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Technical Brief

How Does Developing Enforcement Capacity Reduce Wildlife Crime?

Increasing program effectiveness by understanding common assumptions



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Front Cover: Greater one-horned rhinoceros (*Rhinoceros unicornis*). Chitwan National Park, Nepal. Photograph by Jason Houston for USAID.

Back Cover: Jeep safaris carrying tourists in Kumrose Community Forest, Kumrose, Nepal. Photograph by Jason Houston for USAID.

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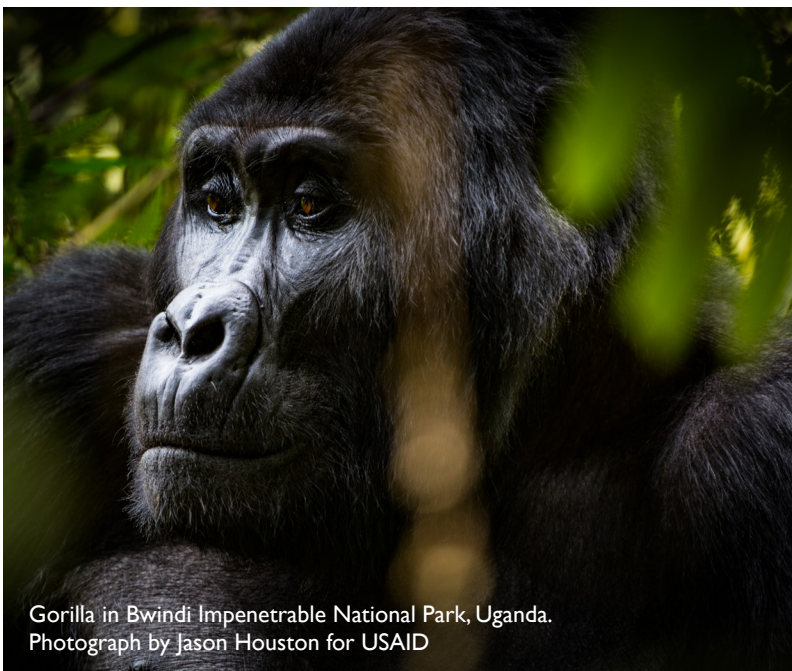
ARREST	Asia’s Regional Response to Endangered Species Trafficking
CITES	Convention on International Trade in Endangered Species
MIST	Management Information SysTem
NGO	Non-Governmental Organization
SMART	Spatial Monitoring and Reporting Tool
USAID	United States Agency for International Development

Introduction

Wildlife trafficking is associated with some of the most serious crime in the world, including narcotics trafficking, weapons smuggling, slavery, and terrorism, and is driving the depletion of some of the world's most iconic wildlife, including elephants, tigers, rhinoceros, and sharks. Through its commitment to promoting secure, democratic societies, the United States Agency for International Development (USAID) has made a significant investment in combating wildlife crime, including strengthening national and local efforts to enforce laws against wildlife trafficking to protect communities from crime and strengthen national security.

Capacity building for enforcement and prosecution is a common strategic approach for combating wildlife trafficking. It is one of three approaches in the United States National Strategy to Combat Wildlife Trafficking, and one of ten highlighted approaches included in USAID's [Measuring Efforts to Combat Wildlife Crime toolkit](#).

Capacity building is the provision of financial or technical assistance to improve the capacity of governments and agencies to enforce wildlife laws and prosecute wildlife criminals. Building capacity of partner countries for



Gorilla in Bwindi Impenetrable National Park, Uganda.
Photograph by Jason Houston for USAID

effective enforcement and prosecution of wildlife crime supports USAID's other efforts to support safe and prosperous communities, and sustain access to healthy ecosystems.

To meet the escalating, sophisticated, and well-resourced threat that is wildlife trafficking, USAID is seeking more efficient and effective approaches to combat wildlife crime. USAID uses a theory of change to describe how an intervention – for instance building the capacity of enforcement officers and prosecutors – is expected to lead to a conservation outcome – such as a reduction in illegal killing and trade of threatened wildlife. This brief summarizes findings from the literature around four key assumptions in a generalized theory of change about capacity building for

enforcement and prosecution. USAID's Office of Forestry and Biodiversity is building an evidence base around these assumptions to help programs be more effective. Using the experiences of other organizations that are summarized in this brief, program designers and implementing partners can increase the effectiveness and efficiency of their capacity building efforts.

