

**Workshop of Experts to Develop Criteria and Indicators for Monitoring Implementation of the
Global Tiger Recovery Programme (GTRP)
Hanoi, Vietnam, 2-4 August 2011**

Summary Report of the Proceedings¹

Day 1

Welcome/Opening Addresses

Mr. Do Quang Tung, Chair

Mr. Do Quang Tung, Deputy Director, Vietnam CITES Management Authority, Vietnam Forestry Administration, introduced the workshop and thanked delegates and participants from the 13 Tiger Range Countries (TRCs), the GTI and the GTF, and NGOs including WWF, WCS, IUCN, TRAFFIC, and FFI. (List of delegates and participants at Appendix 1.)

Dr. Ha Cong Tuan, Deputy Director General of the Vietnam Forest Administration, welcomed and thanked delegates and participants. He noted that in Vietnam the tiger is a priority species protected by law as it is in other TRCs but that in the last 50 years, tigers have declined in numbers and range due to forest reduction and hunting. He noted some recent efforts in Vietnam, including a new interagency committee on law enforcement and workshops to promote transboundary cooperation with its neighbors. He further commented that the TRCs are committed to cooperate in GTRP implementation and to implement their own NTRPs and this workshop is to exchange experience and criteria to monitor the GTRP and NTRPs. He also noted the importance of conservation to sustainable development and adaptation to climate change and that effective international cooperation to protect wild tigers is important. Declaring the workshop open, he offered warm thanks to the GTF Secretariat for organizing this workshop and expressed his hope that it will be successful and give wild tigers a better future.

Mr. S.P. Yadav, Deputy Inspector General of India's National Tiger Conservation Authority and acting on behalf of the Secretary General of the Global Tiger Forum, welcomed delegates and participants and explained that GTF is collaborating with GTI and TRCs to strengthen tiger conservation. He recalled that TRCs presented their "to-do lists" of priority activities for 2011 at the Delhi meeting in March. This workshop is to develop a framework for monitoring implementation of GTRP. He commented that the TRCs have demonstrated their commitment through development of their NTRPs, which all together form the GTRP. Now the priorities are finding resources from donors to implement the NTRPs and finalizing a monitoring framework. He noted that identification of donors and recasting NTRPs into a project mode is as important as getting consensus on a broad monitoring framework. Where donor funding exists in a TRC, the focus should be to channel funds to NTRP priorities. The GTF would like the entire process to be TRC driven while GTF serves as a facilitator through country-level focal points and core groups. Each GTF member TRC has been asked to form a national-level Core Group. He pointed out

¹ Complete presentations given at the workshop are available on the GTI website: www.globaltigerinitiative.org

that the ultimate assessment of the success of the GTRP will be the status of the tiger population at the global level. Robust, scientific monitoring methodologies already exist and are being employed at various scales and levels of intensity. TRCs need to determine the best methods to use given their unique conditions. He stated that the GTF can offer assistance to 1-2 TRCs, if they require it, to help in assessment of tigers, co-predators, prey, and status of habitat by providing experts and support from the Wildlife Institute of India. He concluded by thanking the Government of Vietnam for hosting the workshop, which GTF believes will be one more milestone in the tiger agenda.

Mr. Keshav Varma, GTI Program Director, World Bank, welcomed delegates and participants and thanked the Government of Vietnam for hosting the workshop and the Global Tiger Forum for organizing it with GTI support. He also acknowledged the scientists who came to advise and support the TRCs to build consensus on a monitoring framework. He noted that the workshop is about measuring progress toward the goal of the St. Petersburg Declaration: doubling the number of wild tigers by 2022. Also in the St. Petersburg Declaration, TRC governments committed to convene high-level meetings on a regular basis to review progress. The Government of Bangladesh has graciously offered to host the first such meeting, at a ministerial level, in Dhaka in late January. He briefly summarized the GTI/World Bank role: to be accountable to the TRC heads of governments for ensuring that the commitments of the Declaration are fulfilled. He then outlined the three kinds of monitoring to be considered in the workshop: program monitoring; scientific monitoring of tigers, prey, and habitat; and evaluation of protected areas management effectiveness.

Dr. Sejal Worah, Resource Person, WWF, provided a brief overview of the workshop objective and the three types of monitoring to be addressed. She noted that this was an historic meeting in that all 13 TRCs were represented at a *technical* meeting.

Dr. Andrey Kushlin, GTI Program Coordinator, outline how we got to this point, reminding the participants that monitoring was mandated in the St. Petersburg Declaration on Tiger Conservation and in the GTRP. He described the role of the GTF as providing technical inputs to the GTI Secretariat on two tracks: a common framework among the TRCs to monitor progress toward Tx2 and a monitoring and reporting system for GTRP implementation. Deliverables of the World Bank grant to the GTF on these two tracks are:

Track 1: Scientific Monitoring of TCLs

- Develop a network of monitoring experts
- Conduct a technical workshop on monitoring
- Draft first annual report in advance of the first annual stocktaking

Track 2: Monitoring and Reporting for GTRP Implementation

- Draft of monitoring and reporting manual
- First draft of annual GTRP report

Dr. Sejal Worah next outlined the expectations of the workshop outcomes, including:

- Each TRC will have a draft of an objective NTRP monitoring system.
- Regarding biological monitoring, what each TRC needs and how to get there will be determined along with an agreed process for developing/implementing appropriate methodology.
- An understanding of the approaches to evaluating effectiveness of PA management.
- The roles of regional/global partners roles in monitoring will be outlined.

Presentation of revised one-year objectives based on NTRPs and self-assessment outcomes from each TRC.

Dr. Andrey Kushlin, Chair

Each TRC presented its to-do list for 2011 and reported on progress up to August 1. These reports demonstrated that significant progress has been made in this very short time. It seems clear that the momentum and political will generated by the Summit has elevated the profile of tiger conservation and is carrying the TRCs forward very impressively. *The following is a sample of the progress reported (complete reports are on the GTI website):*

Bangladesh: 50% of Sundarbans revenue will now go to Community Development groups; small water channel (khal) survey/track survey in 2011 for tiger and prey abundance completed; increased capacity for stray tiger immobilization so they are not killed by local forest people; Tiger Day observed on July 29.

Bhutan: Bhutan Forest and Enforcement Database set up; Tiger Day observed on July 29; capacity building programs were conducted by IFAW/WTI in June and July.

Cambodia: CTAP to be published by December 2011; training on wildlife meat identification was conducted; there have been strategic patrols of the Eastern Plains priority landscape.

China: organized a workshop on monitoring and conservation for all subspecies of tigers in China; pilot implementation of MIST in GLNP in northeast China; the National Plan for Recovery Wild Tigers in China has been recognized by central government.

India: 12 new tiger reserves in pipeline; “e-Eye” in Corbett Tiger Reserve launched; studies on economic evaluations of Tiger Reserves approved; all corridors have been identified.

Indonesia: 2,277 households in 15,527 ha in BBSNP are being removed; pilot implementation of MIST in GLNP and BBSNP; encroachment mitigation taskforce for conservation areas set up.

Laos: Xe Pian NPA got US\$100,000 to support management activities; official launch of Lao WEN; completed REDD feasibility study in NEPL and Nam Pouy NPAs; started tiger monitoring in Nam Pouy with camera traps; New Ministry of Natural Resources and Environment set up

Malaysia: improved legislation; implementation of awareness program; Ministry to coordinate Central Forest Spine; increase patrolling and enforcement activities; state level participation.

Myanmar: ensured inviolate core in Hukaung by renewing declaration; attitude survey of local people conducted; program for village awareness of wildlife law begun; Htamanthi Nature Reserve has tigers.

Nepal: 3 local level transboundary meetings were held; there is an effort to improve coordination of army, police, etc. in wildlife law enforcement; new Prime Minister has committed more money to special tiger conservation program, reformation of organizational structure, promote research, formulate and implement anti-poaching and illegal trade strategy

Russia: Sredneussuriysky ecological corridor to connect Skihote-Alin and Wandashan is in process of approval; there is a regular exchange of results of monitoring tiger and ungulates between experts of Russia and China; 20 rangers have been added to strengthen anti-poaching brigades in Primorsky and Khabarovsk Regional Administrations and in federal protected areas.

