CHAPTER

# 13

# Save The Tiger Fund's Grant-making Strategy for Recovering Wild Tiger Populations

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OUTLINE



## THE DONOR'S CHALLENGE

Making effective investments through grantees in order to sustain and recover wild tiger populations from the vantage point of an organization based in Washington DC (USA) is a high risk endeavor for at least two reasons: (1) grantees may fail to produce the *outputs* or *deliverables* promised; and (2) even if the outputs are generated as promised, grantees may

fail to produce the desired *outcome*—securing a future for wild tiger populations across their range. In this chapter, we define these risks and outline the steps we at the Save The Tiger Fund (STF) have taken to manage these risks.

## BOX 13.1

## HISTORY OF SAVE THE TIGER FUND

The Save The Tiger Fund (STF) was established in 1995 as a partnership between the ExxonMobil Foundation and the National Fish and Wildlife Foundation in response to calls from tiger conservationists who claimed that without immediate action and funding the tiger would be extinct in the wild by the year 2000. At that time, ExxonMobil (then the Exxon Corporation) had been using the tiger extensively in its marketing campaigns and felt a corporate responsibility to ensure that tigers did not become extinct. While the tiger is no longer the official ExxonMobil logo, the company continues to contribute over US$1 million annually to STF. Combined with donations from individuals, other foundations such as the Critical Ecosystem Partnership Fund, and court-ordered restitution resulting from federal prosecutions for illegal tiger trafficking, these funds have enabled STF to deliver US$15 million to nearly 300 on-the-ground tiger conservation projects between 1995 and 2006 (Table 1). This funding represents about one-fourth of all philanthropic funds spent on tiger conservation globally [1], and ExxonMobil's contribution to tiger conservation is the largest single corporate commitment to saving a species. Clearly, funding is a major limiting factor for tiger conservation. This makes the task of decision-making to guide resource allocation a critical conservation action with enormous responsibility for donors because nothing less than the future of one of the world's most charismatic and culturally significant animals is at stake.

**TABLE 1** STF investments by country, 1995–2006

| Country | Amount (US$) | Number of grants |
|---|---|---|
| Russia | 3,403,553 | 68 |
| International | 3,068,712 | 35 |
| India | 1,910,554 | 65 |
| Sumatra | 1,808,330 | 29 |
| Nepal | 1,333,432 | 25 |
| China | 820,266 | 17 |
| Cambodia | 749,480 | 15 |
| Thailand | 657,413 | 16 |
| Malaysia | 503,548 | 9 |
| Bhutan | 293,785 | 6 |
| Myanmar | 248,265 | 5 |
| Lao PDR | 125,000 | 3 |
| Bangladesh | 111,000 | 3 |
| Vietnam | 49,000 | 2 |
| **Total** | **15,082,338** | **298** |

We believe that to secure a future for wild tigers it will be important to conserve representative viable tiger populations within distinct bioregions, ecoregions, and habitat types across Asia that ensure that the 'tigerness' of Asian landscapes is maintained. We further believe it is important not to let tiger populations dwindle to the point of 'ecological extinction,' where their numbers are so few they can no longer function as the top predators in their ecosystems, a view shared by many tiger conservation practitioners.

What actually needs to be done to secure a future for wild tigers, and how donors should best invest in the most cost-effective conservation actions to achieve this goal, is less clear and is debated among tiger conservationists. In reality, our long-term goal—securing a future for wild tigers—is beyond what grant managers identify as the 'line of control' of actual deliverables and activities that donors directly influence to achieve desired outcomes. For example, grantees carry out a number of conservation actions such as anti-poaching or education activities that were originally promised in the proposal, leading to various outputs like a number of people educated or increased patrol-hours. The grantees may perform these activities well, meeting their output targets, or they may fail to do what they originally promised. We term this 'output risk.' A second form of risk is that the deliverables and outputs from our investment may not actually contribute significantly to the desired *outcome*—securing the future of viable populations of wild tigers across their range. We term this 'outcome risk.' A major challenge we face as a donor with limited resources is selecting grantees that can produce outputs that will lead to this successful outcome.

## SOME BACKGROUND

It was only in 1969 when wild tigers were first recognized internationally as a species threatened with extinction [2]. Before that momentous shift in our thinking, wild tigers were symbols of an endless frontier mentality, mostly to be feared and killed. We now know that the tiger is a conservation-reliant [3] landscape species [4] and always will be. Protected areas alone are rarely large enough to ensure the conservation of genetically secure tiger populations that are resilient to disturbance events [5]. Sustaining wild tiger populations therefore requires large blocks of habitat with adequate core protected areas, free of human disturbance that are connected together in large Tiger Conservation Landscapes (TCLs) with adequate prey and the support of local human residents throughout (see Chapter 9). After 40 years of effort, our best science shows that the tiger is in crisis: wild tigers now occupy less than 7% of their historic range, and they occupy 40% less habitat than they did a decade ago [6].

Saving wild tigers is not a tame problem [7] that can be addressed with just more money to do the same things. The tiger's ecological needs—food, water, abundant ungulate prey, connected landscapes—remain about the same in the various landscapes where they live, but the landscape mosaics and conditions and socio-economic and political climates are always in flux and changing. Consequently, the ecological and political criteria required to keep wild tigers also change. For example, there are about twice the number of people in the tiger's geographical range that there were 40 years ago when the tiger was first declared endangered [8]. India, China, and many of the tiger range countries have rapidly expanding

economies, creating demand for natural resources and unprecedented pressure on remaining tiger habitats. China has essentially lost its wild tigers but individual disposable incomes in China have lead to increased demand for wildlife products, often smuggled into China illegally from neighboring countries. The political governance structures in all the tiger countries are in great flux. The legal and governmental structures and institutions that have served tiger conservation in various degrees of efficacy are now more than 30 years old in some places and are fraying or just are not effective any longer [9]. These need to be adjusted and modernized in each tiger range country to match present circumstances to retain effectiveness. Saving wild tigers would be termed a 'wicked problem' in planning theory fields [7] because of the complex nature of the social, political and biological landscapes where tigers live and the huge potential for unintended consequences resulting from our conservation actions.

For all its power—physical and metaphysical—the tiger is extremely vulnerable to changes that are occurring through its occupied range. Tigers are very productive when reproducing females are protected and there are adequate populations of large deer, wild pigs, and wild cattle for them to eat. However, we have identified three behavioral threats that create a low resilience to changing conditions:

1. Tigers are not strong dispersers through the 'filters' of most human-dominated landscapes and tigers all live in human-dominated landscapes [10].
2. Tigers are very susceptible to the ecological traps created by road constructions in their habitats. Tigers are drawn to these roadways because of the long sight-lines and the secondary succession grasses and herbs that grow on road-sides attract ungulate prey. Poachers driving these roads using spot-lights and high-powered rifles equipped with scopes can easily detect and kill tigers [11].
3. Tigers need lots of prey [12]—at least one large ungulate a week—but prey populations in most Asian forested areas have depleted prey bases because of poaching.

## CONCEPTUALIZING TIGER CONSERVATION ACTIONS

How can we provide the means to conserve the ecosystems upon which tiger populations depend? At first many thought the solution was to contain poaching and to establish some people-free special reserves over a small percentage of the tiger's potential range. We have subsequently learned that tigers are a conservation-reliant species [3] requiring very extensive areas and the complex threats to their existence will never be ameliorated. Given the mounting threats to wild tiger populations and the pervasive influence of human activity in tiger landscapes, it is unlikely that we will ever reach a point where any wild population could be considered recovered with reasonable certainty and no longer in need of continued, specialized directed conservation effort. Continued interventions are needed to:

- maintain established protected areas and establish new ones;
- maintain and re-establish connections in landscapes to support and sustain the populations living in the 76 priority tiger conservation landscapes [6];
- maintain habitat quality and optimize prey densities;
- mitigate human–tiger conflict;

