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The 2011-2012 Baker Institute Student Forum Research Committee is pleased to present the third issue of the Rice Cultivator, a student journal on local, national, and international public policy topics.

This edition marks the expansion of the journal. In addition to the inclusion of full-length research articles written by Rice undergraduates, this edition also includes a new section, News and Views. Together, the two sections continue to promote the journal's mission: to showcase the innovative research projects of Rice University undergraduates and to promote thoughtful, reasoned dialogue about public policy within the Rice community.

The Rice Cultivator is entirely student written, edited, and published. The Rice Cultivator is offered online to promote wide and environmentally friendly access. We would like to thank all of its contributors, especially the Baker Institute Student's Forum faculty advisor, Joe Barnes, Bonner Means Baker Fellow, without whose support the journal would not be possible.

We hope the journal will continue to advance Rice University's mission to offer its students extraordinary opportunities for research and for engagement with pressing world issues. Consonant with the aims of the James A. Baker III Institute for Public Policy, we also hope this volume continues to contribute a meaningful voice to public discourse on important policy questions.

Please note that all views expressed herein reflect solely the opinions and perspectives of the authors and do not necessarily represent the views of the James A. Baker III Institute, Rice University, or the Baker Institute Student Forum.

We leave you to your enjoyment.

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UNRESTRICTED INTERNET ACCESS: A BASIC HUMAN RIGHT

BY BATOUL ABUHARB

UN Special Rapporteur on freedom of opinion and expression Frank La Rue presented his latest report in Geneva to the Human Rights Council on June 6, 2011 stating that Internet access was a basic human right. The report emphasized that restrictions and limitations on content that can be accessed on the Internet is in violation of Article 19 of the International Covenant on Civil and Political rights. Article 19 states that every person should have the freedom of expression, including the freedom “to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice” (UNHCHR 2011). According to La Rue, the sharing of ideas and thoughts on the Internet is a form of expression and thus should be guaranteed protections similar to that of other forms of communication (UNGA 2011).

La Rue’s report came at a critical time as protestors across the Middle East and North Africa used the Internet to mobilize followers, gather supporters, organize protests, and spread their message to as many people as possible. At the height of the Egyptian revolution in January 2011, government officials shut down Internet and cell phone services across the country in an attempt to quell the rebellion and silence the protestors (Keating 2011). The Libyan and Syrian governments soon followed suit in March and June 2011, respectively (Flock 2011). These cases of Internet shutdowns were unprecedented moves, and led many to question if governments possessed the right to use these powers.

While government intervention in shutting down internet and cell phone

services has recently been brought into light as a result of the Arab Spring protests, the move is not new. In 2005, in an attempt to weaken the opposition, King Gyanendra of Nepal shutdown Internet, fax, and mobile phone services in the country during an attempted coup against him (Sutter 2011). Similarly, in 2007, the Burmese government also shut down Internet access in the country as part of a crackdown attempt on protestors (Pallister 2007). Authoritarian governments around the world are increasingly recognizing the power of the Internet in rallying a population and providing the people with the power to influence change, a prospect posing an immediate threat to authoritarian governments everywhere.

According to data from The World Bank there were over 1.8 billion Internet users across the world in 2009 (World Bank 2009). Information on the Internet has the potential to reach many, many people across the globe, and has made the dissemination of knowledge and the sharing of ideas and thoughts incredibly easy. La Rue’s report stressed that sharing thoughts and ideas on the Internet is a real form of expression and should be respected and treated as such. Governments across the globe use sophisticated censorship methods to limit access to online content that the Government deems inappropriate. In his presentation he mentioned the arrest of over 100 bloggers around the world in 2010 on charges related to the content of their expression on the Internet (UNGA 2011). This is a clear example of attack on individuals and their freedom of expression by these authoritarian governments that goes beyond restricting an entire country’s access to the Internet. Individuals are being arrested and detained for exercising their right to express

themselves freely.

The report underscores that limited Internet access poses a serious threat to pro-democracy and peaceful protest movements. The Egyptian revolution would undoubtedly have been more difficult to coordinate and potentially unsuccessful at reaching such a large audience without the help of the Internet. The Internet is the ultimate tool for spreading a message and rallying people behind a cause and has the potential to allow individuals to do almost anything from sharing pictures with friends to starting a revolution. The realization of the power of the Internet has not only inspired to the UN to extend the protection of the rights of individuals to access the Internet, but has also been interpreted as a threat by authoritarian governments as they realize the Internet will work to keep them accountable.

Moreover, the Internet represents a new kind of media that allows people all over the world to interact, communicate, and share ideas. As such, the expression of opinions on the Internet should be afforded the same protections, importance, and recognition as any other form of expression. As technology develops and new media emerge that improve the sharing of knowledge, it too should be protected by international law and access to it should be viewed as a basic human right just like the Internet.

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IMPLICATIONS OF *SHERLEY V. SEBELIUS* FOR US STEM CELL POLICY

BY MONICA MATSUMOTO

Human embryonic stem cells (hESCs) have exciting applications in regenerative medicine and therapies for diseases such as spinal cord injuries, diabetes, Alzheimer's, and heart disease. hESCs, which are isolated from early-stage embryos, are unique and especially valuable due to their self-renewal and pluripotency – their ability to differentiate into any type of cell. However, hESC research is ethically and socially controversial because creating a hESC line requires the destruction of a human embryo (Doerflinger 2010). Currently, the US lacks a defined policy to regulate hESC research, culminating in the *Sherley v. Sebelius* lawsuit that could potentially restrict federal funding and hESC research.

hESC research has been eligible for federal funds since August 9, 2001, when President George W. Bush issued an executive order that allowed funding of lines created before that date – ultimately totaling 21 hESC lines (Bush 2007). In March 2009, President Barack Obama issued an executive order to expand hESC research, which was followed by the release of new guidelines for research by the National Institutes of Health (NIH) – a government institution that funds biomedical research (Obama 2009; National Institutes of Health 2011).

The debate over federally funded hESC research recently reached the courts in the *Sherley v. Sebelius* lawsuit. The plaintiffs, Drs. James Sherley and Teresa Diesher, challenged the eligibility of hESC research for federal grants, claiming that hESC research violates the Dickey-Wicker Amendment – a rider added to the appropriations bill for NIH funding each year since 1996. The amendment prohibits the use of federal funds for research in which “embryos are destroyed” (Livingston

1996). In August 2010, a US district court judge issued a preliminary injunction to halt NIH funding of hESC research because he interpreted the new NIH guidelines as violating the amendment (Lamberth 2010).

Shortly thereafter, the Obama Administration appealed the district court decision, and a US Court of Appeals suspended the preliminary injunction. Ultimately, the injunction was overturned, allowing NIH funding to resume, but not before scientists lost confidence in US policy stability (Levine 2011; Ginsburg 2011). The case has been sent back to the district court, awaiting a ruling over the merits of the case, but there will likely be additional appeals regardless of the decision, so the lawsuit may even reach the Supreme Court.

A ruling in favor of the plaintiffs, and a subsequent halt in hESC federal funding, would devastate hESC and biomedical research, as well as the development of therapies for ailments such as cancer, neurodegenerative and cardiovascular diseases, and other critical disorders with no other treatment. Since 2002, the NIH has invested \$546 million in hESC research, so discontinuing grants would also jeopardize projects that are currently underway and would be an immense waste of funding (Collins 2010). Although private grants are exempt from the decision, these sources would be unable to sustain all the current and future projects in the absence of NIH grants. Additionally, many scientists would likely lose their positions, the US would fall behind internationally in biomedical research, and scientists may instead move abroad to conduct research (Collins 2010).

The policy uncertainty underlined in

the *Sherley v. Sebelius* lawsuit negative affects stem cell research in the US. Congress should make it a priority to stabilize the policy environment by passing legislation to define the federal stem cell policy and codify Obama's 2009 executive order for hESC research.

Due to the promising research surrounding hESCs, as well as the substantial federal funds that have already been invested, the highly anticipated outcome of this case will have far-reaching consequences for the entire American population.

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THE HOA: ENEMY OF SOLAR PANELS

BY ERICA OJONG

With growing concerns over global warming, it is now socially laudable to strive for home energy conservation. Or is it? Surprisingly, there is still some opposition to the average homeowner simply trying to install solar panels. This opposition comes from the Homeowners Association, or HOA. Just a few months ago, a Mr. John Thoppell tried to install solar panels on the roof of his Austin suburb home. His efforts were rejected by the HOA because the panels were visible to the neighbors (Price 2011). This shocked me on a personal level. I also live in Austin, a city where Whole Foods headquarters is located and sustainability is almost a way of life. However, Mr. Thoppell's story is not an isolated case. In 2009, a NY Times blog reported that homeowners from California to New Jersey experienced the same opposition (Galbraith). HOAs repeatedly denied homeowners the right to install solar panels simply because they were not aesthetically pleasing. Maybe beauty is subjective...

With all the fervor for sustainability surrounding much new construction (i.e., LEED, Energy Star), it is almost unbelievable that making existing construction more sustainable is even garnering opposition at all. To make matters worse, present government reaction to the issue is sadly anemic. Some existing laws referring to solar panels are vague or only apply to new construction (Galbraith 2009). Others contain statements like the following in *California Civil Code Section 714(e)*: "Whenever approval is required for the installation or use of a solar energy system, the application for approval shall be processed and approved by the appropriate approving entity in the same manner as an application for approval of an architectural

modification to the property, and shall not be willfully avoided or delayed" (FindLaw).

Because of this kind of clause, the standards of the HOA can be sustained. It is surprising that the government is not moving quickly to rectify this problem. At least in Texas, legislators already recognize that there is an issue with HOAs and solar panels. As of 2009, Texas legislators have been considering a bill that will prevent HOAs from banning solar panels (Galbraith). Nevertheless in 2011, there is still no sign of some Texas HOAs giving up their mandates (as evident in Mr. Thoppell's case).

Although HOAs are beneficial in maintaining the general image of a neighborhood, it is ridiculous that aesthetic concerns are a priority over imperative issues like energy conservation. On a national level, the HOA solar panel issue renders President Obama's "Clean Energy Economy" ineffective in some cases. President Obama says the following of a Clean Energy Economy program designed to promote solar energy (among other options): "Making Homes More Energy Efficient: Recovery Through Retrofit will eliminate key barriers in the home retrofit industry by providing consumers with access to straightforward information about their home's energy use, promoting innovative financing options to reduce upfront costs, and developing national standards to ensure that workers are qualified and consumers benefit from home retrofits" (U.S. General Services Administration 2011, 8).

The key barriers to solar panels do not just include finance, information, or standardization. They also include the legal aspect. At a state and national level, the

government needs a law or mandate specific to easing the process of improving home sustainability. A White House backed program is not adequate. We also need the law to support all home sustainability initiatives.

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A THREE-PRONGED SOLUTION TO THE U.S. ECONOMY

BY NEERAJ SALHOTRA

As a college student watching the United States economy slide into an abyss, I am immensely worried. I am worried that when I graduate jobs may not be plentiful. I am worried that robust economic growth may become a bygone phenomenon for the United States. I am worried that Washington is lacking smart, courageous leaders. But, despite all these worries, I take solace in knowing that all is not lost—the United States can recover. By enacting the right policies, the United States can boost economic growth, can create jobs for Americans, and can help country reduce its deficit.

But, for such a dream to come true, the United States will need to realize that, as former Secretary of Treasury Larry Summers recently noted, “[T]he biggest problem the country has right now is not the budget deficit. The biggest problem the country has right now is the jobs deficit” (Summers 2011). With 24 million Americans unemployed or underemployed, or struggling with work; 9.1 percent unemployment (BLS 2011); and almost five job-seekers for each opening (Shierholz 2011), policymakers must focus on how to put Americans back to work and how to grow the economy. The only real way to solve America’s budget crisis is economic growth, which will come through boosting employment and getting consumers spending again. The United States should focus on a three-pronged plan to fix the economy — short-term job creation, medium-term tax reforms and spending cuts, and long-term entitlement reform.

In the short run, with consumers buried under a mountain of debt, the government must invest to put Americans back to work. Specifically, Congress should

pass a national infrastructure bank (a measure that has bipartisan support) that can leverage public and private funds to create a modern-day Works Progress Administration to repair America’s dilapidated infrastructure (Kerry and Hutchison, 2011). With borrowing costs at about 2 percent, construction-sector unemployment higher than 13.5 percent (BLS Construction 2011) and America’s infrastructure graded at “D,” this is an opportune time for infrastructure investments (American Society of Chemical Engineers 2009). Such a policy would increase demand causing businesses to hire more and invest the \$2 trillion in cash on which they are sitting (NPR 2010). Put simply, with the private sector in neutral, the government represents the only means to increase demand (and, by extension, jobs).

In the medium run, the United States must begin to get its fiscal house in order. This policy should feature both tax reform and moderately phased-in spending cuts that minimize the immediate shock to the economy. The president and congressional leaders have identified \$1.5 trillion in spending cuts (both domestic discretionary spending and military) that can and should be made (Silverleib and Cohen, 2011). In tandem with the spending cuts, the government must increase revenue by reforming the tax code. Specifically, the government should end the regressive mortgage-interest deduction that disproportionately benefits the upper-echelon of society and will cost taxpayers more than \$500 billion over the next five years (Klein 2011). The government should also close the loophole allowing hedge fund managers preferential tax treatment; this tax expenditure costs the country \$20 billion annually (Reich 2011). Finally, the

government should allow the Bush tax cuts to expire, which will address 75 percent of the deficit problem in the medium term (Leonhardt 2011). In the medium term, the nation needs a suite of spending cuts and tax reforms to address the fiscal problem.

Finally, in the long run, the United States must address entitlement spending (Social Security, Medicare, and Medicaid), which is out of control. While the exact policy options are not clear, the government must make these programs solvent while preserving their integrity. The answer is not distributing vouchers for Medicare or awarding block grants for Medicaid; but rather, enacting substantive reforms that reduce the cost of, but do not destroy, the social safety net.

This three-step approach — short-term job creation, medium-term tax reforms and spending cuts, and long-term entitlement reforms — will help end the current economic mess and show that the United States is serious about fiscal restraint. But, let me be clear, the most pressing challenge facing the nation is the 24 million Americans who are unemployed or underemployed. So, before we talk about balanced budget amendments, the deficit, or the national debt, let's remember the millions of Americans who are struggling to provide for their families.

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SHOTS IN THE DARK: NATIONAL DEFENSE AND PUBLIC HEALTH

BY JORDAN SCHERMERHORN

In 2007, 80% of American funds allocated to fight disease abroad were distributed to combat the “big three” infectious diseases: HIV/AIDS, tuberculosis, and malaria (Moran 2009). This focused effort has continued throughout President Obama’s administration, with 70% of global health funds over the next six years designated for AIDS initiatives alone (Hotez 2009). The focus on these particular afflictions is entirely justifiable: all have the potential to spread very rapidly, high mortality rates, and the capacity to develop into serious chronic conditions. Tuberculosis and HIV in particular are notorious for drug resistance, making a steady source of funding for novel treatments all the more important.

This focus, however, has allowed several infections, such as dengue fever, cholera, and schistosomiasis, to become known as the Neglected Tropical Diseases (NTDs). NTDs are often water-borne or parasitic, more likely to be short-term in individuals with adept immune systems, and are less likely to be immediately fatal on their own – though they pose, particularly for young children, a very legitimate danger. Most importantly, they vastly and disproportionately affect low-income populations and are not, by and large, a problem for developed nations (WHO 2010). Though debate has ensued on whether the best approach to tackling this problem would be to focus on treating the diseases themselves or improving local infrastructure, hygiene practices, and water quality, it is undeniable that, at least in terms of international research priorities, the neglected diseases live up to their name.

Several labs focused on tackling these diseases, however, are not funded by organizations such as the Gates and Clinton

Foundations - both well-known for their work combating infectious disease. Overseas laboratories operated by the U.S. Army and U.S. Navy, under the banner of the Department of Defense, have quietly researched treatments and prevention methods. A report by the Center for Strategic and International Studies, released in June 2011, provides an in-depth analysis of the work these labs have conducted in public health. General findings include more frequent than expected interactions with regional health centers and an unexpected focus on diseases relevant to the endemic population – including HIV and malaria, as well as several NTDs (Peake 2011, 1-10). While these may initially seem to be questionable priorities for the United States Defense Department, it makes sense that these units must work to protect first-world soldiers from third-world diseases: in spite of barriers such as vaccination, housing, and low malnutrition, American service members abroad are still susceptible to diseases endemic to the regions in which they serve, particularly in areas of dubious water quality.

Politically unstable regions of the world serve as bastions for Western diseases of the past, affording the United States the opportunity to use health as a policy tool. For example, in an effort to genetically confirm the presence of Osama bin Laden in his Abbottabad compound, the CIA conducted a fake hepatitis B vaccination drive in which only 2 of 3 courses needed to ensure protection were administered. As this story broke, it instilled a culture of mistrust surrounding vaccination in the region, and may have crippled efforts to eradicate polio, a neglected disease with a reliable vaccine for which Pakistan is largely considered the

last stronghold (Lenzer 2011). As of mid-September 2011, 84 cases of polio had been reported in Pakistan – almost twice the incidence for the whole of 2010 – with one known case spreading to China, which had previously been free of indigenous cases for 17 years (BBC 2011).

Despite potential for abuse, efforts on behalf of the defense department to combat neglected health problems are important and should remain a funding priority. Health technologies appropriate for use in combat situations are often identical in need to those appropriate for low-resource settings abroad: point-of-care diagnosis is critical in high-pressure situations, refrigeration may not be available, and disposable or reusable technologies may save lives. Overseas labs, with long-established relationships with regional organizations in disease-ridden locations, have the power to function at the interface of international aid and international security - and the political goodwill the United States can develop from work in relevant international health abroad should not be underestimated.

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EVALUATING THE USG RESPONSE TO THE TUBERCULOSIS EPIDEMIC

BY YE JIN KANG

ABSTRACT. Tuberculosis (TB) has consistently ranked as one of the leading killers in many demographic groups in numerous countries. Dangerous factors posed by TB include its ability to cause bodily harm by working in tandem with AIDS and the evolution of drug-resistant strains. Recognizing that TB is a strategic issue concerning the welfare of citizens worldwide, as infectious disease knows no political or geographic borders, this paper will evaluate USG (US government) TB policies in the context of the global response to TB and then provide recommendations for improving the USG's contributions to the world's fight against TB. A historical evaluation of the USG's policies to fight the TB epidemic show that a refinement in US government aid policies over the past decade, particularly during the Bush Administration, has the USG taking a global leadership role on this pressing problem. However, current research proves that these measures are not enough - a much more collaborative effort among different bureaucratic institutions such as the CDC, NIH, and USAID, and a more insightful and sustainable endeavor is necessary.

INTRODUCTION

Infectious diseases are a hazard to humanity because they can potentially spread worldwide across different political or geographical borders. The World Health Organization (WHO) reports that various infectious diseases claim more than 11 million lives annually (WHO 1999). Though emergency aid from organizations has reduced the pervasive levels of infectious diseases, it remains rampant in impoverished areas where people have limited access to treatment and adequate sanitation. Also, a lack of developmental aid, low case detection rates, and poor coordination among aid organizations further exacerbates the problem. This paper focuses on TB, a disease that thrives on these contributing factors. Because of its potency and universality TB is an issue of strategic presidential importance. This paper provides a portrait of the USG contributions to fighting this global disease. More specifically, it will examine the history of US involvement in the fight against TB and

analyze the roles of different sectors of US Federal bureaucracies. Where possible, the paper also provides an assessment of areas in which policy expansion or improvement would further address the challenge of TB.

TB AS A STRATEGIC ISSUE

Infectious disease control is a strategic issue for the US as diseases can reach the US or infect Americans who travel overseas via present modes of trade and transportation. Traditionally, Americans fear newly emerging infectious diseases that have appeared in the past 20 to 30 years, most notably in the 21st century AIDS and SARS. This anxiety is rooted in the tendency to be wary of the unknown, even when historically familiar diseases such as TB have greater prevalence levels worldwide. However, this division between new and old, familiar and unfamiliar is exceptionally misleading. Newly emerging strains of drug-resistant TB are well documented, which makes TB a unique problem that is both global and new, warranting a new vision and

approach.

Thus, improved leadership by the US for TB can strategically work in multiple ways. This paper will later provide recommendations for how the USG can do so. The US can prevent TB from spreading to more areas as well as halt newly emerging strains of drug-resistant TB. The precedent that the USG sets to fight TB can transfer to combating future diseases that are historically old or newly emerging. Historical efforts by the US, and specifically the Federal government to help fight other infectious diseases show that the US has provided previous specific leadership on a particular infectious disease (i.e. in 2003, PEPFAR for AIDS, and in 2005, President's Malaria Initiative for malaria).

Improved leadership is also a strategic move by the USG to help boost the global economy, as the world's poorest communities suffer from a total loss in income of about \$12 billion annually due to TB (WHO 1999). Infectious diseases cause adults to be less productive and damage the physical and mental development of children. The stigma received from having an infectious disease can destroy relationships and make it difficult for him to function in society. Because impoverished communities create an optimal environment for the spread of infectious diseases, and the resulting illness leads to a decline in a population's productivity, infectious diseases trap nations in a cycle of poverty. We need to eliminate the conditions that sustain this cycle, such as poor hygiene, low detection, and a weak healthcare infrastructure (Health Poverty Action 2011).

A DANGEROUS PATHOGEN

TB is not only a strategic issue, but also a moral issue as the cures exist for those who

are ill but not for those who are poor and ill. Over 95% of TB cases are found in developing countries where poverty is rampant. Another contributing factor, in addition to the circumstances that fuel and sustain the cycle of poverty, is the lack of access to drugs for those in developing countries. While the initial round of antibiotics for TB in the 1950s brought a huge victory in the domestic U.S. fight against TB, TB quietly lived on in impoverished countries where people lacked access to these drugs.

Today, out of the world's population, a third holds the TB bacteria in their bodies – again, one finds the majority of cases found in developing countries. Annually, nine million or more of these people eventually develop “active” TB – this process can occur at any point in their lives. The TB bacterium lies dormant without causing symptoms until the host immune system grows weak and permits its renewed emergence; causes of a weakened immune system include lack of nutrition or the presence of another disease that compromises the immune system. A single person with TB can transmit the disease up to ten people a year. Chillingly, TB can infect a new person every second. Recognizing the imminent need to address TB in 1993, TB was designated by the WHO as a global emergency. The figure below shows the regions of the world designated by the WHO as being of high burden (KFF_Global Tuberculosis 2011). See figure 1.

TB has built its presence in over 150 countries over thousands of years due to its ability to infect people through the air. 81% of new TB cases occur in twenty-two “high-burden countries (HBCs).” The most recent reports of TB, compiled in 2009, show that about 14.0 million people live with active

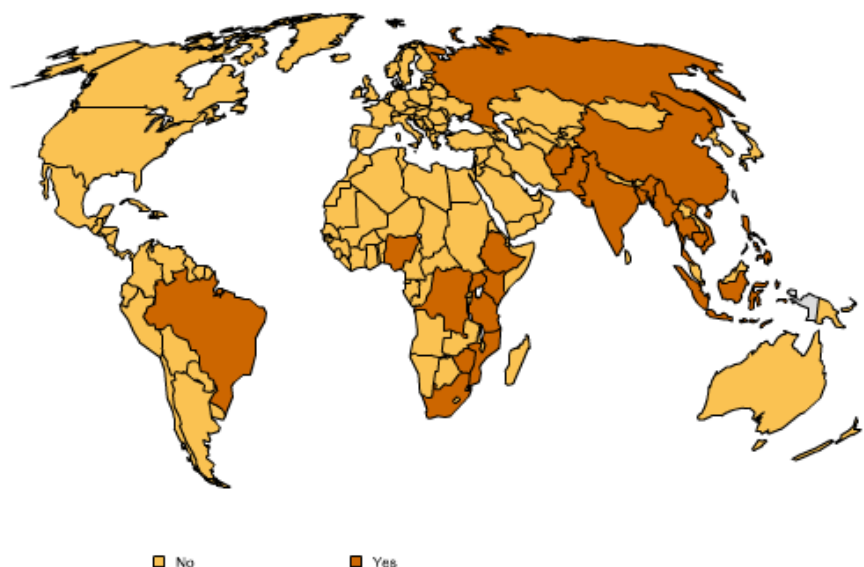


Figure 1. High Burden Regions of the World (KFF_Global Tuberculosis 2011)

TB. 9.4 million of these people were new cases. An estimated 1.7 million TB deaths occurred in 2009, and 400,000 of these patients were co-infected with HIV and TB (KFF_Global Tuberculosis 2011).

The potency of TB lies in its ability to increase a patient's chance of developing further diseases because the TB bacterium weakens the immune system. TB is the second leading cause of death in the 15-29 age group after HIV/AIDS in the WHO African Region (Browning 2010). This destructive TB-HIV synergy has created a number of challenges in diagnosis, treatment, and delivery of drugs. The lack of integration in services for both diseases often means a patient is diagnosed for one disease and left untested for the other.

Despite efforts by international disease control agencies, the rate of decline of TB is less than 1% a year. As TB is a chronic disease, it results in a lower quality of life and has unforeseen consequences. For example, many TB patients lose their jobs since employers are afraid of the disease spreading to others. When schoolteachers cannot show up to work and the school

cannot find a replacement, as is often the case in disadvantaged communities, the students suffer from lack of instruction.

When parents succumb to TB, their children suffer as well. They have to take over household duties and work to help pay for food or medicine. Thousands of hours of lost productivity occur because the sick cannot go to work, directly impacting the economy. While TB treatment is often free, associated costs with treatment such as a proper diagnosis and transport to clinics can cost up to 8-20% of annual household income for TB patients (US Congress – Multi-drug Resistant Tuberculosis 2008). Health economist Franque Grignard estimates that two years of treatment of MDR-TB costs \$20,000 per individual. A staggering but potentially encouraging statistic shows that just a 10% reduction in cases of TB can cause a 2 % increase in economic growth in some Eastern European countries such as Ukraine (Browning 2010). Economists extrapolate that a 50% reduction in TB-related mortality deaths would cost the US \$900 million annually. However, 22 million people could be cured, 16 million

deaths could be avoided, and \$6 billion dollars could be saved (Fonkwo 2011). The high costs of TB treatment as well as the potential spin off benefits gained through recovery clearly show that TB is a huge barrier to sustainable development.

PRESSING PROBLEMS IN TACKLING THE PATHOGEN

Countless factors contribute to the persistent existence of TB. It is difficult to diagnose, as the most common symptoms resemble the flu: coughing, fever, and loss of weight. Even when TB is diagnosed, there are yet more complications. Mr. Richard Skolnik, a Professor of Global Health at George Washington University, expresses the following view. “Drug susceptible TB is curable. However, the drugs for curing this TB are very old. In addition, one has to take a number of drugs for four months and then two drugs for two months, which makes it hard for patients to comply with treatment. In addition, some TB is resistant to one or more of the drugs used to treat it.”

The evolution of these new strains of TB, called drug-resistant TB, complicates the situation a hundred fold. The drugs for these strains of TB are more expensive and patients have to take them for a longer period. Recognizing that some strains of TB are not curable with any drugs on the market at all is quite morbid.

WHO has documented drug-resistant TB in every country surveyed, which makes the lack of laboratory capacity in Sub-Saharan countries and Eastern Europe especially alarming. Multidrug-resistant TB (MDR-TB) is TB that is resistant to isoniazid and rifampicin, the two most commonly used drugs used to fight the disease. Extremely-drug resistant TB (XDR-TB) is a condition where patients are resistant to drugs used to treat MDR-TB (US

Congress –Multi-drug Resistant Tuberculosis 2008).

Eradicating TB requires a careful coordinated approach among multiple different players: medical practitioners, scientists, and policymakers. However, even a perfectly harmonized approach is not enough if cultural and social issues impacting communities are ignored. Prevalent stigma towards TB patients further demonstrates the importance of addressing these issues. Stigma holds patients back from seeking testing for TB even if they are in desperate need of medical attention. This proves to be an enormous obstacle as these hesitant patients can then unknowingly transmit TB to others (Stigma 2010).

GLOBAL RESPONSE

Recognizing the need to prevent TB from spreading and to keep drug resistant strains at bay, one of the UN Millennium Development Goals (MDGs) developed in 2000 by a large assembly of member states was to halt and reverse the incidence of TB by 2015. The WHO set up a Stop TB Partnership, a collaborative effort that now includes over 1200 organizations worldwide and growing, to catalyze the effort towards meeting the MDG. This landmark approach was vital since it was the first integrated approach among different organizations to eliminate TB (The Global Plan 2006). Partnerships create a platform for dialogue and debate on best practices for successful elimination. Policies can be created that utilize the knowledge of locals in developing countries, potential obstacles to successful implementation of new drugs and vaccines can be identified and addressed in a timely manner, and programs can be more tailored to each individual country's needs.

In Davos, Switzerland at the World Economic Forum, the Stop TB Partnership released the *Global Plan to Stop TB 2006-*

2015. This strategy laid out concrete measures to help eliminate TB as a public health problem and is the cause of much success in reducing the prevalence and incidence levels of TB today. Specific targets set by the Stop TB Partnership included reducing by 50% the prevalence levels of and deaths due to TB compared to levels found in 1990. Eradicate TB as a public health problem by 2050 when ideally, the global incidence of TB would be less than 1 out of one million people a year.

Despite success, the marathon run towards a world free of TB has just begun. The rising global population means that those actually living with TB has increased substantially. Addressing these challenges requires global collaboration from multiple international players. There are six components of the strategy (Stigma 2010) needed to meet the MDG 6 targets: 1) Pursue high-quality DOTS expansion and enhancement, 2) Address TB/HIV, MDR-TB, and the needs of poor and vulnerable populations, 3) Contribute to health system strengthening based on primary health care, 4) Engaging all care providers, 5) Empower people with TB, and communities through partnership, and 6) Enable and promote research.

The Global Fund is a multilateral funding body created in 2001 and a mechanism for stakeholders to contribute to one central funding body who then provide grants to countries impacted by these three diseases. The Fund has a balanced representative system with seven people each from both donor and recipient countries. One delegate from each of these entities are also included in the representative system: nongovernmental organization (NGO) in a developed country, NGO in a developing country, business community, private foundations, and those personally affected by these diseases (Salaam-Blyther 2007).

To date, the Global Fund has overseen the funding of over \$3 billion to TB initiatives and over \$230 million to TB-HIV efforts. Despite international efforts, a funding gap of \$21 billion exists to meet the \$47 billion goal necessary to meet 2015 targets set by The Global Plan to Stop TB (KFF_Global Tuberculosis 2011).

USG RESPONSE

The US stands out among the numerous countries fighting against TB because it has successfully transitioned its TB policy from a reactive response to a proactive response. In the US, health professionals test patients that are positive for latent TB prescribe drugs to prevent TB from becoming active. All healthcare workers are required to pass a screening test for TB to avoid spreading the infection to others. Governments in other countries, such as South Korea, are too occupied with trying to treat those with active TB already to focus on those with latent TB. However, the successful effort in reducing TB prevalence levels in the US compared to levels in the mid-1950s proves that the US has the experience and technical knowledge necessary to help fight TB abroad. Thus, the US has an opportunity to provide key leadership through collaboration and coordination. Knowing that TB in developing countries can be treated for as low as ten dollars especially demands that public action be taken to address this issue.

Figure 2 shows the low prevalence of TB in the US compared to other countries and the targeted 2015 TB prevalence goal. Despite the low prevalence levels the US has compared to other countries, about 10 to 15 million people in the US carry TB bacteria (TB Frontier 2007). Although the TB bacteria lie inactive at this stage, the bacteria could become active and manifest itself into TB disease at any moment.

	2007 TB Prevalence (out of 100,000 people)	2015 TB Prevalence Goal (out of 100,000 people)
United States	3.1	3.5
United Kingdom	12	4.6
Honduras	71	70
Russia	115	34
China	194	164
India	283	293
South Africa	692	384

Figure 2. Table Comparing TB Prevalence Levels (WHO 2011)

Therefore, TB can be a potential public health problem for the US, especially with the increasing number of immigrants, who may carry TB bacteria with them from abroad.

The recently compiled 2010 Lantos-Hyde USG TB Strategy summarizes the current efforts by the US to help control TB in developing countries. Countries are targeted by the USG according to TB disease burden, multidrug resistance TB burden, and HIV prevalence and political commitment. The USG's policies fall in line with the STOP TB strategy. The USG's primary goals are to expand the DOTS program, increase the diagnosis and treatment of drug-resistant TB cases, and strengthen health systems in each of the USG's partnering countries (Lantos-Hyde 2010).

The history of funding the fight against TB is extremely short. As Congress and the President became aware of the threat of TB they allocated more resources for TB control. In 2003, President's Emergency Plan for AIDS Relief (PEPFAR) passed and authorized bilateral funding for TB (KFF_Global Tuberculosis 2011). PEPFAR recognized that AIDS and TB work in tandem to cause bodily harm as both suppress the immune system. Contributions to the Global Fund to Fight AIDS, Tuberculosis, and Malaria (KFF_Global

Fund 2011) started in FY2001 through annual bills and then in FY 2003 through PEPFAR. In 2004, USAID mobilized a greater effort to fight TB. In 2008, PEPFAR was reauthorized and allocated \$ 4 billion over 5 years to fight TB and required the USAID to delineate the USG strategy to address TB within the scope of the Global Health Initiative (Moss 2008). The Global Health Initiative is the Obama's administration new approach to global health. From 2009 to 2014, the USG has set aside \$63 billion to provide an overarching USG strategy to address numerous global health problems (KFF_US Global Health Initiative 2011).

So far, contributions to the Global Fund total \$5.7 billion, and the President's FY 2011 budget was \$1.0 billion for the Global Fund. Past contributions to the Global Fund by Congress have exceeded the President's request to Congress for funding (KFF_Global Tuberculosis 2011). The USG stands out among nations as the largest contributor to the Global Fund and has played a significant role as one of the founding donors. In addition, the US holds one of the governing seats on the board. The leadership the USG is taking in the Global Fund is appropriate as the US has the financial and professional resources to exert positive influence.

There are three main bureaucratic

agencies tasked with helping to fight TB: USAID, NIH, and CDC. Since 1998, as the largest US operating bureaucracy tasked with TB control, the USAID coordinated research and development efforts with members of the international community (Lantos-Hyde 2010). The USAID has country offices in most of the 20 countries targeted by the US for elimination of TB. The USAID contracts out work or gives grants to external organizations and collaborates with other government partners such as the CDC. In 1985, the budget at NIH for TB totaled just \$60,000, and it was only the emergence of drug resistant TB strains and their potency combined with the AIDS epidemic that stimulated allocation of up to \$140 million/year for more drugs and vaccines. The CDC is responsible for preparing innovations produced by the NIH for field implementation and adaptation. This ensures reaching the appropriate target population effectively. Meetings are held at least once a year among these bureaucratic agencies to discuss the USG's role in the fight against TB (US Global Health Policy 2009).

Figure 3 outlines the different roles the various bureaucracies have in combating TB.

RECOMMENDATIONS

An assessment of USG policies to combat TB shows that the USG is on the right track and is making extraordinary contributions. However, the unmet need to address TB efforts worldwide is incredibly high. Furthermore, the nature of TB to spread through the air and the unpredictability in the emergence of drug-resistant strains requires that the aid effort be constantly reformed and reevaluated. Therefore, this section will provide recommendations that can catalyze efforts to eliminate TB.

IMPROVE INTERAGENCY COORDINATION

When placing TB in the context of USG aid efforts to eradicate AIDS and malaria, the immediate disparity that comes to mind is the lack of administrative leadership to coordinate the plan to fight TB. In 2003, the fight against AIDS received a significant push when the Office of the Global AIDS Coordinator (OGAC) was tasked with enacting PEPFAR. In 2005, the battle against malaria received a significant push forward through the President's Malaria Initiative, which also had an administrative coordinator (KFF_Global Health Initiative

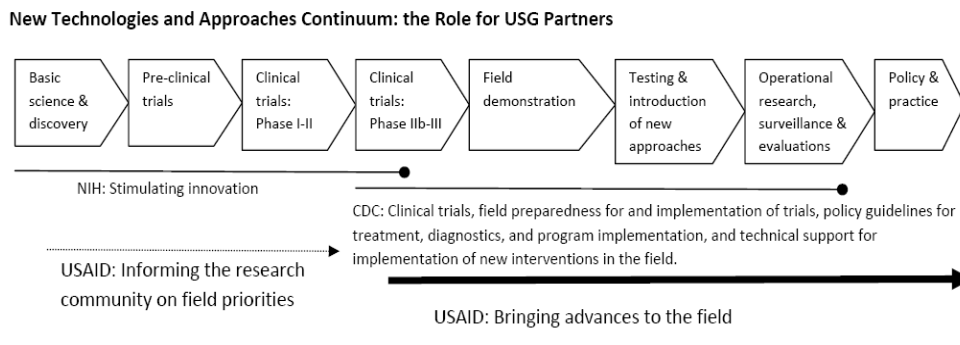


Figure 3. Partners in the USG. who work to eradicate TB (Lantos-Hyde 2010)

2011). A high profile coordinator who understands TB at the scientific and policy level can streamline USG efforts to combat TB. This coordinator can be the voice necessary to bring targeted focus to the TB effort – a push equal to that received by malaria and AIDS (TB Frontier 2007).

A head coordinator can strengthen communication across different bureaucratic departments. Presently, the spread of TB control efforts among three different bureaucratic institutions creates a disconnect among those with the same goal of addressing TB. Ideally, if the USG had the power to restructure bureaucracy, one institution to handle TB eradication efforts would exist. This set-up would strengthen communication among all of the important players and people working together to defeat TB. However, the surge in US efforts toward TB control efforts developed long after these institutions were formed, which means the USG had to build upon existing resources to build the capacity to address TB. Alternate views suggest that having disease-specific programs can work against addressing global health from a holistic point of view. President Obama's Global Health Initiative is based upon this philosophy. However, without a visible leader promoting change in TB efforts, complacency can permeate and the risk of diminished TB control efforts becomes more likely.

A recent review of aid efforts conducted by the Institute of Medicine recommended that the US government create a White House Interagency Committee on Global Health to improve coordination among aid efforts (US Commitment 2009). Since multiple departments are involved in the job of TB control, creating a committee could also catalyze the USG's efforts to combat TB. If appointing a TB Czar to coordinate all TV efforts is not possible, then coordinating TB

efforts within the context of this committee is the next best solution.

Trying to resolve the presence of multiple bureaucratic agencies with another level of bureaucracy seems to be detrimental as this measure just creates more bureaucracy. However, an interagency committee for global health is crucial to TB control because it can better coordinate efforts. This committee can also help transition US aid policies, for TB and other diseases, from a reactive to a proactive mode of thinking, much like in the US domestic TB policy has successfully shifted from a reactive to a proactive response.

Furthermore, a committee can also act as the main voice to represent the USG's goals to the international scene, bring clarity and focus to TB programs that require work among multiple different players, and provide better accountability of US funds. For example, this committee can provide the necessary leadership into helping the Global Fund improve its finance mechanisms of projects abroad. Recent investigations into the Global Fund have exposed misuse of funds worth \$34 million. USG should lobby for measures that will increase transparency in the funding allocation process and provide rigorous scrutiny of events at higher risk of fraud (Global Fund 2011).

Lastly, this committee can also serve as a forum for pursuit of bipartisan consensus on issues that would strengthen the fight against TB. Leadership shown by several senators on both sides of the political spectrum- Senator Gordon Smith (R- OR), Senator Barbara Boxer (D-CA), Senator Sam Brownback (R-KA), Sherrod Brown (D-OH), demonstrates that consensus on TB initiatives can be reached and can even serve as a conduit for driving towards a more bipartisan consensus on these issues.

DEVELOP INSIGHTFUL POLICY

Not only does there need to be a push for extensive collaboration between the bureaucratic agencies, but effectiveness requires more insightful policy. One can develop insightful policy through increased and faster evaluation of programs. Policymakers should periodically review and evaluate TB policy according to feedback received from various TB programs – whether these programs are field experiments, evaluations of private-public partnerships, outcomes in research laboratories, or documentation of new unique TB strains.

Furthermore, insightful policy means ensuring that policy reports consider USG efforts in the context of global efforts so that one keeps the unmet need in sight. The need for this effort is important especially with monetary aid efforts as they are always reported in millions or billions of dollars. As the magnitude of numbers increase, their ability to conceal problems rather than reveal important issues becomes compounded. It is important to consider this, especially when realizing that by already showcasing monetary aid figures, we present pressing issues in terms of quantity rather than urgency and global relevance.

Another way to make policy more insightful is to include more stakeholders. For example, a collaborative effort among experts in fields ranging from biological science to anthropology deserves support. These subjects are all relevant to providing a holistic view of TB as a disease requiring consideration of medical, social, and economic impacts. However, one needs to consult more widely than just experts when designing and refining policy. In order to ensure that aid is truly effective, one needs to consult community leaders and health professionals about the effects of aid policies in their communities. Each individual country has its own cultural intricacies, complicating TB care and

treatment. Recognizing that there cannot be a blanket policy to eradicate TB is crucial, especially because eliminating TB contains so many obstacles and challenges. This action can help rectify country-specific behavioral burdens that come with addressing challenges in getting patients to adhere to drugs (Waisbord 2010). For example, stigma poses a significant problem to the success of TB programs because people may not agree to an aggressive screening campaign or come forward to be tested.

NEED SUSTAINABILITY

While the USG can develop mechanisms to plan the above-recommended measures, which will result in international and transnational networks within public health, the USG needs to consider measure to develop sustainable policy. This is important when recognizing that unfortunately there is no cure for TB in sight. TB is a disease that has existed for thousands of years, there has not been a new vaccine for about a hundred years, and no new drug in about forty years.

A way to sustaining the fight against TB so that the USG's efforts do not wear out is to increase a country's capacity to address its own needs. We should make an effort to strengthen health systems and improve laboratory capacity in developing countries (Conley 2010). Furthermore, by empowering other countries to address their own needs, the developed world can then shift its focus on helping others with more dire needs (Small 2011).

Another way of sustaining the global effort for TB is to implement measures that can multiply the potential of existing resources. An example is to educate and train more domestic and international leaders in infectious disease (i.e. internships at NIH, CDC, and USAID). This measure

helps transfer the knowledge accumulated about TB from one generation to another. Another example is to build US diplomatic capacity to help transfer knowledge of TB control effectively across countries. It would be ideal for an appropriate representative in the NIH, CDC, and USAID to establish partnerships with health institutions abroad, i.e. London School of Hygiene and Tropical Medicine and the Swiss Tropical Institute. These institutions already have partnerships with locals in many developing countries and have extensive expertise in international development and addressing infectious diseases. Addressing the lack of global health diplomacy is vital as TB is found in over 150 countries (Feldbaum 2010). A recent report released by the Center for Strategic and International Studies highlights the severe lack of diplomatic capacity available for global health efforts, which hinders progress on several fronts: in implementation of policies, in the creation of partnerships, and in information sharing.

ADDRESS THE TB-HIV CO-EPIDEMIC

TB is the leading killer of patients with HIV/AIDS. A patient with HIV/AIDS has an increased chance of developing TB, which in turn accelerates the disease progression of HIV/AIDS. Therefore, in order to prevent further deaths and to reduce disease prevalence, patients with HIV/AIDS and TB need to receive treatment for both diseases. Currently, there are 1.37 million people co-infected with HIV/AIDS and TB. (Deadly Duo 2009). The accelerated death caused by HIV/AIDS and TB is due to several factors such as piecemeal or inadequate addressing of diseases, stigma, and highly regimented treatment protocols.

However, a main problem in the fight against both diseases is the lack of coordination among HIV/AIDS and TB treatment programs. Those saved from

HIV/AIDS through proper treatment often die of TB because they do not receive medications to fight TB. In addition, the stigma associated with both diseases prevents patients from getting tested, increasing the chance of death. World wide, in 2007, only 2.2 percent of HIV-infected patients were tested for TB. Furthermore, both diseases require a rigorous and lengthy treatment regimen, which, if not properly administrated, can lead to potentially dangerous outcomes such as the evolution of drug-resistant strains (Waisbord 2010). New research findings demand an increased capability in addressing the twin co-epidemic. In 2008, scientists at the University of Cape Town in South Africa found that AIDS treatment is less effective when used with TB medication (JAMA 2008). This finding demonstrates that integration of programs to combat both diseases requires clarity and oversight. Focused legislation specifying the need to expand work on addressing the TB-HIV co-epidemic is critical to moving the fight against these diseases forward.

The recent 5-Year Strategy for PEPFAR recognized TB as the leading killer of HIV/AIDS patients in its 15 focus countries, and the United States allocated \$4 billion in funding for TB control (Five-Year Strategy 2009). The focus placed on TB through legislation incorporate into PEPFAR, provides an opportunity to revisit, re-emphasize and expand the means to address the TB epidemic.

Specifically, I propose a method that can serve as a possible foundation for integrating efforts to control TB and HIV/AIDS - strengthening local efforts through funding for community health workers (CHWs). CHWs are health care providers who live in the community and are generally perceived as more accessible to local populations than clinic workers. I propose that there should be increased

collaboration between CHWs who treat HIV/AIDS patients and CHWs who treat TB patients. Collaboration can improve treatment outcomes for patients with both diseases and facilitate efforts to control HIV-related TB. Partners in Health, a NGO working mainly in Africa and Latin America, has successfully used paid CHWs to provide treatment for HIV/AIDS and TB patients (Partners in Health 2007). PEPFAR should consider this worthwhile approach.

CHWs can provide counseling and track adherence to drug regimens in patients' homes, eliminating the need for patients to travel daily to clinics. Since CHWs communities view their CHWs as reliable and knowledgeable peers, they can implement education campaigns, potentially reducing social stigmas. The campaigns should be targeted to encourage people to get tested for TB, thereby increasing case detection rate of HIV/AIDS patients with TB (Community Health Workers 2010).

PEPFAR's goal for the 5-Year program is to shift from being an emergency response provider to helping countries achieve sustainable success. By utilizing human capital in the form of the CHW, the responsibility of treating patients is transferred to the communities themselves, fostering self-reliance.

Because of concerns that health professionals are more reliable or that salaries for CHWs would increase program costs, a major challenge would be to allocate the available funding towards this initiative. However, research indicates that CHWs help provide more cost-effective treatment and better quality of care (Islam et al. 2002). Another challenge is to sustain the collaboration among clinics, CHWs, and patients by ensuring a steady drug supply, providing adequate compensation to CHWs, and informing CHWs of any changes to treatment protocol. Furthermore, differences in prevalence of HIV/AIDS or TB indicate

the need to tailor programs to accommodate the needs of specific regions (Friedland 2007).

PROVIDE HOLISTIC CARE FOR TB PATIENTS

TB is widely prevalent in many developing countries and a strong reason for its enduring prevalence is the lack of a patient support system that allows patients enough time to heal. Therefore, advocates of holistic care champion a "global" approach – which simply means that a global plan to combat TB needs to incorporate local efforts that can actually help patients.

I propose that grassroots NGOs can be an effective force in helping patients heal by arranging home-based care systems, where assurance of holistic care for patients will be guaranteed, i.e. proper hygiene and care. Aid given to countries is often unilateral and earmarked, which means that those patients receiving free drugs cannot receive adequate attention to other needs such as sufficient hygiene. By coordinating USG TB programs to empower grassroots NGOs will streamline the road to address those plagued by infectious disease. Grassroots NGOs can also provide the environment necessary for patients to receive and intake their drugs properly, which prevents the evolution of drug-resistant strains of disease.

Furthermore, strengthening grassroots NGOs aligns with the goal of making the transition from emergency aid to developmental aid. By strengthening grassroots NGOs, local community members can build the capacity to address their own needs and be empowered to pursue their individual passions. Also, NGOs are playing an increasingly greater role in the international community in sectors of development as people increasingly financially empower NGOs to expand their vision and practices. Thus,

catalyzing the growth of grassroots NGOs can help them increase their visibility to draw in more funding.

Using a grant-based method to empower grassroots NGOs is one way to ensure smart growth of these organizations. USAID bilateral missions with connections to the local NGO community could distribute grants to help finance grassroots NGOs. Grants are ideal because it is a method to unite various grassroots NGOs without the perception of overregulation. