and other governments and institutions,
- 4. The Emergency Plan should run up until the end of 2015, to be followed by a rolling Sumatran Rhino Recovery Plan.

Key Elements of the Emergency Plan:

- Critical information needs to be collected on wild rhinos in Sumatra and Kalimantan in order to provide a sound basis for all future management decisions. Building on ongoing efforts in Bukit Barisan Selatan National Park (BBS) and Way Kambas National Park (WK), the following precise and standardised, information is targeted for each population in BBS, WK and Gunung Leuser/Leuser Ecosystem (GL):
 - Location and size of areas occupied by rhinos
 - Size of rhino populations
 - Sex structure of each population
 - Age structure of each population
 - The relatedness amongst individuals of a population
 - Which females are proven breeders and which are not breeders in each population
- Protection of wild Sumatran Rhinos needs to be strengthened, with increasing the number of RPUs, and enhancing RPU training. A Sumatran Rhino protection needs assessment needs to be implemented at all known sites with rhinos (Sumatra and Kalimantan), leading to specification of required ranger density, equipment needs and patrolling effort and protocols. From this, budgets need to be determined and funding allocated.
- 3. Sumatran Rhinos that are isolated from others, and therefore cannot breed, need to be detected. All isolated animals found in Malaysia should be captured in order to contribute to the closely-managed breeding programme, and a policy should be developed urgently for the management of isolated animals in Indonesia so that they can contribute to the survival of the species.
- 4. An integrated strategy needs to be developed for the management of Sumatran Rhinos in contained or confined conditions, in order to increase the rate of breeding in all sites. As part of this, agreements need to be reached regarding the transfers of individual rhinos or reproductive materials between participating institutions, and assisted reproduction facilities and expertise will need to be established.
- 5. There will need to be infrastructure development for the management of Sumatran Rhinos in contained or confined conditions. To plan for this, a cost-benefit analysis (looking at costs in relation to the likely breeding success of animals) should be implemented to compare a single large enclosure versus a system of small linked paddocks.
- 6. Using the results from 1 (above), standard monitoring techniques and protocols should be developed to provide critical information on wild rhinos on an individual basis, with a standardized reporting format and schedule to be used across all rhino sites in all range states.
- 7. Formal agreements need to be developed as the means for inter-governmental collaboration in support of a unified Sumatran Rhino conservation effort.
- 8. Sumatran Rhino conservation interests should be incorporated into land use development plans, in collaboration with the relevant authorities .
- 9. The concept of Sumatran Rhino Intensive Management Zones (IMZ) should be developed for formal recognition and appropriate legal status, with restrictions on other land uses and activities harmful to rhino conservation. IMZs should be

- established in BBS, WK and GL with significantly enhanced enforcement efforts, including considering fencing the IMZs to maintain rhino densities.
- 10. Models for local community support for, and engagement with, Sumatran Rhino conservation efforts need to be developed. There should be a communication strategy that will engage local communities to seek their support for controversial but necessary actions to save the Sumatran Rhino from extinction, and so help prevent negative public opinion reactions from arising.
- 11. A comprehensive budget for the Emergency Plan should be developed, and funds allocated by the range states and national and international donors as required.

E. Concluding Commitment

The Governments of Bhutan, India, Indonesia, Malaysia and Nepal recognize the critical situation facing Asian Rhinos. The Sumatran Rhinoceros faces extinction unless decisive and urgent measures are taken, as outlined above. The Javan Rhinoceros could easily be wiped out in a single catastrophe. And the remarkable gains made in the conservation of the Greater One-horned Rhinoceros could easily be lost if current trends in the illicit trade in high-value wildlife products continue. These species are a remarkable cultural heritage to the people of Asia. As mentioned above, the Governments of Bhutan, India, Indonesia, Malaysia and Nepal have all agreed to the 2010-2020 Strategic Plan for Biodiversity, including Aichi Target 12 on preventing extinctions.

The Governments of Bhutan, India, Indonesia, Malaysia and Nepal therefore commit to giving a very high priority to implementing all the actions outlined in this Bandar Lampung Declaration, and to collaborate with each other and the international community in doing so, with the intention that by 2020 at the latest, the populations of all three Asian rhinoceros species will be growing by at least 3% annually.

Signatures

The five Asian Rhino Range States hereby commit to managing the populations of the Greater One-Horned, Javan and Sumatran Rhinos with the intention of achieving at least 3% annual growth rate in their populations, through the implementation of the actions outlined in this Bandar Lampung Declaration .

Ministry of Agriculture and Forest, Bhutan	
Signature	Date
Ministry of Environment and Forests, India	
Signature	Date
Ministry of Forestry, Indonesia	
Signature	Date
Ministry of Natural Resources and Environment, Malaysia	
Signature	Date
Ministry of Forest and Soil Conservation, Nepal	
Signature	Date