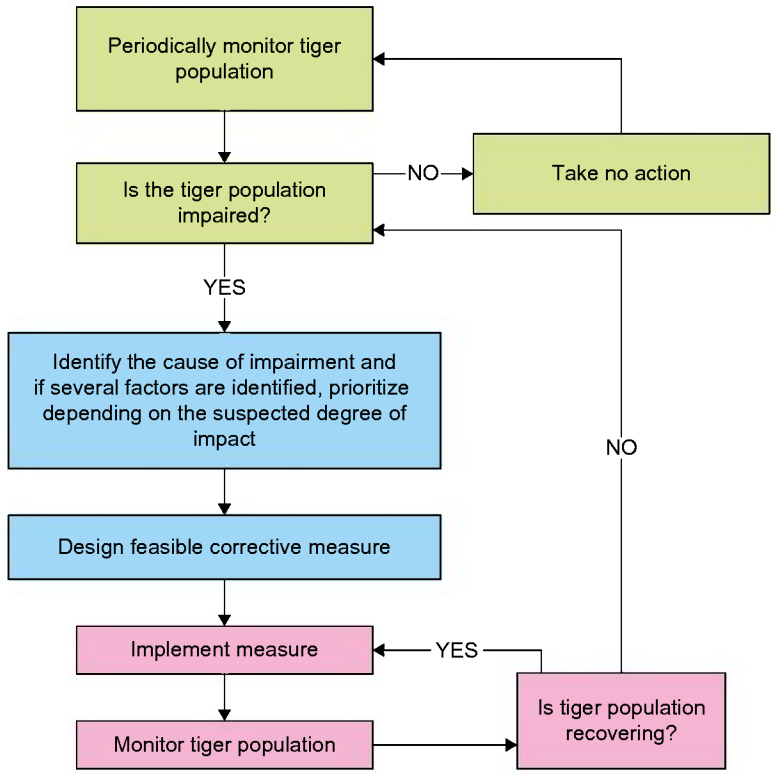


**FIGURE 13.1** A simplified adaptive management framework for tiger conservation that iteratively leads to improved conservation targets and allows for opportunities to learn from mistakes and take corrective action.

- create incentives for those who live in tiger conservation landscapes to value live tigers more than dead tigers;
- prevent the poaching of tigers;
- eliminate market-driven demands for tiger parts and products;
- secure the human, financial, and political backing to sustain tiger conservation efforts in the long term.

This work must be accomplished in an adaptive framework with multiple stakeholders and partners that are working from a shared vision. It is unlikely that we will ever be able to experimentally evaluate the influence of any single conservation action relative to control groups and determine how many tigers we saved given the complexity of tiger landscapes, the scales at which we work, and the potential confounding factors. Fortunately, adaptive management frameworks (Fig. 13.1) allow us to side-step this problem and implement conservation actions while learning by doing. This may seem intuitive to most conservationists with a science background, but in practice it is much easier said than done. Monitoring conservation targets precisely enough to yield useful data can incur substantial costs on overstretched resources and requires time, forethought, and discipline.

## MANAGING OUTCOME RISKS AND MONITORING TIGER CONSERVATION ACTIONS

Given that tigers are and will always be conservation-reliant species, as donors we have at least four tools at our call to manage outcome risks.

First, STF supports projects that continue to generate new knowledge to better understand the ecology of tigers, the landscapes where they live or could live, and the threats they face. The conservation of wild tigers rests upon answering two similar biological questions: 1) What controls tiger populations? and 2) What affects the probability of their persistence? The first question concerns the tiger's ecology and behavior while the second mixes ecological and human factors. We need to know enough about the tiger's ecological needs to be able to conserve them and to resolve the conflicts they face with people. Following on the *Tigers of the World*, first edition [13], STF hosted the Tigers 2000 Symposium and subsequently published *Riding the Tiger: Tiger Conservation in Human-Dominated Landscapes* to synthesize our knowledge of tiger conservation globally [4]. In addition, we have made the peer-reviewed papers and theses on tiger ecology and conservation supported in whole and in part by STF available electronically at www.savethetigerfund.org (where we have been able to secure permission from the original publisher). Using the neutral convening power of STF we provide a web-based platform for real-time information sharing so that we can learn from the solutions and methods that others have devised to tackle fundamentally similar problems and reduce the likelihood of continually 're-inventing the wheel.' We realize that to date we have been less successful in understanding the forces that generate threats, especially those driving illegal markets for tiger parts and products, and we are now taking steps to fill this gap.