Thailand: Regional Tiger Conservation and Research Center (RTC) at Huai Kha Khaeng Wildlife Sanctuary was established; National Tiger Committee was set up; Smart Patrol System has been extended to other PAs of WEFCON (i.e., Mae Wong+Khlung Lan NPs).

Vietnam: has finished survey of tiger habitat in 3 of 5 PAs and plan to finish by end of year; celebrated Tiger Day on July 29; Vietnam CITES Management Authority in collaboration with relevant agencies and TRAFFIC organized three transboundary workshops and MOUs were signed between Vietnam provinces and neighboring provinces of Lao PDR and Cambodia to improve wildlife trade control cross the border.

Process Monitoring Indicators and Plans

During this afternoon session, Sejal outlined the rationale for monitoring to assess progress, identify problems, and adapt strategies if that is necessary. Sejal, and all speakers on monitoring, stressed that monitoring is not about creating winners and losers, or punishing anyone for not reaching objectives—it's to inform and improve management and really learn from failure, not sweep it under the rug.

She then presented a framework for GTRP implementation monitoring in a matrix format of:

- Objectives—each TRC's 2011 Priority Activities;
- Indicators of progress toward completing the activities;
- Baseline—the current state;
- Role—who is responsible for the different activities and indicators; and
- A simple Green, Yellow, Red traffic light visual to show at a glance how things are going toward meeting the Objective.

Individual country groups and resource people then worked to fill in the table to the extent possible in the time available. Following the exercise, all agreed it was challenging as well as a very useful approach. TRC delegates agreed to continue the work with their colleagues back home and forward the completed exercise to the GTI and GTF Secretariats by the end of August. The Secretariats will then compile all of the TRC inputs, harmonize the terms used so they are consistent across TRCs, and take care of formatting details and the like before returning a draft to the TRC focal points for final inputs.

Day 2

Biological Monitoring

Most of Day 2 was devoted to Biological Monitoring of tigers, prey, and habitat.

Dr. John Seidensticker, Smithsonian Institution and GTI Advisor, opened the session by setting the historical context for biological monitoring of tigers and prey

Dr. Dale Miquelle, WCS Russia Program Director, presented an overview of the rationale, methods, possible outcomes, and other aspects of scientific monitoring. Key points are:

- Scale: monitoring is generally at source sites (usually PAs, where people work and do interventions) but landscape-scale monitoring must also be considered.
- Accountability requires effective monitoring; must be honest about successes and failures; agreed methodologies for comparability; scientific rigor; transparency; peer-review; adequate survey design
- Objective: determine abundance of tigers and prey, as well as survival and recruitment at source sites
- Tools for tiger monitoring: capture-recapture (camera traps, DNA) on a yearly basis
- Even at very low densities, as in the Russian Far East, capture-recapture can be used if you really know the ecology of the tiger.
- Minimum count might be appropriate if capture-recapture won't work, but it is important to use only one method (DNA, photos, sign)--although all of the data collected should be kept.
- Methods to determine abundance of prey/prey density: line sampling; occupancy, encounter rates; this should be done annually.
- To survey larger landscapes use occupancy modeling of detection/non-detection of tiger sign; landscape surveys should be conducted every 3-5 years; data are valuable for management (identifying corridors, etc) too.
- Must do it right! Get help from experienced specialists if necessary.
- Law Enforcement Monitoring to improve onsite planning and performance.
- WCS and USGS are preparing a guide book on biological monitoring protocols, specifically in the GTI process context, to be available by the end of 2011. Site-specific workshops to address each unique situation will be offered.
- Patience and perseverance essential. Tiger population growth may be rapid at first if numbers are very low, then growth will slow—it will take at least about 12 years to double based on tiger demography.
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Dr. Pete Cutter, WWF Thailand, discussed defining targets for monitoring. Key points:

- Monitoring is not for numbers alone, it is for improving management and action or validating that you're doing it right.

