

6-4-2015

## The Expansion of Cooperative Threat Reduction programs: The case for a formalized agreement with Pakistan

Christian Pedersen

*Pepperdine University*, christian.pedersen.pepperdine@gmail.com

Follow this and additional works at: <https://digitalcommons.pepperdine.edu/ppr>



Part of the [Public Affairs, Public Policy and Public Administration Commons](#)

---

### Recommended Citation

Pedersen, Christian (2015) "The Expansion of Cooperative Threat Reduction programs: The case for a formalized agreement with Pakistan," *Pepperdine Policy Review*: Vol. 8 , Article 2.

Available at: <https://digitalcommons.pepperdine.edu/ppr/vol8/iss1/2>

This Article is brought to you for free and open access by the School of Public Policy at Pepperdine Digital Commons. It has been accepted for inclusion in Pepperdine Policy Review by an authorized editor of Pepperdine Digital Commons. For more information, please contact [josias.bartram@pepperdine.edu](mailto:josias.bartram@pepperdine.edu).

# **The Future of Cooperative Threat Reductions Programs: The Case for Expansion into Pakistan**

Christian Pederson

## **Abstract**

For more than two decades, Cooperative Threat Reduction (CTR) programs have been the linchpin of US efforts to control the proliferation of nuclear technologies and combat nuclear terrorism. The umbrella agreement for CTR, originally created under the Nunn-Lugar Act, was an effective tool for preventing the flow of nuclear technologies and material following the collapse of the Soviet Union. As new challenges arrive, the United States needs to consider creating similar programs to ensure the security of nuclear weapons and sites globally. One candidate for the expansion of these programs is the Islamic Republic of Pakistan.

## **Introduction**

Since the dawn of the first nuclear age, which began with the advent of the first atomic weapons, the security of nuclear technology and the secrecy of nuclear knowledge have been essential for international security. Despite many storied close calls and near misses with these dangerous technologies, to date, nuclear technology has remained largely secure. President Obama has stated that nuclear terrorism represents the most “extreme threat to global security,” and in 2012 the President committed the US to leading a new international effort to prevent the proliferation of nuclear materials (Nikitin, 2012, 4). Cooperative Threat Reduction (CTR) programs are a form of assistance the US has dispersed in the interest of reducing the threat of nuclear weapons. The US has provided technology, expertise, and financial assistance to nations throughout Eurasia to ensure the US most vital national interest — the survival of the US and the security of its people (Kugler, 1994, 59). The coordinated actions taken by the US and the Russian Federation have reduced the proliferation of nuclear materials and prevented access to weapons of mass destruction worldwide. As the CTR tasks first outlined two decades ago, the US needs to expand these programs to other nuclear states. The Islamic Republic of Pakistan is the best candidate for the expansion of the CTR programs to improve the security of nuclear weapons.

## **The Nunn-Lugar Agreement and the Birth of CTR**

Senators Sam Nunn and Richard Lugar first became interested in arms reduction in 1986, when they led a bipartisan group of senators to Geneva, in hope of negotiating a nuclear arms control reduction treaty with the Soviet Union (Lugar, 2013). Following the dissolution of the Soviet Union, the two senators introduced legislation to secure nuclear weapons and materials to prevent their proliferation to non-nuclear states and terrorist organizations (Krepon, 2009, 10). The Nunn-Lugar Act provided funding to secure the transportation of nuclear material, dismantle outdated nuclear weapons, improve security at storage facilities, find employment for unemployed nuclear scientists, and track fission material (Sarkesian, Williams, & Cimbala, 2008, 280). The Nunn-Lugar agreements created the framework for what became known as the “Cooperative Threat Reduction Umbrella Agreement”.

The program has grown from a \$400 million annual budget to more than \$1 billion, funding operations within the Department of Defense (DOD), Department of State, and Department of Energy (DOE) (Woolf, 2012, 2). The DOD specifically oversees CTR components relating to storing and destroying weapons. The State Department oversees the

export control component of CTR. The DOE is responsible for deactivating production facilities and aiding programs to assist nuclear scientists in finding meaningful civil sector employment.

Since 1992, Russia and the US have collectively cooperated in efforts to prevent the spread of nuclear weapons throughout the former Soviet Union (Sarkesian et al., 2008, 278-279). One of the first actions taken under Nunn-Lugar was the nuclear weapons within Ukraine, Belarus, and Kazakhstan were surrendered to Russia so they could be secured and destroyed (Krepon, 2009, 111). The Nunn-Lugar program had four primary objectives. The first was to destroy weapons of mass destruction, specifically nuclear weapons (Squassoni, 2005, 4). The second was to secure these weapons through transportation and storage, in preparation for destruction (Squassoni, 2005, 4). Next, the program aimed to create verifiable safeguards to prevent the further proliferation of weapons, materials, and components (Squassoni, 2005, 4). Finally, the program wanted to limit the distribution of scientific knowledge which could contribute to further growth of nuclear weapons programs (Squassoni, 2005, 4).

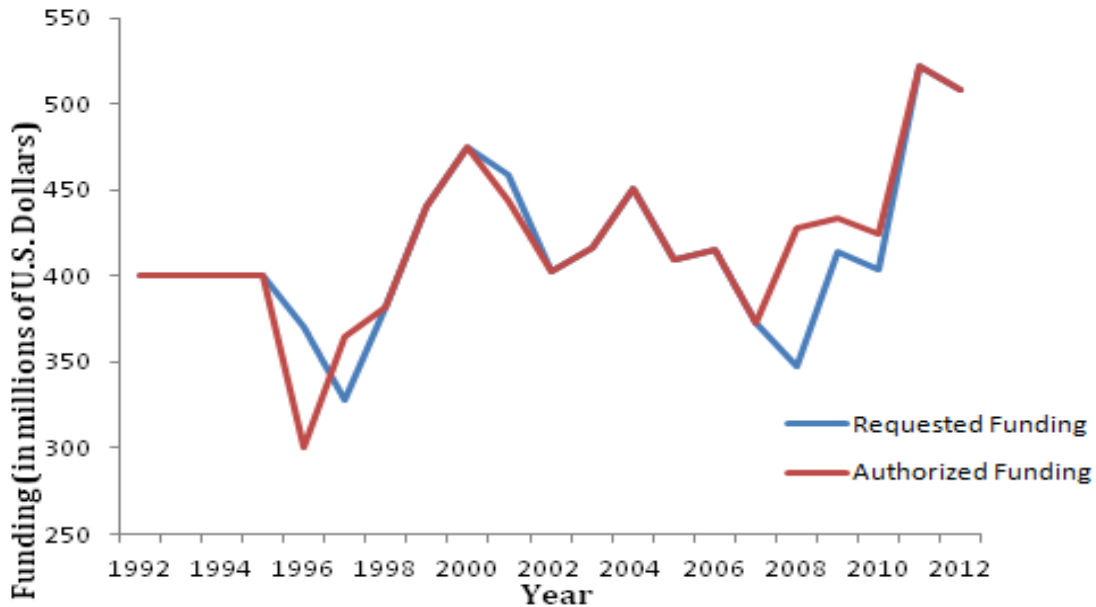
Many members of Congress saw how crucial these programs were to national defense (especially in the wake of a failed coup in Russia), and some worried that with the US paying for the security and destruction of older nuclear weapons, Russia would be allowed to reinvest in the modernization of its nuclear arsenal (Woolf, 2012, 3-5). These cooperative threat reduction programs have been largely supported by both the Senate and House of Representatives, and Republican and Democratic presidents (Krepon, 2009, 111).

After implementation, it took a while for the CTR programs to gain traction. Coordination had to be organized between the three primary bureaucratic agencies and additional “umbrella agreements” had to be negotiated with each state where the CTR was going to be applied (Woolf, 2012, 5). These agreements had to establish the legal framework for the transportation of weapons, and detail the privileges and responsibilities of US personnel implementing these programs abroad (Woolf, 2012, 5).

### **US Funding for CTR Programs**

When Congress initially authorized the Nunn-Lugar Amendment, it allocated \$400 million dollars from existing DOD funding to be used for CTR (Woolf, 2012, 10). However, it took some time for these programs to be implemented, so additional funds were again transferred from other DOD projects to prioritize CTR in 1993 (Woolf, 2012, 10). Following 1993, the government began allocating funding specifically for CTR programs.

**Figure 1.1: US Funding for CTR Programs**



Data Source: Congressional Research Service Report, 2012.

Figure 1.1 above shows that every year CTR has been in effect, with the exception of 1996 and 2001, funding allocated to these programs has exceeded the aid requested for them. The George W. Bush Administration has been criticized for cutting the funding for these programs to funding levels largely considered inadequate in the middle of the 2000s (Sarkesian et al., 2008, 234). During the 20 span from 1992 to 2012, nearly \$9 billion dollars were spent by the Federal Government on CTR programs. The Obama Administration requested \$519.1 million dollars for CTR programs for the 2013 fiscal year (Woolf, 2012, 11).

### **The Effectiveness of CTR Programs to Date**

While many policymakers believe that CTR has proven to be an invaluable national security tool, it can be difficult to define the effectiveness of these programs (The Future, 2001, 3). One reason is that CTR programs have operated on three different levels: a site level, a country level, and the global level (Bresolin, 2013). Examples of site level programs include security improvements at 23 weapon storage sites in Russia and the security of several hundred kilograms of nuclear material within Kazakhstan (Bresolin, 2013). At the country level, CTR programs have been responsible for educating partner nations on nuclear security, and implementing the creation of networks for the secure transportation of nuclear material (Bresolin, 2013). At the global level, CTR programs have supported programs such as the Nuclear Security Summit, working with the International Atomic Energy Agency (IAEA) to develop support centers for nuclear material and establishing partnerships to combat the threat of nuclear terrorism (Bresolin, 2013).

These CTR programs have deactivated nearly 7,600 nuclear weapons, 900 air-to-surface missiles, 155 bomber planes, and 30 nuclear submarines (Krepon, 2009, 111). Table 1.1 below depicts some of the accomplishments of CTR programs.

**Table 1.1: Nuclear Weapons Systems Destroyed Under CTR Programs**

<b>Weapons Component</b>	<b>Destroyed</b>	<b>Completion of Goal (2017)</b>
<b>Nuclear Warheads</b>	7,610	82%
<b>ICBMs</b>	902	87%
<b>Mobile ICBM Launcher</b>	191	53%
<b>ICBM Silos</b>	498	82%
<b>SLBMs</b>	684	94%
<b>Nuclear Submarines</b>	33	85%
<b>SLBM Launchers</b>	492	80%
<b>Surface to Air Nukes</b>	906	100%
<b>Bomber Aircraft</b>	155	100%

\* ICBM: Intercontinental Ballistic Missile, SLBM: Submarine Launched Ballistic Missile  
 Data Source: The Nunn-Lugar Scorecard, The Lugar Center, 2013.

These programs also created 39 stations to monitor biological weapons threats (Kazi, 2013). More than 5,000 scientists formerly involved with the creation of weapons— nuclear, chemical, and biological—and missile technologies were put to work for peaceful purposes (Kazi, 2013). But accomplishment alone is no measure of effectiveness or the efficiency of completion. The DOD acknowledges that while trainings conducted, equipment destroyed, and scientists engaged can be calculated and recorded quantitatively, the efficiency of these programs is harder to define (Davis, 2012, 19). The DOD officially uses the Nunn-Lugar Scorecard to track efficiency (Davis, 2012, 19). The scorecard itself cannot be used to measure the qualitative effectiveness of these programs.

The best measure of effectiveness is to use six program objectives as created by the DOD because then performance can be measure based upon program completion (The Future, 2001, 13). Highly effective programs meet more than 80% of their objectives, and low performance meet less than 50%. Medium effectiveness is between the two percentages (The Future, 2001, 13). While this measure does not actually measure the effectiveness of these programs, it measures efficiency by comparing progress to date with the programs completion goal of 2017. Based upon these measurements, CTR programs that focus on the destruction and dismantlement of nuclear weapons have the highest degree of efficiency (The Future, 2001, 13). With the exception of the destruction of mobile Intercontinental Ballistic Missile (ICBM) launchers, the rest of the nuclear programs are more than 80% completed. The CTR programs which focus on the elimination of biological and chemical weapons have not shared the same degree of effectiveness (The Future, 2001, 14).

One problem with the current metric used by the DOD is that it does not take into consideration the future of reduction efforts (Davis, 2012, 21). Missions and objectives may change over time, and this is not currently reflected in the current metric. Some of the medium and low scoring reduction programs seem to be low scoring because they lack consistency and clearly defined objectives (The Final, 2001, 14). The ambiguity of mission scope aside, the

## THE FUTURE OF COOPERATIVE THREAT REDUCTION PROGRAMS

“completion” of CTR programs can be a very subjective term itself. There are a few CTR programs with measurable end results, but a significant number of other programs, such as those which focus on building sustainable relationships, are perpetual without defined end results in sight (Davis, 2012, 55). Instead of attempting to evaluate CTR programs as a whole, perhaps it would be more effective to measure individual program components. This way each agency that contributes to CTR can create an individualized measure that can be used to compare costs with goals and results in order to determine the effectiveness of each component of greater CTR.

### **The Current Status of CTR Programs**

The original umbrella agreement between the US and Russia, which created CTR, was renewed twice (Woolf et. al., 2014, 21). While CTR programs have widely been considered successful by policymakers, recent actions taken by both Russia and the US threaten their future success (Krepon, 2009, 181). In October 2012, the Russian Federation decided not to extend the Nunn-Lugar CTR agreement, believing that it was no longer “consistent” with the principles of which a meaningful agreement should be based upon (Bresolin, 2013). Russian objections to the proposal extended by the Obama Administration were grounded in three major issues. One was that a major power on the world stage should not be dependent on the financial assistance of another nation (Bresolin, 2013). Russia also did not want to continue forfeiting national security secrecy for assistance which was no longer deemed completely necessary (Bresolin, 2013). The final issue was the US continued pursuit of missile defense. President Vladimir Putin has maintained that while Russia will remain open to cooperative nonproliferation efforts. Putin believes that renewed research and development into missile defense technology presents a more immediate security threat (Bresolin, 2013).

On June 14, 2013, in the presence of former Senators Nunn and Lugar, the Russian Federation and the US signed a new CTR agreement (Lugar, 2013). This new agreement, titled Multilateral Nuclear Environmental Program in the Russian Federation Agreement (MNEPR), significantly reduces cooperation between both nations (Woolf et. al., 2014, 21). Under the MNEPR, the Russian Federation is responsible for all the costs associated with CTR (US Department of State, 2013). This new agreement will commit Russia to continue these programs with a greater degree of autonomy from the US.

Some policymakers wonder how the effectiveness of CTR will continue under the new agreement since the US is drastically reducing its involvement (Guarino, 2013). The US has traditionally developed and contributed a majority of the equipment used in these CTR programs. Without US involvement, efforts may deteriorate (Guarino, 2013). Spending proposals for nonproliferation programs were also decreased in the Obama Administration’s 2014 budget request (Guarino, 2013). If the US is able to continue successful CTR operations with the Russian Federation under this new agreement, it will provide continued justification for the need to expand these programs to other nuclear states that do not currently have CTR agreements in place (Kazi, 2013).

Despite President Obama claiming adamant support for nuclear security programs, the proposed budgets of 2013, 2014, and 2015 all called for greater cuts in CTR spending (Nikitin & Woolf, 2014, 15). This has led some to question the President’s commitment to these programs. However, some costs associated with CTR are not necessarily recurring expenses. Once nuclear material has been destroyed and security measures have been implemented, the funding required for these programs can be decreased as a result of the program’s success (Nikitin & Woolf, 2014, 15). The funding allocated for CTR is also directly tied to specific agreements between the US

and partner nations, as changes in these agreements can impact the funding levels allocated for programs (Nikitin & Woolf, 2014, 15). Plans still remain to continue CTR efforts with Russia, though some members of Congress have grown cautious following the Russian incursion into Crimea. Congress added the provisions to the Defense Authorization Act of 2015 that threat reduction programs could only continue under the conditions that Russia was in complete compliance with all existing arms control agreements and that Russian forces were not stationed in Ukraine (Nikitin & Woolf, 2014, 8). Though recent Russian aggression may have reignited former tensions and security concerns, it seems as though CTR efforts will continue between the US and Russia.

### **US Aid to Pakistan**

The attitude of the US towards Pakistan has fluctuated greatly since the nation's independence. Consequently, throughout history policymakers have allocated Pakistan aid as it pertained to specifically defined objectives, such as the containment of Soviet expansion (Epstein & Kronstadt, 2013, 9). Following the withdrawal of Soviet forces from Afghanistan and Pakistan's continued pursuit of nuclear weapons, aid to Pakistan was cut to historic lows at the beginning of the 1990s (Epstein & Kronstadt, 2013, 9). Although annual aid has fluctuated, Pakistan has received more than \$30 billion in aid since 1948, roughly half, in the form of military assistance (Epstein & Kronstadt, 2013, 1). Secretary of State John Kerry has maintained that Pakistan is a valuable partner, and cutting aid to Pakistan would not be in the best interest of the US, as it would jeopardize nuclear security and nonproliferation efforts (Epstein & Kronstadt, 2013, 5).

Following the September 11 attack, the US increased its aid to Pakistan to transform Pakistan into a stable and willing partner in the war on terror. The aid given to Pakistan has been given with the intention of creating stability, security, and prosperity (Bureau, 2013). Pakistan has steadily become one of the largest recipients of aid, with the nation receiving more than two-thirds of the \$30 billion in aid during the last 15 years (Epstein & Kronstadt, 2013, 1). Table 2.1 below depicts the aid Pakistan received from the US between 2008 and 2012. In 2012, Pakistan was the recipient of more than \$1.2 billion dollars from the US. During 2012, Pakistan was the fifth largest recipient of US aid globally (Greenbook, 2014). A majority of the aid given by the US to Pakistan, is focused on agriculture, energy, economic development, health, education, and stabilization (Bureau, 2013). Though the DOE has given a substantial amount of aid to Pakistan in recent years, the majority of this aid has focused on nuclear power production, and should not be interpreted to be specific assistance with CTR programs (Bureau, 2013).

Though the DOE has given a substantial amount of aid to Pakistan in recent years, the majority of this aid has focused on nuclear power production, and should not be interpreted to be specific assistance with CTR programs (Bureau, 2013).

## THE FUTURE OF COOPERATIVE THREAT REDUCTION PROGRAMS

**Table 2.1: US Aid to Pakistan from 2008 to 2012**

Agency	2008	2009	2010	2011	2012
Department of Defense	N/A	3,000,000	51,967,355	45,390,000	77,200,000
Department of State	59,860,143	158,131,830	370,083,462	157,473,931	181,633,152
USAid	384,733,218	1,086,816,840	1,437,213,625	404,197,678	874,695,107
Department of Energy	784,180,00	1,645,421	701,533	420,506	184,082
Other	9,086,988	89,661,102	142,406,767	151,279,414	81,139,851
<b>Total Aid</b>	<b>532,098,349</b>	<b>1,339,255,193</b>	<b>2,002,372,742</b>	<b>758,761,529</b>	<b>1,214,852,192</b>

Data Source: USAid Foreign Assistance, 2014.

In 2009, Congress passed the Enhanced Partnership with Pakistan Act (Bureau, 2013). As demonstrated in Table 2.1, this aid more than doubled the amount of aid that Pakistan was receiving. The intention of Congress was to reinforce cooperation with Pakistan and demonstrate America’s interest in creating a stable, long- term partnership (Bureau, 2013). Under the conditions of this aid, Pakistan agreed to continue cooperating with the US on efforts to prevent the proliferation of nuclear technologies, knowledge, and materials (Epstein & Kronstadt, 2013, 31). In the 2014 budget, nearly \$18 million dollars was specifically requested to further improve non-proliferation and anti-terrorism efforts. (Epstein & Kronstadt, 2013, 38).

One of the gravest challenges before the Pakistani government has been domestic energy production. The energy shortage has become “increasingly severe over the past decade,” with power outages lasting more than two-thirds of the day in some parts of the country (Epstein & Kronstadt, 2013, 6). The nation currently demands nearly 15,000 megawatts, greater than the nation’s current production levels (Epstein & Kronstadt, 2013, 6). The goal of the US has been to assist Pakistan in boosting energy production by almost 1,200 megawatts annually by the end of 2014 (Epstein & Kronstadt, 2013, 6). In addition to the assistance the nation is receiving from the DOE, Pakistan has sought additional aid from China to build two civil nuclear reactors (Kronstadt, 2011, 64). The severe energy shortages present an opportunity for the US to offer targeted aid to Pakistan.

As the US presence and interest in Afghanistan becomes reduced, the US cannot abandon its interests in Pakistan (Markey, 2014). Conventional wisdom suggests that as the war on terror winds down, a compliant Pakistan will no longer be necessary, so aid should be reduced. However, Pakistan could be a valuable partner for the US as policies become reoriented towards Asia in President Obama’s famous pivot east. A relationship with Pakistan will be necessary to ensure regional stability and continue protecting US security objectives (Markey, 2014). Perhaps, instead of reducing the amount of aid Pakistan receives, the US should consider reallocating it. The creation of CTR agreements with Pakistan will allow the US to continue providing aid to Pakistan, for the purposes of security and stability even though traditional counter terror based military aid will be on the decline. The roots of a compromise might be found in addressing Pakistan’s energy needs and exchanging increased energy production aid for a CTR agreement.

### **Officially Expanding CTR Programs to Pakistan**

Senator Lugar stated that CTR programs need to move and diversify, as security threats spread around the globe (Lugar, 2013). The discussion of expanding CTR programs first began in 2003, and while Congress and President Bush both supported these measures, an agreement could not be reached. As debate raged over how much of the CTR funding could be applied to new



nations, and which agency (the DOD or the State Department) should oversee the distribution of this aid (Woolf, 2012, 61). Comprehensive CTR efforts throughout the former Soviet Union have encouraged terrorist organizations to redirect their efforts to acquire nuclear weapons from new locations in Asia (Lugar, 2013). The recent political instability within Pakistan has once again catapulted the issue of nuclear security in Pakistan to the forefront of policymakers' minds (Kronstadt & Kumar, 2014, 9). Some experts fear that within nations such as Pakistan, the threat exists that weapons could be stolen—or intentionally given by radicals within the government—to terrorist organizations (Woolf, 2012, 62).

The reality of this threat was realized when it was discovered that A.Q. Khan, one of Pakistan's leading nuclear scientists, began trying to sell weapons and centrifuges to buyers (Krepon, 2009, 96). He created two nuclear supply networks, which helped develop both the North Korean and Iranian enrichment programs (Krepon, 2009, 113). Khan's dissemination of nuclear technology, coupled with the growing fear of terrorism, has raised the possibility of creating CTR programs with Pakistan (Joshi & Kassenova, 2008). Al-Qaeda has long sought to acquire nuclear weapons and recruited an MIT educated nuclear scientist to help in achieve this goal (Bergen, 2011, 215). Pakistani nuclear weapons seem prone to the risk of proliferation. With growing political instability within the nation and a growing number of terrorist organizations, the security of weapons is critical (Joshi & Kassenova, 2008).

In 2001, then Secretary of State Colin Powell visited Pakistan to first discuss cooperation on nuclear security (Joshi & Kassenova, 2008). Since Powell's visit to Pakistan, a limited range of programs have been implemented slowly and quietly. The US has provided more than \$100 million dollars in aid to Pakistan to provide equipment, training, and improve personnel reliability (Joshi & Kassenova, 2008). For example, the National Nuclear Security Administration (NNSA) has assisted with training Pakistanis on background checking and personnel security (Joshi & Kassenova, 2008).

There is a limited amount of information regarding security measures currently in place, such as Pakistani use of Permissive Action Links (PALs) to secure their warheads (Joshi & Kassenova, 2008), but it is widely believed by the intelligence community that Pakistan has implemented PAL measures similar to those currently employed within the US (Masse, 2011, 139). One security measure that has been implemented in Pakistan is the "two-man rule" as a control mechanism, where two sets of authorization codes must be implemented before the launch of weapons can be initiated (Masse, 2011, 139). It is also believed that the majority of Pakistan's nuclear weapons are stored in an unassembled state (Levi, 2007, 103). This is advantageous because if unauthorized individuals gain access to these nuclear weapons, they will have to be treated differently than pre-assembled weapons would need to be. The nuclear material will first need to be manipulated and the weapons will need to be assembled before they can be used (Levi, 2007, 103).

Some policymakers believe that there is no realistic threat regarding the security of Pakistani nuclear weapons, as the military seems to have firm control over the weapons (Joshi & Kassenova, 2008). It is estimated that nearly 10,000 military personnel are specially assigned to guard nuclear weapons and nuclear material enrichment facilities (Masse, 2011, 139). All nuclear facilities are surrounded by a security perimeter of physical barriers and advanced weaponry (Masse, 2011, 138). History tells a different story however, as A.Q. Khan and the proliferation of nuclear technology shows the internal dangers of the Pakistani nuclear program and the need for CTR (Joshi & Kassenova, 2008).

## THE FUTURE OF COOPERATIVE THREAT REDUCTION PROGRAMS

Problems still exist, which may prevent the formalization of official CTR programs with Pakistan. First, Pakistan may not be willing to allow the US access to their nuclear weapons and facilities, which may become necessary (Woolf, 2012, 62). Second, there is the possibility that assistance provided to secure facilities, may actually make it easier to launch nuclear weapons. Lastly, the US could run into legal issues by providing economic aid to nations which are not signatories to the Nuclear Nonproliferation Treaty (NNPT) (Woolf, 2012, 62). Under the NNPT, the US has agreed not to transfer technology and components to non-nuclear states (Squassoni, 2005, 16). However, the NNPT is explicit regarding the distribution of PALs and other similar technologies. Currently, only three nuclear powers are not signatories to the NNPT: Pakistan, India, and North Korea (Squassoni, 2005, 11).

If US policymakers decide to ignore the ambiguity in the NNPT and move forward with a CTR agreement towards Pakistan, it is estimated to cost less than CTR efforts have with Russia because the Pakistani nuclear program is much smaller than the Russians (Squassoni, 2005, 25). However, with much unknown about the nuclear program, costs could escalate depending upon technological sophistication needed for sufficient improvements (Squassoni, 2005, 25). An additional complication is the fact that aid will be coming from the US. For more than 30 years, the US has been pressuring Pakistan to abandon its nuclear program. A CTR agreement may be seen as another attempt by the US to rob Pakistanis of their sovereignty (Squassoni, 2005, 22).

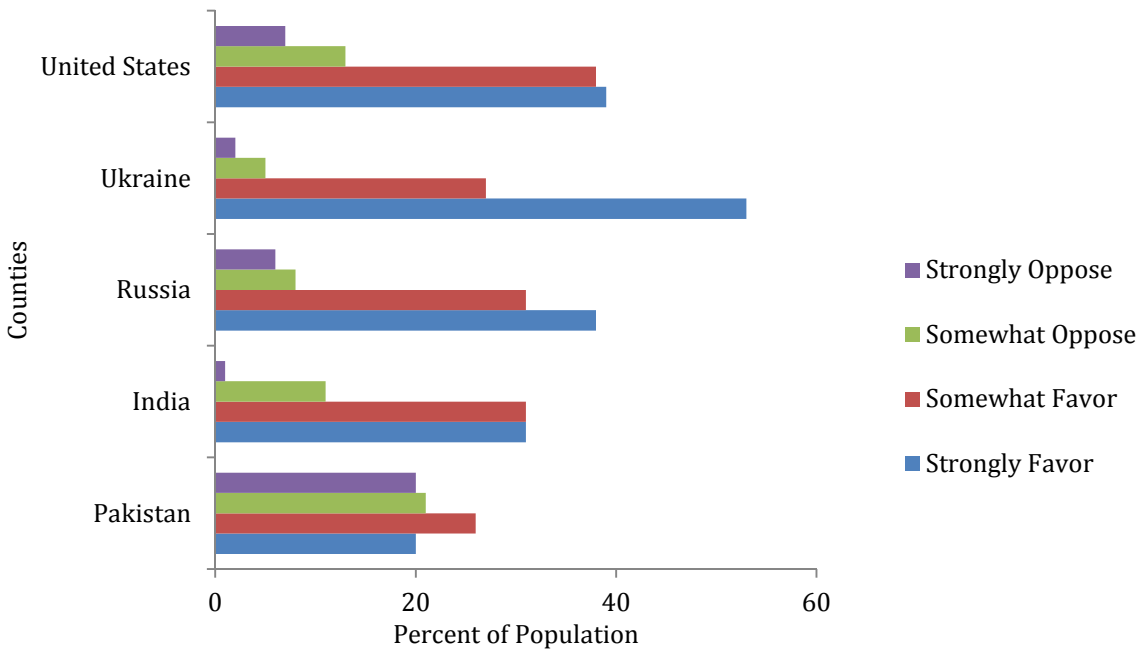
Senator Lugar, the father of CTR, has suggested that the best way to engage Pakistan is to create a joint program engaging both Pakistan and India (Squassoni, 2005, 22). India has shown some interest in these programs. Both nations have large amounts of nuclear material, which is not yet subject to international regulation in either nation (Squassoni, 2005, 11). This is an opportunity for the US to offer diplomatic and administrative assistance to increase border security and export control (Squassoni, 2005, 22-23). The US has already begun civil nuclear cooperation programs with India, without extending similar offers to Pakistan (Kronstadt, 2012, 4). The civil nuclear cooperation agreements promote assistance with nuclear energy production from the US, while increasing efforts to prevent proliferation (Kerr et. al., 2014, 2). The US could present a similar opportunity to Pakistan. The US will have to convince Pakistan that participation in this program will not unfairly benefit India.

When President Obama decided to travel to India in 2010 but not visit neighboring Pakistan, it led many Pakistani leaders to believe that the US was adopting a “pro-Indian” attitude (Kronstadt, 2012, 46). For any CTR program to be effective, the program will have to seem fair and non-threatening to both the Pakistani leaders and the general population (Kronstadt, 2012, 4). Just because policymakers support the expansion of CTR efforts, does not mean that the general public would share their support for these efforts.

### **Public Opinion in the US and Pakistan**

In 2008, a global poll was conducted by 21 research organizations. The poll was created to gauge public support for an international agreement that would eliminate all nuclear weapons (World Public Opinion, 2008). More details were provided to prevent ambiguity surrounding reduction and practicality of such an issue. The results are demonstrated in the following Figure 2.1.

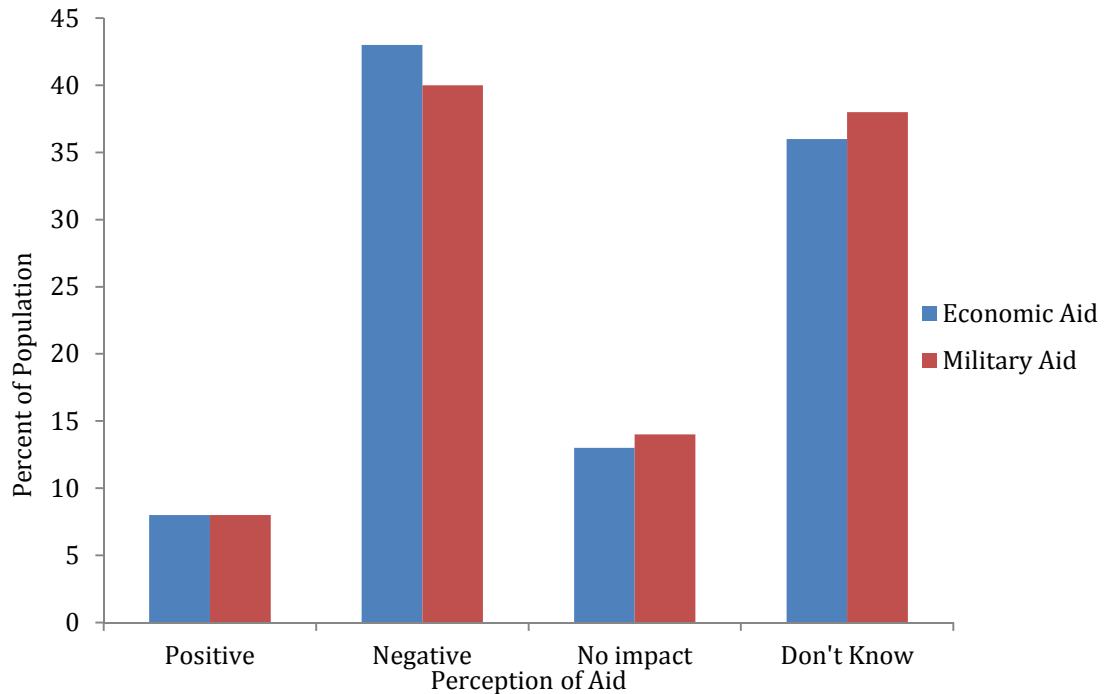
**Figure 2.1: Public Opinion Toward the Elimination of Nuclear Weapons**



Data Source: World Public Opinion, 2008.

The graphic represents public support for non-proliferation. The first three nations (the US, Ukraine, and Russia) are all current partners in the CTR umbrella agreements. India and Pakistan are also included in the graphic, since they are two possible candidates for CTR expansion. While this poll does not show how public perception of nuclear weapons has changed over time, it does highlight two key points. One, the American population largely favors the global reduction of nuclear weapons. This pertains to CTR, as part of the goal of CTR programs is to reduce the proliferation of weapons. Point two, the Pakistani population is the population most opposed to the reduction of nuclear weapons. In fact, of all the nations surveyed, Pakistan had the highest percentage of its population opposing the reduction of nuclear weapons. Previous CTR programs have been implemented with success in nations like Ukraine and Russia, two nations with populations that largely support nuclear reduction efforts. This poses a significant question for policymakers: Can CTR programs be effective in Pakistan, a nation whose population, disproportionately to the rest of the world, opposes the reduction of nuclear weapons?

**Figure 2.2: Pakistani Perception of US Aid**



Data Source: Pew Research: Global Attitudes Project, 2013.

The Pakistanis do not seem particularly supportive of the idea of foreign aid from the US in general, as the above Figure 2.2 demonstrates. Both military and economic aid from the US is largely viewed in a negative light. This may result from the negative view a majority of Pakistanis have towards the US. In December 2013, Gallup again conducted its annual year-end survey. The survey found that 44% of Pakistanis perceived the US as the greatest threat to peace and stability (Win/Gallup, 2013). The US is considered by many to be almost twice the threat of Pakistan’s archrival India, which is believed to be the biggest threat by 15% of the population (Win/Gallup, 2013).

Even though the US was perceived by many polled to be the greatest external threat, there are domestic threats that Pakistanis fear as well. Polls taken show that over 93% of participants considered crime and terrorism to be very serious problems in Pakistan (Pew, 2013). It would be prudent for policymakers to consider allocating aid to specifically address these major areas of public concern. The portion of the population that considers the Taliban to be a threat has grown by 11%, and the portion of the population which considers al-Qaeda to be a threat has grown by 8% (Pew, 2013). After crime and terrorism, the next greatest threats were considered to be illegal drugs and political corruption. Any sort of CTR aid provided by the US needs to be packaged in a way that will be well received by the general public. If portions of the CTR agreement can be created to specifically target political corruption, crime, and terrorism in an effective manner, Pakistan may become more willing to embrace a comprehensive CTR agreement.

Aside from what the public in Pakistan thinks of CTR, it is important to consider what the public in America thinks of these programs. Unfortunately, there is no available data regarding domestic support within the US for CTR programs. The Lugar Center, the Nuclear

Threat Institute, and the Center for Nonproliferation Studies do not have any data regarding public support for CTR programs. Without a poll specifically designed to discuss CTR programs, the only polls which can be relied upon are polls which address the proliferation of nuclear weapons.

The attitude of Americans towards nuclear weapons, especially the proliferation of weapons to terror groups, is quite clear. Nearly 55% of Americans think it is very likely that a terrorist organization will use a nuclear weapon in the next decade (Polling Report, 2015). About 40% of the population believes that through international cooperation, greater control can be implemented to prevent terrorists from obtaining nuclear weapons (Polling Report, 2015). What may be most applicable in the case of Pakistan is that given the choice between reducing the numbers of nuclear weapons controlled by unfriendly nations and preventing terrorist access to nuclear weapons, 77% of the population thought the US should focus on preventing terrorist access (Polling Report, 2015). Based on these polls, it seems highly likely that the general public in the US would support improved efforts to prevent terrorist access to nuclear weapons within Pakistan. It is important that policymakers clearly connect the goals of CTR, with the greater goal of nuclear non-proliferation when presenting future CTR agreements to the American public.

### **Conclusion and Recommendations for Policymakers**

Congress has considered the expansion of CTR programs throughout Asia, as evinced by legislation such as the Cooperative Threat Reduction Modernization Act (H.R. 2314) and the Next Generation Cooperative Threat Reduction Act of 2013 (S. 1021) (Nikitin & Woolf, 2014, 6). Each of these proposed pieces of legislation would have created a new framework and strategy for the expansion of CTR programs (Nikitin & Woolf, 2014, 6). As policymakers in the US pursue a CTR agreement with Pakistan, they must consider a number of key issues

The US must realize the same umbrella agreement created with Russia cannot simply be imposed on Pakistan. Pakistan is not Russia. While components of the CTR agreement with Russia are applicable to any agreement that could be made with Pakistan, the US-Russian agreement was based on a history of nuclear cooperation (Squassoni, 2005, 5). Both nations already had existing agreements to reduce strategic nuclear weapons, CTR became a mutually beneficial way to cooperate on the fulfillment of the treaty obligations which called for reduction of nuclear weapons (Squassoni, 2005, 5). The US and Pakistan do not have a similar, shared history of nuclear cooperation. The Soviet Union and the US negotiated together on nuclear weapons for nearly 20 years before the first CTR agreements were signed. That shared history of trust and coordination could be built upon, making it easier to create the new nuclear agreements which created CTR.

The US should not pressure Pakistan to reduce nuclear stockpiles. While the reduction of nuclear weapons is an admirable goal, it seems impractical that Pakistan would ever embrace the reduction components of CTR. The nation, the military, and the people are proud to have achieved their nuclear independence. While the US and Pakistan seem to have a shared interest in preventing terrorist access to nuclear weapons, it must be clear to the Pakistanis that any future agreement will not come at the expense of the delicate nuclear deterrence they share with India (Squassoni, 2005, 6). By supporting reduction efforts, the US jeopardizes other shared nuclear goals. It is in the best interest of the US to abandon this component of CTR aid, which has been applied to so many of the former Soviet Republics, in the pursuit of more pragmatic components of an agreement.

## THE FUTURE OF COOPERATIVE THREAT REDUCTION PROGRAMS

Any CTR arrangement should offer focused aid on areas of agreement. The US needs to rethink the aid programs it currently provides, and how to transform them to meet the needs of a new CTR agreement. There is some evidence to suggest that secretly, the US is providing some specialized aid to Pakistan to assist with the training of security personnel and funding the construction of improved physical security measures as well (Hersh, 2009). However, if additional measures are to be implemented, they will have to come in the form of formal, publicized international aid. The US should offer aid that will target the concerns of the general public. The social ramifications of CTR programs have been largely unexplored. It would be valuable for policymakers to know the impact that CTR programs have on employment and on the local economy. However, since most Pakistanis believe crime and terrorism to be the greatest threats, aid should be directed with the intent of combating these threats first. With Pakistan's shortage of domestic energy production, the US could increase programs designed to assist with domestic production. This is an issue of concern for the Pakistani public, and an area where the nation has already sought international support. It seems likely that CTR aid which be directly tied to energy production, the reduction of crime, and the prevention of terrorism will be best received by the public.

Policymakers should expand existing aid programs to Pakistan before creating new ones. The US has a number of programs aimed at preventing the proliferation of nuclear technologies. Introducing previously proven programs into Pakistan is a way to ensure an agreement's success at the early stages. One such program is the DOS State Nuclear Smuggling Outreach Initiative (NSOI). The program is part of the US existing CTR obligations. The purpose of NSOI is to improve a state's abilities to "prevent, detect, and respond" to nuclear smuggling and theft (NSIO, 2014). The program strives to develop a cohesive approach to these paramount threats. These programs currently receive the smallest share of the State Department's CTR funding, and they are not employed in south Asia (Nikitin & Woolf, 2013, 31). This partnership should be expanded to Pakistan as one of the first components of any CTR agreement. Expanding existing programs like this will keep a CTR aid program focused on the components of nuclear security which both nations agree upon.

The US should seek an integrated approach when engaging Pakistan. A portion of arms control experts advocate for a more global approach to reducing nuclear weapons, instead of the recurring need to create treaties with individual states (Kissinger, Nunn, Perry & Shultz, 2013). This is an opportunity for policymakers who seek increased control over Pakistan's nuclear weapons. Through a globalized approach, security can be increased without the US having to navigate the political landmines within Pakistan. The recent Nuclear Security Summits provide an example of how the nuclear powers can come together to discuss security and create a diplomatic base for global discussions on nuclear weapons (Kissinger et. al, 2013). Regional conversations are equally important in discussing the practical steps and central security threats (Kissinger et. al, 2013). With regard to Pakistan, this would also allow the US to engage both Pakistan and India without either nation feeling like the US is showing favor to one nation over the other.

Policymakers need to realistically understand the time commitment required for an effective CTR agreement. A comprehensive CTR agreement cannot be expected to blossom overnight. Even after the passage of the legislation and the signing of the treaties formalizing the original CTR programs, the implementation of these programs was a slow process. Within the US, requirements and bureaucracy had to be created for this monumental task. The attitudes and perceptions of all the nations involved needed to change for the new agreements to become

successful (Woolf et. al., 2014, 21). Policymakers cannot fall blind to hindsight but must anticipate similar results to the former Soviet Republics in Pakistan, without expecting similar types of obstacles.

The Nunn-Lugar Act was a landmark piece of legislation, essential for global security. Within the nations of the former Soviet Union, nuclear material and technology was readily available for abuse and misuse. As the world changes and threats continue to evolve, the US needs to diligently pursue new opportunities to ensure that these threats never manifest themselves in reality. As nuclear technology continues to permeate the nations of the world, the US needs to continue engaging new partners to pragmatically combat the threat of nuclear terrorism. With the proper application and understanding, techniques of the past like CTR can continue to provide viable solutions for the future.

## THE FUTURE OF COOPERATIVE THREAT REDUCTION PROGRAMS

### References

- Bergen, P. L. (2011). *The longest war*. New York, NY: Free Press.
- Bureau of South and Central Asian Affairs. (August 16, 2013). US relations with Pakistan. In *Department of State*. Retrieved April 16, 2014.
- Bresolin, J. (July 2013). Fact sheet: The Nunn-Lugar cooperative threat reduction program. In *The Center For Arms Control and Non-Proliferation*. Retrieved April 6, 2014
- Davis, J. C. (2012). *Improving metrics for the Department of Defense cooperative threat reduction program*. Washington, DC: National Academy of Sciences.
- Epstein, S. B. & Kronstadt, K.A. (2013, July 1). *Pakistan: U.S. Foreign Assistance* (CRS Report No. R41856). Congressional Research Services.
- Polling Report. (2014). Foreign affairs and defense issues: Arms control, weapons of mass destruction, missile defense. Retrieved January 2, 2015.
- Guarino, D. P. (2013, June 24). Lugar expresses optimism, concern on future of WMD Security. In *Nuclear Threat Institute*. Retrieved March 24, 2014.
- Greenbook: US Overseas loans and grants (March 28, 2014). In *USAid: From the American People*. Retrieved April 14, 2014.
- Hersh, S. M. (November 16, 2009). Defending the arsenal: In an unstable Pakistan, can nuclear warheads be kept safe? [Electronic version]. *The New Yorker*.
- Joshi, S., & Kassenova, T. (August 4, 2008). Cooperative threat reduction and Pakistan. In *The Nuclear Threat initiative*. Retrieved April 5, 2014.
- Kazi, R. (January 23, 2013). Extend the Nunn-Lugar Cooperative Threat Reduction program. In *E-International Relations*. Retrieved April 5, 2014.
- Kerr, P.K., Nikitin, M. B. D., & Holt, M. (December 8, 2014). *Nuclear Energy Cooperation with Foreign Countries: Issues for Congress* (CRS Report No. R41910). Congressional Research Services.
- Krepon, M. (2009). *Better safe than sorry: The ironies of living with the bomb*. Stanford, CA: Stanford University Press.
- Kronstadt, K.A. (January 13, 2011). *Pakistan: Key Current Issues and Developments* (CRS Report No. R41307). Congressional Research Services.
- Kronstadt, K.A. (May 24, 2012). *Pakistan-U.S Relations* (CRS Report No. R41832). Congressional Research Services.



- Kronstadt, K.A. & Kumar, S. (September 3, 2014). *Pakistan Political Unrest: In Brief* (CRS Report No. R43717). Congressional Research Services.
- Kugler, R. L. (1994). U.S. military strategy and force posture for the 21st Century: Capabilities & requirements. N.p.: National Defense Research Institute/ RAND.
- Kissinger, H. A., Nunn, S., Perry, W. J., and Shultz, G. P. (March 5, 2013). Next steps in reducing nuclear risks. In *Nuclear Threat Institute*. Retrieved April 5, 2014.
- Levi, M. (2007). *On Nuclear Terrorism*. London: Harvard University Press.
- Lugar, R. (June 20, 2013). The Lugar Center. In *The New U. S.-Russia Nunn-Lugar CTR Agreement*. Retrieved April 6, 2014.
- Markey, D. S. (2013). *Reorienting U.S. Pakistan strategy: From Af-Pak to Asia*. N.p.: Council on Foreign Relations. Retrieved April 13, 2014
- Masse, T.M. (2011) *Nuclear Jihad: A Clear and Present Danger?* Washington D.C.: Potomac Books.
- Nikitin, M. B. D., & Woolf, A.F. (June 13, 2014). *The Evolution of Cooperative Threat Reduction: Issues for Congress* (CRS Report No. R43143). Congressional Research Services.
- Nikitin, M. B. D., & Woolf, A. F. (July 8, 2013). *The Evolution of Cooperative Threat Reduction: Issues for Congress* (CRS Report No. 43143). Congressional Research Service.
- Nuclear Smuggling Outreach Initiative (NSOI) (2014). In *Department of State*. Retrieved April 22, 2014.
- Nikitin, M. B. D., (March 7, 2012). *Securing Nuclear Materials: The 2012 Summit and Issues for Congress* (CRS Report No. R41169). Congressional Research Services.
- Pew Research Center. (May 7, 2013). On eve of elections, a dismal public mood in Pakistan. Retrieved April 23, 2014.
- Sarkesian, S. C., Williams, J. A., & Cimbala, S. J. (2008). *US national security: Policymakers, processes, & politics* (4th ed.). Boulder, CO: Lynne Rienner.
- Squassoni, S. (2005). *Nuclear threat reduction measures for India and Pakistan* (CRS Report No. RL3158). Congressional Research Service.
- Spar International/ SPARTA, Inc. (March, 2001). *The future of the cooperative threat reduction program*. Retrieved April 5, 2014.

## THE FUTURE OF COOPERATIVE THREAT REDUCTION PROGRAMS

US Department of State, Office of the Spokesperson. (June, 2013) *A New Legal Framework for U.S.-Russian Cooperation in Nuclear Nonproliferation and Security*. Retrieved March 25, 2014.

Win/Gallup International. (2013). End of the Year 2013: Pakistan. *Worldwide Independent Network*. Retrieved April 21, 2014.

Woolf, A. F., Kerr, P.K., & Nikitin, M. B. D. (July 21, 2014). *Arms Control and Nonproliferation: A Catalog of Treaties and Agreements* (CRS Report No. RL33865). Congressional Research Services

Woolf, A.F. (March, 2012). *Nonproliferation and Threat Reduction Assistance: U.S. Programs in the Former Soviet Union* (CRS Report No. RL31957). Congressional Research Service.

World Public Opinion Poll. (2008). World publics on eliminating all nuclear weapons. Retrieved: April 22, 2014.