Second, STF supports wild tiger monitoring programs. The statistical procedure to non-invasively and transparently monitor tiger range occupancy and population numbers of both tigers and prey have become greatly enhanced and much more accessible in the past decade [5, 14, 15]. Probably the best examples of STF support are the long–term tiger trend surveys over the past decade [16] and the decadal Russian Far East survey [17]. These monitoring efforts are unprecedented in the annals of tiger conservation. Recognizing that earlier tiger monitoring efforts were science-deficient [18], India's Project Tiger has initiated a country-wide process of estimating tiger range occupancy and estimating tiger numbers in key source populations that is to be transparent and statistically defensible [19]. The Tiger Conservation Landscapes and the process to identify and produce the prioritization (see Sanderson et al., Chapter 9) was specifically designed to be an on-going monitoring process and is maintained on line at www.savethetigerfund.org/tigermaps. We know that tiger distribution changes readily in response to protection, prey, and habitat changes over time, thus we are constantly collecting updated distribution records from field biologists and the public through our website, having learned from the successful pioneering use of the internet by the bird watching community to gather global bird distribution records.

The third tool we use to assist in managing outcomes is by supporting locally generated tiger action plans with periodic conferences to facilitate discussion with leading conservation experts on adjustments that need to be made to address emerging changes and threats. The Amur tiger program is a model of how other tiger landscapes could proceed. Russia has a *Strategy for the Conservation of the Amur Tiger in Russia* that was first published in 1996 and has

been continually refined [20]. STF was pleased to support and participate in the *International Conference on Conservation of the Amur Tiger* held in Khabarovsk in 2003 where experts from the around the world joined with Russian experts to provide an updated vision of the future [21]. Save The Tiger Fund has joined in, or financially supported, similar tiger conservation action planning in Bhutan [22], Malaysia [23], Nepal [24], Myanmar [25], and Thailand [26].

The fourth way that STF manages outcome risks is by supporting local conservation leaders and strong partnerships. Over time, through site visits, grant solicitations and grant reviews, the people who are really driving the process of saving wild tigers at the landscape scale become apparent. We have to replace ourselves. One of our most important goals as a donor is to identify, nurture, and mentor the next generations of conservation scientists and conservation practitioners and give them the support they need to do the job.

At STF, we listen to local voices as they express their concerns and visions for the future of wild tigers. We frame our view on how we are doing by listening to these voices, monitoring results, and improving our understanding of the tiger's needs and responses to threats. In short, we manage risk of outcome failure by continually updating our vision and outlook. Our institutional challenge is to nurture the capacity to identify, adapt, and address changing needs with our investment. We want to be assured that our grant-making is pragmatic and grounded by the realities and difficulties of working in the field, but we always challenge our grantees to perform at higher levels, even if that is beyond their immediate comfort-zone.

## EVALUATING AND MANAGING RISKS

STF has several administrative mechanisms to promote the desired outcomes from our grantees. The first step is a request for proposals that communicates what we would like to accomplish in the grant cycle and to ensure that those priorities are informed by the best science available. Once a portfolio of promising proposals has been received that address these priorities, the proposals are sent to anonymous peer-reviewers. If the projects we fund have buy-in from some of the world's best conservation thinkers, we can reduce the 'outcome risk' of funding projects that will not benefit wild tiger populations. A second quality-control step is a review and discussion of the grants by STF Council, a group of eminent conservationists, business people, and government representatives from tiger-range countries. STF staff then work with grantees and provide the oversight needed to minimize 'output risk' by communicating regularly with grantees, carrying out occasional site visits, and by ensuring that the funds are used diligently and responsibly to deliver the outputs as originally promised.

With a large and complex portfolio that spans more than a decade and 300 grants, the individual stories and collective actions of our grantees become exceedingly complex, with many success stories, failures, and lessons learned. From an institutional perspective, these are very difficult to distill into a meaningful narrative. As a result, STF performed an internal implementation evaluation to quantitatively assess whether grantees were actually delivering the outputs they promised in their proposal and to synthesize the collective lessons learned for wider dissemination [27, 28]. Overall, grantees' outputs exceeded their original objectives (Fig. 13.2), but many confounding variables made it difficult to determine the ecological outcomes of grantees' conservation actions. Furthermore, it was difficult to scale up any

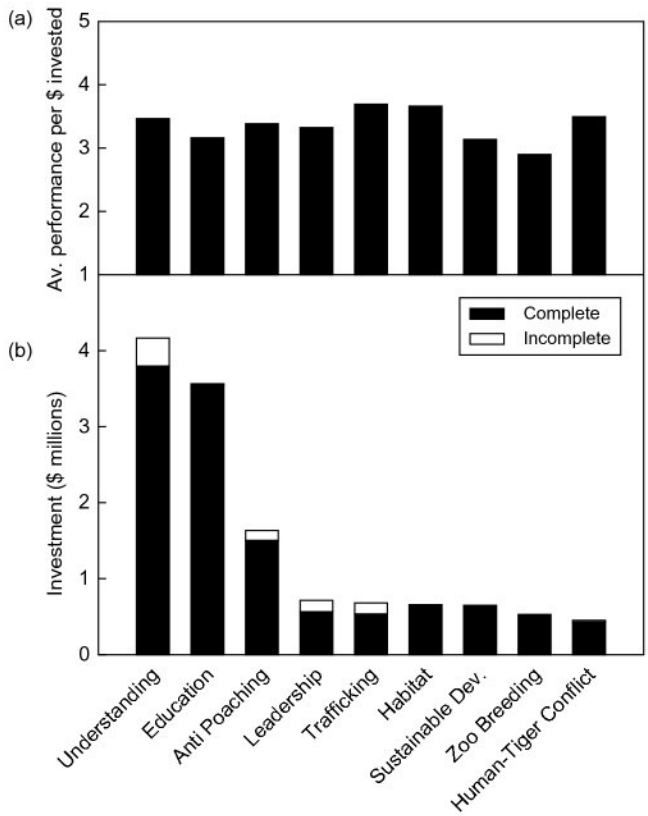


**FIGURE 13.2** The breakdown of $12.6 million STF investments between 1995 and 2004; (a) by the average performance of each dollar invested in each activity on a scale from 1–5 where: 1 = unsatisfactory, 2 = less than satisfactory, 3 = satisfactory, 4 = very satisfactory, 5 = exceeded expectations, and (b) by activity type where: *Understanding*—monitoring and research on tigers, prey, and their habitats, dissemination of findings, and building local research and monitoring capacity. *Education*—building schools, developing teaching capacity, developing conservation curricula in schools, and outreaching to the general public using awareness materials, events, and the media. *Anti-poaching*—monitoring poaching incidents, outreaching to hunters, and enforcement activities, and increasing anti-poaching capacity of reserve staff through training and provision of equipment. *Sustainable development*—improving human well-being through development of alternative livelihoods, community health programs, resettlement assistance, alternative energy sources, and formation of village resource committees. *Habitat*—acquiring, restoring, and consolidating tiger habitats for conservation. *Leadership*—grooming future generations of tiger conservation leaders through specific leadership training programs or post-graduate degree courses. *Trafficking*—increasing capacity of enforcement officials and customs agents, monitoring trade, conducting enforcement activities, and targeting education of consumer groups. *Zoo Breeding*—improving breeding facilities or management of tiger subspecies held in zoos. *Human–tiger conflict*—providing human–tiger conflict response units, monitoring human–tiger conflict, conducting outreach and compensation schemes in tiger landscapes.

quantitative meta-analysis of outputs because the methods and indicators that grantees used to quantify their success were often different, even if they were tackling the same problems.

The variation in grantees' performance was considerable, ranging from projects that simply failed to deliver on what they had proposed, to those that exceeded expectations (Fig. 13.3). However, when comparing the spread of performance by grantee with performance by dollars