- Monitoring at different scales answers different management questions. Monitoring in source sites and PAs is to answer how many tigers, prey density, carrying capacity, other carnivores, and spatial patterns/priorities for intervention. In corridors, it identifies barriers and fragmentation. In the matrix, it looks at sustainable practices and human-tiger conflict. At the landscape level, it looks at connectivity and metapopulation structure.
- Different methods of monitoring answer different questions and are appropriate to apply at the different scales noted above.

In discussion, a need for master planning of TCLs was brought up to address the challenge of PA managers bringing in all the sectors, noting that there are too many infrastructure surprises. Also noted was a need for monitoring the state of the habitat, for which baseline data are needed in all TCLs.

Mr. S.P. Yadav discussed the monitoring program in India, noting that monitoring was about “Keeping the pulse of the ecosystem.” He outlined the methods and results of the 2010 All-India Estimation of Tigers, Co-predators, and Prey and Status of Habitat. Overall results: tiger numbers increased over 2006 estimation but occupied habitat declined by about 12%.

Four **case studies** of scientific monitoring in different habitat types and under different conditions were presented to give a sense of how diverse challenges can be addressed.

- Bhutan case study, presented by Mr. Lhendup Tharchen, Coordinator, Tiger and Carnivore Conservation, Wildlife Conservation Division.
- Sumatra case study presented by Mr. Hariyo Wibisono (Beebak), Tiger Conservation Coordinator, WCS Indonesia Program.
- Thailand case study, presented by Mr. Ronasit Maneesai, Forestry Technical Officer, Department of Parks, Wildlife and Plant Conservation.
- Russia case study presented by Dr. Sergey Naidenco, Leading Scientific Researcher, A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences.

With all of this background, TRC country groups worked to fill in a matrix charting their current biological monitoring activities and methods, their future plans—the kinds of monitoring they would like to implement in the future, and their needs in terms of money, training, and technical support for biological monitoring of tigers and prey, and law enforcement monitoring. It was later agreed that the completed matrices would be returned to the Secretariats on same schedule as the program monitoring matrices.

PA Management Effectiveness Evaluation

Mr. Mike Balzer, Chair, outlined various systems currently employed to evaluate management effectiveness in protected areas including:

- WCPA Management Effectiveness
- World Bank/WWF Management Effectiveness Tracking Tool

- World Heritage Sites
- ISO Standards

[NOTE: See <http://www.wdpa.org/me/tools.aspx> for links to information on these and other tools for evaluating protected area management effectiveness.]

S.P. Yadav presented on Management Effectiveness Evaluation (MEE) of Tiger Reserves in India. The most recent report is available at http://www.projecttiger.nic.in/whtsnew/mee_tiger_2011.pdf. Key points:

- PAs cover 10% of land area and are increasing. Given this set aside from economic development, we must be accountable to stakeholders and demonstrate good management.
- Evaluation is a tool to assist managers not a tool for punishment.
- WCPA-MEE Framework: Context, Planning, Inputs, Process, Outputs, Outcome, with 30 headline indicators, and each large category is weighted in its contribution to the total score.
- MEE is basically a SWAT analysis + immediate action points.
- GTF will provide technical support to any TRC that wants to implement MEE.

Mike Balzer presented a concept that WWF is developing for a tiger PA certification program or “gold standard” and is looking for input from the TRCs on whether they would be interested in helping to further develop the program. Currently called PACE – T Protected Area Certificate of Effectiveness (ideas for a better name were requested), it would define a global network of outstanding PAs for tigers with certification as a motivation for effective management. Proposed next steps are to:

- Design standards.
- Establish verification bodies.
- Trial in selected parks.
- Gain first 20 PACE-T certified parks.
- Gain endorsement by GTF.

In discussion, it was proposed that accreditation might be a better descriptor than certification. There was also a question about whether the program aspired to a setting a very high gold standard or to encouraging PAs to achieve minimum standards. This issue is to be resolved.

Day 3

Role of Partners

Partners can provide support in three areas:

- Help with finishing the implementation monitoring plan.
- Help with resource mobilization: either help TRCs to raise money (eg proposal writing) or to give money directly.

- Help with biological monitoring.
- Help with discussing the gold standard.

The TRCs then filled in a matrix indicating what partners might be involved in whatever areas they need help in.

Each partner in attendance then briefly outlined what support it could offer.

- **WWF** can provide support for all monitoring activities in the 11 countries and 12 landscapes it works in as well as support resource mobilization.
- **GTF** can facilitate and provide technical experts for tiger and prey estimation and provide technical support and experts for management effectiveness evaluation.
- **WCS's** work is site-based, in areas of high impact, with sites in 10 of 13 TRCs. It will collaborate with anyone interested to produce the guide to biological monitoring. It can provide a technical team to help design and implement monitoring systems, and is developing the SMART software for Law Enforcement Monitoring.
- **GTI** is working to raise resources for the monitoring Global Support Program through a developing Multi-donor Trust Fund and may be able to provide seed funding to trigger early monitoring efforts. It is also planning to bring donors together to fund NTRPs.
- **Smithsonian** is offering a capacity building program, now directed by Mahendra Shrestha, who will be in touch with each TRC focal point to prioritize their capacity building needs. Three training sessions are planned, the first in Nepal later this year.

Wrap Up

Action Steps

- **TRCs** to complete the matrices on Program Monitoring and Biological Monitoring and return them to the GTI and GTF Secretariats by the end of August or sooner if possible.
- **Partners** will get back to TRCs with more information about management effectiveness evaluation options and can advise on how to select a method.

New Issues

- A meeting on Law Enforcement Monitoring in the next few months was agreed to be important
- **Andrew Zacharenka** reported on the pilot of a State of Habitat Report .
- The need to develop 2012 priority activities plan before the end of the year was discussed.

Closing Comments

Keshav Varma congratulated the TRCs on their evident commitment and hard work. Now partners need to work quickly to offer coordinated support. It is important to go to Dhaka with heads held high to impress the ministers and the international community. On Smithsonian capacity building, he noted that

TRCs must make sure it's aligned with their needs. The goal of the proposed State of Habitat Report is to provide authentic, honest to inform governments, especially for cross-sectoral engagement. On illegal trade and poaching, there is a need to know trends based on good data. He hopes to have some resources via the MDTF by the Dhaka meeting and encouraged donor meetings at the country level, to be chaired by World Bank country directors where possible. Finally he reiterated that the impact of conferences must be on the ground at the front lines.

Andrey Kushlin reported on the training to be provided by ICCWC.

S.P. Yadav thanked Vietnam for hosting the workshop and also thanked the focal points of GTF and GTI, all TRC delegates, and the resource people.

Mr. Do Quang Tung thanked all participants, especially all 13 TRC delegates and said he was looking forward to future cooperation.

S.P. Yadav closed the workshop.

Day 1 Tuesday

We heard opening remarks from our gracious host the Government of Vietnam, and from the GTI and the GTF – all stressed the importance of monitoring program implementation, biological monitoring, and management effectiveness to advance tiger conservation. This is one of the commitments of the St. Petersburg Declaration. Now the task is for TRCs to come to consensus on criteria, indicators, and methodologies for these different monitoring processes, in preparation for the first stocktaking at the ministerial level in early 2012 in Dhaka. SP stressed that the process must be country-driven just as the GTRP process was. But GTF, as well as GTI, are ready to help as needed.

After this introductory session, we went into workshop mode. Segal pointed out that this was a first—all 13 TRCs represented at a technical workshop.

Each TRC presented revised one-year objectives based on their NTRPs and reported on progress so far this year, up through August 1. I think everyone will agree that there has been significant progress in this short time. It seems clear that the momentum and political will generated by the Summit has elevated the profile of tiger conservation and is carrying the TRCs forward very impressively.

During the afternoon session, Sejal outlined the rationale for monitoring to assess progress, identify problems, and adapt strategies if that is necessary. Sejal, and all speakers on monitoring, stressed that monitoring is not about creating winners and losers, or punishing anyone for not reaching objectives—it's to inform and improve management and really learn from failure, not sweep it under the rug.