Four Key Assumptions:



Each section of the brief focuses on one of these assumptions, beginning with key recommendations related to USAID practitioners and program designers, then summarizing findings from the literature.

Assumption 1: Appropriate competencies are identified to build capacity for enforcement and prosecution



Identifying the right set of key competencies, sub-competencies, and target audiences is a critical foundation for an effective capacity building effort. Table 1 on pages 6-7 synthesizes findings from a literature review of these competencies and audiences as a reference for building institutional capacity to combat wildlife crime.

Key findings for USAID in identifying core competencies

- **Use capacity assessments to (1) determine a capacity development goal**, with specific objectives, audiences, and intended outcomes, **and (2) identify institutional needs**, such as leadership skills, equipment, and infrastructure, to ensure that new capacity is sustained for the long term. Capacity assessments that are focused on specific capacity development goals ensure efficient use of resources and increase likelihood of success.
- **Recognize that not all audiences have the same capacity needs.** Reusing capacity development goals from past projects or experiences alone increases the risk that programs will fail to adapt to different or changing contexts.
- **Consider key competencies when conducting a capacity assessment.** Key competencies include knowledge of wildlife law (including national and international laws and species identification); conducting patrols and intelligence-gathering (including investigation, monitoring, surveillance, and data gathering); and prosecution skills (including case preparation and chain of custody practices).
- **Consider common capacity gaps, such as investigation and intelligence**, including intelligence-led policing.

Effectiveness Profile: USAID/Indonesia's Changes for Justice project

The USAID/Indonesia Changes for Justice project developed a specialized training system for judges that included a competency-based certification system; distance-learning opportunities; a fellowship program; a continuing judicial education program; guidelines and protocols for all senior positions; and a lecture series delivered across agencies to discuss parallel efforts reforming human resources systems. To make this system work, major institutional changes were made to the Ministry of Justice including developing a code of conduct for all staff, reforming human resources policies and systems, and investing in administrative functions to relieve judges of administrative burdens.

Table 1: Key competencies and target audiences for building institutional and individual capacity to prosecute and enforce wildlife crime. (Bolded sub-competencies were most frequently cited in the literature; italicized sub-competencies were least frequently cited.)

Description	Required Sub-Competencies Reported as Lacking	Target Audiences
Competency 1: Investigation and intelligence (general)		
<p>Wildlife crime enforcement relies heavily on investigation and intelligence. Needed front-line competencies in this area range from collecting and processing evidence to developing informant networks, gathering intelligence, and conducting intelligence-led operations.</p> <p>Intelligence-led policing involves tracking patterns in criminal activity and using data analysis to inform strategic management and use of enforcement resources, particularly in targeting repeat and serious offenders. Other key investigation and intelligence competencies include utilizing forensic techniques, building suspect profiles, filing reports, and collaborating and communicating across agencies.</p>	<p>Most frequently reported</p> <ul style="list-style-type: none"> • Undertaking controlled deliveries • Collecting and processing evidence • Ensuring evidence is of good quality • Utilizing forensic techniques • Detecting and seizing wildlife and associated products • Investigation and intelligence (unspecified) <p>Sometimes reported</p> <ul style="list-style-type: none"> • Establishing intelligence and informant networks • Reporting cases • Profiling suspects • Gathering, using, and analyzing intelligence • Using detection (sniffer) dogs • Communicating and collaborating across agencies <p>Also mentioned</p> <ul style="list-style-type: none"> • <i>Undertaking covert investigations</i> • <i>Employing risk management</i> 	<p>Primary: Enforcement officers, with distinctions made between the competency needs of different types and ranks of personnel</p> <p>Secondary: Prosecutors, involved in investigation</p>
Competency 2: Convention on International Trade in Endangered Species (CITES) enforcement		
<p>Competencies related to the implementation and enforcement of the Convention on International Trade in Endangered Species (CITES) are a focus for many organizations. CITES enforcement agencies or institutions struggle to build awareness of and enforce CITES procedures, rules, and regulations. Other necessary CITES-related skills for enforcement officials include identifying forged documents, understanding internet-based wildlife trade, and compiling and submitting trade statistics to allow verification of imports from and exports to other countries.</p>	<p>Most frequently reported</p> <ul style="list-style-type: none"> • CITES regulation, implementation, and enforcement (unspecified) <p>Sometimes reported</p> <ul style="list-style-type: none"> • Understanding Internet trade • Identifying forged documents <p>Also mentioned</p> <ul style="list-style-type: none"> • <i>Developing bribe-proof permits</i> • <i>Compiling and submitting trade statistics</i> • <i>Understanding conservation status of different species</i> 	<p>Primary: Enforcement officers, customs and border officials, CITES management authorities</p> <p>Secondary: Private sector (traders)</p>
Competency 3: Identification of wildlife species and products		
Competency 4: Understanding and enforcement of national-level wildlife laws		
<p>The identification of wildlife species and products and knowledge about national-level laws and regulations pertaining to wildlife trade are key skills that complement CITES-related capacity. Without this knowledge, officers cannot enforce the law, even where political will and agency effort are present.</p>	<p>Most frequently reported</p> <ul style="list-style-type: none"> • Recognizing individual species and their parts • Distinguishing legal wildlife products from illegal ones (e.g., CITES-listed species vs. unlisted ones, or adherence to national laws and policies) 	<p>Primary: Enforcement officers, customs and border officials</p> <p>Secondary: Transportation staff (e.g., airport staff, truck drivers)</p>