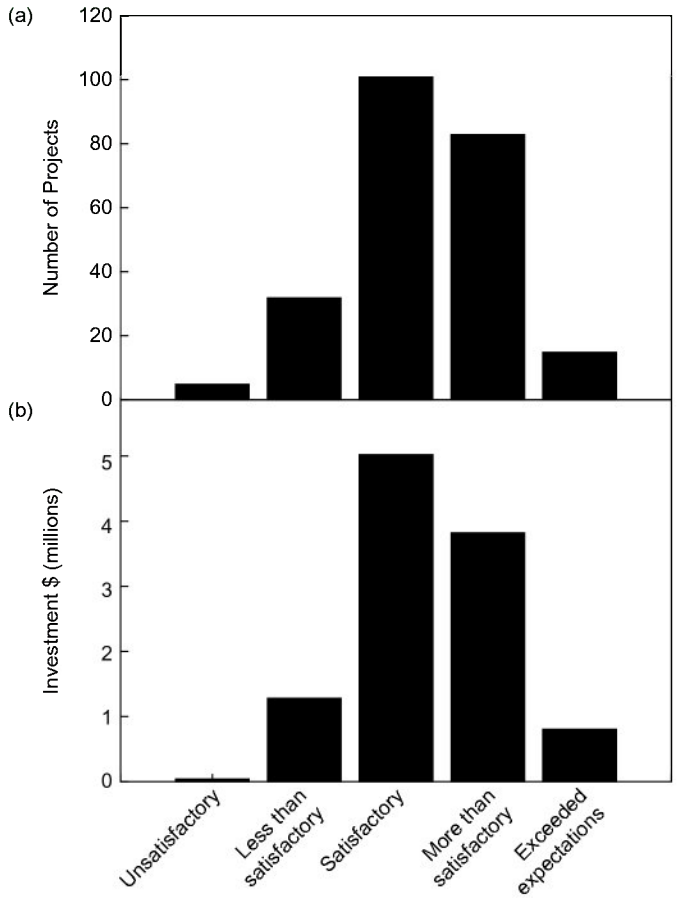


**FIGURE 13.3** Variation in performance of STF investments by project (a) and by $ invested (b). Performance was determined by comparing the promises made in the original proposals with what grantees claim to have delivered in their final reports.

invested, it was evident that we invested below average dollar amounts in the riskier groups (Fig. 13.3). This is important, because we welcome small, local groups that have good ideas and unproven track records, but we invest in them cautiously. If the group shows that they can deliver good results using promising conservation models then we help them to scale up and build capacity in follow-up grants. One of several examples is the Phoenix Fund in Russia. STF provided start-up funding for this local organization in 1998 and today, it is an internationally recognized group that has won several prizes for conservation, including the Whitley conservation award and has a close working relationship with Russian government officials. The Phoenix Fund is supported by over 20 different funding partners and employs full-time teams who conduct anti-poaching work, human-tiger conflict reduction–programs, and education programs (see Belim, Chapter 33) in a landscape where independent census data shows that wild Amur tiger populations have stabilized.

While the evaluation allowed us to take stock of our accomplishments, it also revealed areas where we could improve and strengthen our programs and philanthropic efforts:

- Our best conservation outcomes have been achieved where collaborative efforts have been made to develop a landscape-level vision for tiger conservation in a particular region that can be used to coordinate the actions of donors and stakeholders.
- Donors must encourage grantees to work towards long-term goals and operate on timeframes that are sufficiently long to allow grantees to demonstrate ecological outcomes.
- Grantees must learn and successfully apply methods and lessons from other countries and projects to develop best practices, and donors must facilitate peer-learning.
- Donors need to set realistic expectations of outcomes, ensuring congruence between the funds available and their mission.
- Donors must have adequate tracking mechanisms to periodically evaluate their progress towards their own portfolio goals using ecologically meaningful indicators, such as increased area of habitat protected, restored, or connected; increased density of prey populations; and increased tiger populations.

## FINAL THOUGHTS

Improving the practice of conservation tops the agendas of most conservation organizations who have gathered under the umbrella of the Conservation Measures Partnership (www.conservationmeasures.org). We at STF have approached this task somewhat differently than other conservation organizations by introducing the concept of risk management to our grant-making. Risk management is basically a way to stay out of trouble and still get done what you set out to do; it is a balancing act. STF does not carry out on-the-ground conservation, but we invest in partners who do. So for our partners—many who are contributors to this volume—and hopefully to a much wider audience, we share with you our latest thinking to secure a future for wild tigers. We must embrace adaptive management principles and, as a conservation community with shared goals, we need to develop more consistent and ecologically meaningful indicators, quantitative goals, and we must prioritize projects that link outputs to outcomes: securing and recovering wild tiger populations. We have to pursue this together. We believe this approach is the key for the tiger's future.

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