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simple Green, Yellow, Red traffic light visual to show at a glance how things are going toward meeting the Objective.

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That closed the first day.

Most of Day 2 was devoted to Biological Monitoring of tigers, prey, and habitat.

John Seidensticker opened the session by setting the historical context for biological monitoring of tigers and prey

Dale Miquelle presented an overview of the rationale, methods, possible outcomes, and other aspects of scientific biological monitoring. His most critical point was that biological monitoring must be done right and that experienced specialists are available to help where help is needed.

Pete Cutter then talked about the targets for biological monitoring and the different scales that must be addressed from

- PAs and sensitive ecological sites, source sites
- Corridors that connect the PAs
- Rest of the matrix – land-use issues, planning, sustainable agriculture, wide range of issues

SP Yadav – Monitoring in India: “Keeping the pulse of the ecosystem”

SP outlined the methods and results of the 2010 All-India Estimation of Tigers, Co-predators, and Prey and Status of Habitat. This most comprehensive work is an example or model for other TRCs but every TRC is unique so next four case studies of scientific monitoring in different habitat types and under different conditions were presented to give a sense of how diverse challenges can be addressed.

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With all of this background, TRC country groups worked to fill in a matrix charting their current biological monitoring activities and methods, their future plans—the kinds of monitoring they would like to implement in the future, and their needs in terms of money, training, and technical support for biological monitoring of tigers and prey, and law enforcement monitoring. This morning it was agreed that the completed matrices would be returned to the Secretariats on same schedule as the program monitoring matrices.

Then we moved to a short session on Protected Area management effective evaluation. SP gave a comprehensive overview of India MEE program that could possibly be adapted and adopted for PAs in other TRCs.

Mike Balzer presented a concept that WWF is developing for a tiger PA certification program or gold standard and is looking for input from the TRCs on whether they would be interested in helping to further develop the program.

The action step on management effectiveness is that partners will get back to TRCs with more information about management effectiveness evaluation options and can advise on how to select a method.

Day 3, this morning partners – WWF, WCS, GTI, GTF, SI – talked about the support through training, technical assistance, or resources they can offer TRCs for monitoring and TRCs filled out a matrix indicating what partners might be involved in whatever areas they need help.

Next, we discussed next steps and schedules, which I've already mentioned, for completing the tasks – basically the end of August for matrices on biological and program monitoring

Finally, a few new issues were raised:

- Meeting on Law Enforcement Monitoring in the next few months was agreed to be important

- Resources needed; plans are in place

- State of Habitat Report pilot – Andrew

- Pete – begin to line up 2012 priority activities plan

I will prepare a summary report on the workshop and email it to everyone by about August 15, and all of the complete presentations will be posted in the GTI website as soon as possible so TRCs can refer to the materials as they finalized their monitoring plans by the end of August.

Observations:

Thailand : send tables in advance so TRCs can prepare

Pete: TRC teams can work together and delegate represents them at the meeting; this encourages participation

Closing Comments

KV: Commitment, hard work of TRCs

Partners need to work quickly to offer coordinated support

Dakha: go with heads high and impress the ministers and the international community

Training, SI, Mahendra --TRCs must make sure it's aligned with their needs

State of Habitat Report—authentic, honest to inform government, esp. for cross-sectoral engagement

Illegal trade and poaching – need to know trends based on good data

Hope to have some resources by Dakha via MDTF

Donor meetings at country level, chaired by WB country directors where possible

Impact of conferences must be on the ground at the front lines

Andrey talked about ICCWC training

Dale: WCS is there to help, with perhaps more vigour and money than in the past

Mike B: same sentiment

Pete: funding proposals: donors like transparent and genuine collaboration between ngos and governments and good monitoring

SP: thanks host and focal points of GTF and GTI, and all TRCs, resource people, Mr. Lam

Mr. Thung, host, thanks all participants, esp. all 13 came so they must love VN; looking forward to future cooperation

SP closed the workshop.