Description	Required Sub-Competencies Reported as Lacking	Target Audiences
Competency 5: Effective patrolling		
<p>Many organizations cited the need to improve the patrol capacity of rangers and community scouts, including actions such as anti-poaching operations and combat skills, Spatial Monitoring and Reporting Tool (SMART), and other forms of data collection and map use. Beyond these field-level skills, providing rangers and community scouts with leadership and management skills was identified as a key factor in effectiveness and motivation.</p>	<p>Most frequently reported</p> <ul style="list-style-type: none"> • Using SMART • Anti-poaching operations (for law enforcement personnel: combat, firearms, etc.) • Patrol capacity (unspecified) <p>Sometimes reported</p> <ul style="list-style-type: none"> • Leadership and management <p><i>Also mentioned</i></p> <ul style="list-style-type: none"> • <i>Patrol investigative techniques</i> 	<p>Primary: Rangers, Community guards</p>
Competency 6: Monitoring, surveillance, and data collection		
<p>Monitoring, surveillance, and data collection are generally acknowledged as important competencies, though described less frequently in the literature on combating wildlife crime.</p>	<p>Most commonly reported</p> <ul style="list-style-type: none"> • General monitoring, surveillance, and data collection related to wildlife trade, markets, and populations • Capacity to use specific systems such as the Elephant Trade Information System and the Monitoring the Illegal Killing of Elephants 	<p>Primary: Customs and border officials, CITES management authorities, rangers, community guards</p>
Competency 7: Wildlife crime awareness and knowledge along the prosecution chain Competency 8: Case building, preparation, and tracking		
<p>Two critical competencies – which are not widely met – are judicial and prosecutor awareness of wildlife crime, its magnitude, and the associated economic and social impacts. Of equal importance are capacities for enforcement officials to build, prepare, and track cases effectively through the prosecution process, and for judicial officials to be aware of the laws and penalties governing wildlife crime.</p>	<p>Most frequently reported</p> <ul style="list-style-type: none"> • Wildlife crime expertise to be able to work with detection agencies to build strong cases • Ability to build, prepare, and track wildlife crime-related cases • Awareness of wildlife smuggling and crime • Awareness of national laws and sentencing guidelines related to wildlife crime 	<p>Primary: Judges, prosecutors</p> <p>Secondary: Rangers, transportation sector</p>

Assumption 2: Targeted competencies will be acquired and maintained



Once the appropriate competencies for institutions and individuals have been identified, the theory of change assumes that these competencies will be acquired by enforcement and prosecution personnel. Selecting an approach to building those capacities and reinforcing them over time is important to a program's success. Table 2 on pages 9-10 summarizes common competency-building approaches, their rationale for use, and examples of approaches found in the literature.

Key findings for USAID on acquiring and maintaining competencies

- **Weigh different training approaches to acquire and maintain competencies.** Interactive and skills-based approaches were most commonly referenced in the literature, including training-of-trainers, secondments, peer-to-peer learning, role-playing, and in-service training. These activities go beyond the traditional training and workshop approaches.
- **Widen the scope of trainings and ensure relevance.** Trainings to build capacity of enforcement and prosecution personnel should be practically applicable to the trainees and facilitate collaboration and cooperation between agencies. They should be offered with enough frequency to keep skills fresh and to enough staff to make the new practices part of the organization's institutional culture. Project teams should recognize that successful approaches in one project or region may not be as effective in another. As a result, they should strive to adapt approaches to the learning needs and specific contexts of each training group.
- **Consider the need for sustained, long-term capacity in the program planning stage.** Encouraging new competencies to endure over the long-term requires continuous capacity building programming, skill maintenance through training reinforcement, effective partnerships, and systemic considerations in program design. Without thoughtful follow up, newly learned skills can be lost or underused.
- **Use a range of partnerships to effectively leverage capacity gaps and resources** to build a national or regional network to combat wildlife trafficking. These include interagency training to build skills and facilitate cooperation and understanding, collaborating with educational and training institutions to support design and sustained delivery of training, and seconding staff to gain available expertise.

Partnership Profile: USAID's ARREST Program

USAID's Asia's Regional Response to Endangered Species Trafficking (ARREST) Program mid-term evaluation explored partnership approaches to combating wildlife crime. The evaluation suggested that non-governmental organizations (NGOs) may not have the breadth of experience to deliver law enforcement capacity building to partner governments and that United States Government direct training is preferred. Additionally, the evaluation found that while most of the training provided was appropriate, more attention could have been paid to the selection of audiences and topics – such as not grouping port inspectors and prosecutors – and that translation difficulties slowed training delivery. Other recommendations included improving trust, transparency, and sharing credit for success.

Table 2: Competency-building approaches, rationale for use, and examples of approaches suggested by the literature.

Competency-building approach	Description	Example	Use this approach to:
Workshops	Brief, intensive educational program for a relatively small group of people that focuses especially on techniques and skills in a particular field.	Workshops were held for the judiciary in the European Union to increase awareness about the illegal wildlife trade and its impact on species, ecosystems, and livelihoods.	Build skills or knowledge sharing opportunities. Foster professional exchanges and networking.
Training courses	Single courses or course series aimed at building knowledge or developing skills in a discrete subject area.	A training course for judges and prosecutors was given in Association of Southeast Asian Nation Wildlife Enforcement Network countries.	Build skills and knowledge that are highly relevant to a particular professional field.
Training-of-trainers	Experienced training personnel show less-experienced instructors how to deliver courses, workshops, and seminars.	The Changes for Justice project in Indonesia held a training-of-trainers program for judges on the use and maintenance of court equipment. These trained judges then successfully delivered training on the use of the equipment to a district court.	Institutionalize competency-building efforts.
Secondments	The detachment of a person from his or her regular organization for temporary assignment elsewhere.	In Indonesia's Marine Resources Program, secondments between key local government offices and marine project staff helped with curriculum development and training.	Build interagency and interdepartmental collaboration. Share intelligence information and best practices across agencies, including interdepartmental analysis of available intelligence information.
Staff mentors	Mentors guide, train, advise, and promote the career development of mentees.	Mentoring visits by shipping experts provided support to Port Control Units, assuring their effectiveness and performance, as well as monitoring their sustainability.	Ensure training is consistent and being regularly applied.
Peer-to-peer exchanges	Students work in pairs or small groups to discuss concepts or find solutions to problems.	Peer-to-peer exchanges at International Saiga Rangers Summit. Study tour between officers of the Regional Dog Training Center in Kazakhstan and the Czech Republic's World Customs Organization certified Canine Training Facility.	Build expertise from other practitioners. Share best practices across borders. Foster networking and build a sense of community.

Competency-building approach	Description	Example	Use this approach to:
Identifying and supporting champions	Champions support the change effort and ensure that once the project is completed, the changes are sustained.	Local-level ranger-based Management Information System (MIST) champions have allowed pilot tiger source sites to become largely autonomous in organizing follow-up training sessions.	Encourage sustainability through a champion who mentors and sustains processes over the long term.
Role-playing	A simulation of a real-life situation for training purposes.	The International Law Enforcement Academy held a “ real life ” exercise using volunteer role players from the United States Embassy and the local community as poachers and dealers of illegal items.	<p>Improve quality and speed of decision-making in high-stress situations.</p> <p>Help trainees better understand the roles of other enforcement chain actors.</p>
In-service training	Staff are trained with their peer group.	The Malilangwe Wildlife Reserve in Zimbabwe has used in-service training to build a cadre of highly trained staff that can oversee most regular training of rangers and scouts.	<p>Improve the performance of an incumbent holding a position with assigned job responsibilities.</p> <p>Support a continual learning approach, which allows for frequent knowledge and technology updates and demonstrates value of staff.</p>
Inter-agency training and training program development	Agencies work together to develop and participate in training programs.	On the Ustyurt Plateau, a government agreement to coordinate law enforcement was followed by joint training courses , activities monitoring, and wildlife census.	<p>Share strategic visions, build common understanding of challenges, and facilitate cooperation between agencies.</p> <p>Provide on-the-job skills development.</p>

Assumption 3: Targeted compliance and enforcement actions will be taken



The capacity building theory of change assumes that the desired compliance and enforcement actions will be taken after the new competencies for enforcement and prosecution are acquired. Table 3 on pages 12-13 summarizes common barriers to and Table 4 on page 14 lists incentives for targeted compliance and enforcement actions cited in the literature review.

Key findings for USAID on the barriers to and incentives for taking compliance and enforcement actions

- **Consider the barriers that impede action on enforcement and prosecution.** Common barriers include unclear lines of authority, such as jurisdictional conflicts, administrative roadblocks, and transboundary issues; motivational barriers such as unsupportive internal agency policies, low salaries, and low morale; and lack of resources, corruption, and fear of retribution. Such barriers contribute to unsupportive internal cultures that obstruct progress within agencies, making change difficult.
- **Internal factors can limit essential cross-agency cooperation.** These barriers, coupled with issues such as competing priorities, mismatched organizational structures, and personality clashes, can prevent different agencies from working together effectively.
- **Review the list of barriers in Table 3 with stakeholders** (on pages 12-14) and determine if any could apply to the program. Plan how to eliminate, reduce, or circumvent the barriers within the program's manageable interest. Reconsider barriers with program stakeholders throughout the life of the program to determine whether new or different barrier removal strategies are warranted. Consider whether additional stakeholders need to be engaged, consulted, or informed about the capacity building program and its aims.
- **For frontline enforcement, consider a range of incentives to improve performance.** A range of incentives can help staff to overcome barriers and increase the likelihood that they will take appropriate enforcement and compliance actions. Cash incentives, special recognition, professional development, and job-related amenities were cited in the literature and in USAID's [case compilation](#).
- **During the design phase, review the list of incentives in Table 4** on page 14 and discuss whether any could be applied to the program. Consider which incentives would be most appropriate for the context and which may have been used in the past.

Attending to Rangers' Needs

Occupational Stress among Law Enforcement Rangers: Insights from Uganda looked at the multitude of stressors that affect rangers, including: (1) occupational stressors, such as challenging terrain, danger posed by armed suspects and wildlife, and poor living conditions; (2) internal stressors, such as lack of equipment and transportation, contentiousness between ranks of rangers, low salary, and uncertain job security; and, (3) external stressors, such as suspicion by communities, interference by politicians, and a lax criminal system that creates cynicism. All of these stressors contribute to low morale and highlight the importance of salary, among other factors, for this difficult job. The authors suggest counseling by mental health professionals or the development of peer-support networks who understand “the hardness of rangership.”

Table 3: Barriers to enforcement staff taking targeted actions, examples, and possible solutions.

Barriers	Example of Barrier	Examples of Recommendations and Solutions
Authority Barriers		
Jurisdictional conflicts	Confused and overlapping jurisdictions of wildlife management, customs, and CITES authority.	Legal reform to address gaps, issues, jurisdictional conflicts.
Administrative roadblocks	Excessive administrative burden and overlapping duties for judges.	Improve administrative systems with guidelines and protocols; implement case tracking system; hire administrative staff to reduce administrative burden on judges.
Transboundary issues	Limits on cooperation across borders prevents collaboration and sharing of information and data.	Engage in cross-border information sharing and cooperation. Establish joint investigative teams .
Legal issues	Countries' failure to comply with CITES regulations, including Appendix I listings, or limitations on customs' ability to seize suspicious shipments.	The United States threat of bilateral Pelly Amendment sanctions against Yemen, South Korea, Taiwan, and mainland China, as well as other international actions, resulted in political moves to end rhino horn consumption. As a result, rhino poaching essentially came to a halt in the early 1990s. The designation of rhino horn as a prohibited substance in traditional medicine also contributed.
Legitimacy	Forest guards and game wardens are not seen as "equals" by other agencies, which makes it difficult for wildlife officers to obtain support and restricts how they are able to engage in multi-agency operations. Further, the lack of respect can flow into the general public and limit the deterrent effect to criminals.	Ensure salaries are comparable to other enforcement agencies and commensurate with the risks involved.
Motivation Barriers		
Unsupportive internal agency policies	Part-time or hourly employees are not invested enough in their jobs, and their positions can be subject to political whims.	Create permanent positions .
Low priority for wildlife and wildlife products	Low incentives for wildlife seizures compared to narcotics and other contraband means that attention and motivation is often focused away from wildlife crime.	Prioritize wildlife and wildlife product detection and increase incentives for related seizures; implement performance measures for wildlife products similar to those of narcotics. Create bonuses for successful seizures.

Barriers	Example of Barrier	Examples of Recommendations and Solutions
Low morale	Ranger stress due to multiple job-related stressors leads to poor performance.	Counseling or peer support networks .
	Low salaries and failure to pay salaries regularly reduces staff motivation and can lead to corruption.	Reward schemes (for rangers) as incentives for apprehensions and seizures can raise detection rates for wildlife and forest offenses and may dilute the influence of corruption. However, such schemes create the risk of evidence being planted and some suspects being unduly targeted.
	Overwhelming volume of work for customs officials.	Use of decision tree tools to make quicker and more informed decisions. Cross-designate customs officials to allow them to seize shipments that are suspicious, and then have the shipments inspected at a later time by properly trained wildlife inspectors; increase the number of officially trained inspectors.
	Dangerous and difficult work environment for rangers, and threats to judges and prosecutors.	Strengthen patrol leadership and management , thereby improving effectiveness and motivation.
Judges, prosecutors, and police are sent to remote locations and see this as a punishment, affecting their performance of basic duties.	Rotate hardship posts, compensate for costs to families, or preference in next posting.	
Other Barriers		
Lack of resources	Lack of funding to pay rangers.	Increase financial penalties on criminals and use to finance protected area management. Increase tourism fees or the cost of hunting permits .
Corruption	Bribery of officials.	Involve multiple agencies to increase transparency .
	Fraud by rangers; ranger complicity with poachers. <i>(This is frequently linked to low salaries, see Lack of resources above.)</i>	Intensify training and anti-corruption measures among park rangers. Develop a positive and cohesive organizational culture where corruption is viewed as unacceptable, such as a code of conduct. Use a multi-faceted approach that: increases investigative internal operations, establishes disciplinary committees, changes hiring procedures (i.e., hiring individuals with higher education), modifies tactical operations (i.e., not informing rangers where they will be deployed), builds internal capacity with a focus on integrity and leadership, and increases salaries. Training in leadership and professionalism creates motivated staff who are less prone to corruption and are ultimately more motivated to apprehend poachers and value their work.
Fear of retribution	Authorities don't arrest traders, due to fear of retribution from powerful people and organizations.	Media playing a more prominent role in exposing illegal behavior and educating officials and the citizenry of wildlife crimes, and should be provided regular updates on high-profile cases.
Lack of political prioritization	Low-level staff are sent to important interagency meetings, but have no authority to make decisions.	Empower staff, and prioritize leadership and participation.

Table 4: Summary of the range of incentives taken by different organizations and projects to improve the quality and quantity of effort in the enforcement and prosecution chain..

Incentive	Rationale for use	Examples
Cash incentives		
Increased salary	Inadequate salaries, or the failure to pay salaries regularly, may reduce staff motivation and increase the risk of corruption. However, some authors noted that pay is not always a significant factor in motivating employees, and may even demotivate them.	A program in the Niassa National Reserve, Mozambique, raised basic staff salaries to the national minimum wage.
Performance bonuses for number of arrests, seizures, etc.	Encourages quality work and boosts detection rates and accountability.	SMART enabled managers to assess individual performance during patrols and consequently improve the bonuses paid to rangers on an objective basis.
Non-cash incentives		
Insurance	Ensures welfare of staff and families.	Africa Parks instituted life insurance for patrol staff that supports spouses of staff killed on duty.
Professional opportunities (e.g., training, study tours)	Recognizes leadership and innovation.	An individual career development plan is offered for wildlife conservation officers in South Africa to help them advance in their job and learn more about their field and includes a variety of short courses for field rangers.
Special recognition (e.g., certificates, non-cash rewards, public recognition)	Improves enthusiasm and pride of rangers.	Rhino Rangers in Namibia were given certificates for achievement in exams, as well as uniforms, bi-annual team building events, and training seminars. Motivational awards for outstanding performance (including making arrests) consisted of engraved plaques or utilitarian items such as compasses, clothing, or pocketknives for rangers in South Africa. Press releases recognized efforts of staff, and public recognition and boosted motivation for rangers in Quang Nam province, Vietnam.
Promotion	Promotes professional development through rewarding reform and leadership. The promotion system should be based on performance measures and results of professional development.	A chief justice proposed applying competency profiles to new guidelines on transfers and promotions under Indonesia's Changes for Justice project.
Job-related amenities (e.g., housing, food, equipment, uniforms, boots, etc.)	Improves morale and motivation.	Better housing has provided a big morale booster for rangers that live and work in remote and harsh environments in Tsavo, Kenya. New equipment has been used to encourage performance improvements in a study by the Frankfurt Zoological Society.

Assumption 4: Wildlife Crime Will Be Reduced



With enforcement and prosecution officials using new skills in more effective institutions, the theory of change assumes that wildlife crime will be reduced. The literature review included few direct linkages to reduction in wildlife crime, but implementing organizations did report some insights to detecting and facilitating reductions in wildlife crime. Table 5 on page 16 describes cause and effect relationships in greater detail, with links to the original documentation for each presented case.

Key findings for USAID on reducing wildlife crime

- **Invest in high-quality monitoring of crime-reduction results.** The stories and statistics around reductions in wildlife crime help make powerful cases to policymakers and funders about the contribution that more effective enforcement and prosecution can have to reducing wildlife crime.
- **Be cautious when assessing the impact of risks and profit on wildlife crime.** Increased risks to criminals and diminished profitability of wildlife crime do not reduce wildlife crime in all contexts and situations. Key parameters that affect deterrence rates are the size of the penalties and the frequency and type of patrols.
- **Consider the influence of market and behavioral context on the relationship between crime risk and profitability.** Several authors reported that market and behavioral factors are complex and intermingled, sometimes hindering the ability to draw clear conclusions about how a change in crime risk affects the price of an illegal commodity. For instance, demand for illegal wildlife products may be so strong that even a significant increase in criminal risk may not reduce the profit generated.
- **Design programs appropriate to the local context.** Attending to the social and political context is essential to the design of programs to reduce incentives and deter criminal activity. Groups should consider communities' attitudes toward poaching and resource ownership; community norms and social structure; community relationships with poachers and enforcement agents; and how communities perceive the risk to breaking a law.

Reducing Wildlife Crime: Complementary Strategic Approaches

Enforcement, while necessary, is likely not sufficient to reduce wildlife crime. This idea was strongly argued in *Poaching Is More than an Enforcement Problem* by Challender and MacMillan, in which the authors call for the addition of other approaches that reduce the price of illegal wildlife products and increase the opportunity cost of poaching by investing in the eradication of rural poverty. Indeed, the National Strategy to Combat Wildlife Trafficking recognizes the need for a variety of approaches to achieve its goal of disrupting and deterring wildlife crime. USAID and its partners have been working on complementary strategic approaches such as reducing consumer demand through behavior change methodologies, increasing community conservation action and support to combat poaching and trafficking, and building a constituency for effective, accountable, and transparent government action. In order to get a full picture of the relationship between enforcement actions, increased risks, and wildlife crime, it may be necessary to also gather information and data related to these other complementary strategic approaches and their impacts on communities, consumers, criminals, and wildlife. For more information on these complementary strategic approaches, please visit E3/FAB's online platform for the [Combating Wildlife Crime Collaborative Learning Group](#).

Table 5: Examples in the literature of targeted enforcement actions and their effect on increasing risk to wildlife criminals. Examples are categorized by the enforcement-prosecution chain (detection, arrest, prosecution, and application of appropriate penalties).

Type of Action	Specific Action	Result
Targeted Actions Resulting in Detection		
Detection	Improved capacity to use trained detector dogs.	Led to the detection and seizure of Saiga horns at border crossings in Kazakhstan.
	Special customs unit trained and equipped to combat smuggling.	Considerably increased the number of detected cases of illegal wildlife trade.
Collaboration	Transboundary and interagency collaboration and information sharing between Kazakhstan and Uzbekistan.	Improved detection , including two seizures of Saiga horn.
Patrols	Anti-poaching patrols by Tibetan communities and policing of the Shahtoosh trade by Chinese authorities.	Markedly reduced poaching .
	Establishment of customary forest guards and community forest monitoring in East Kalimantan.	Ended almost all illegal hunting and logging .
	Increased patrols in Nyungwe National Park in Rwanda.	Increased the detection rates of snares.
	Increased patrols in Panama's Bastimentos Island National Marine Park.	Deterred poachers , leading to reduced numbers of turtles and nests poached.
Targeted Actions Resulting in Arrest		
Patrols	Increased patrols in the Sacred Himalayas landscape.	Led to increased arrests .
	In South Luangwa National Park in Zambia, village scouts expanded the capacity of the parks agency.	Increased the numbers of illegal hunters arrested and weapons seized .
	In South Africa, anti-poaching activities in the field and law enforcement along the rhino horn trade chain.	Doubled the rate of successful arrests during patrols between 2010 and 2013.
Other	Establish of informant networks and civil society coalitions, and use of a tipline, in Aceh and North Sumatra, Indonesia	Led to arrests of suspected poachers .
	Establishment of a toll-free tip line in Ghana.	Led to the dramatic increase of of arrests for fisheries violations .
Targeted Actions Resulting in Arrest and Prosecution		
Other	Trained customs officials in South Africa issued alerts.	Resulted in seizures of white rhino horns, which led to successful prosecutions .
Targeted Actions Resulting in Prosecution		
Other	Multiple actions by Indonesia's Wildlife Crime Unit, including establishing informant networks around key landscapes and in key markets and transport hubs; using highly trained investigators to gather evidence in an appropriate way so that it is admissible in court.	Led to a greater than 85 percent prosecution rate .
Targeted Actions Resulting in Reduced Wildlife Crime		
Other	Increased penalties and empowered officers with authority in Nepal.	Reduced wildlife crime .

Methods

This technical brief is based on a synthesis of over 200 grey and peer-reviewed documents on the topic of enforcement capacity building for combating wildlife trafficking, as well as key informant interviews with experts in the field. Literature searches were limited to wildlife-related crime and did not include reports and articles sourced from the larger, non-wildlife-related enforcement discipline. Evidence in support of the theory of change was mostly anecdotal; high-quality data on trends in wildlife crime is largely lacking, especially those related to the performance of enforcement systems.



A juvenile greater one-horned rhinoceros (*Rhinoceros unicornis*) was orphaned in recent floods and is being rehabilitated and cared for at National Trust For Nature Conservation facilities before it is released back into Chitwan National Park, Sauraha, Chitwan District, Nepal. Photograph by Jason Houston for USAID.

USAID's Approach: Learning about Combating Wildlife Trafficking

Projects that use a common framework and common indicators to track and analyze progress along a theory of change are encouraged to share their findings with USAID's Combating Wildlife Trafficking [Collaborative Learning Group](#). The following list of learning questions was taken, in part, from the evidence gaps of this review and were further refined by the Learning Group as it pursues its [Learning Agenda](#):

- Guiding Question: What are the characteristics of effective law enforcement capacity building?
- How do institutional arrangements, especially dedicated units and embed programs, impact the uptake of skills and knowledge?
- What are good examples of systems, particularly judicial systems, which have made improvements in combating wildlife trafficking enforcement?
- What factors are necessary for effective cooperation and processes among national, sub-national, and local authorities, especially for Wildlife Enforcement Networks?
- What are some successful examples of partnerships used to deliver competency-building activities and what made them work?
- For specific audiences: Which competency-building methods and content work best, especially for maintaining skills and retaining staff?

By sharing progress (or lack thereof) from multiple activities along a common theory of change, and collaboratively working to answer the learning questions above, the Learning Group and broader combating wildlife trafficking community will gain a better understanding of the conditions under which certain strategic approaches are most likely to succeed.

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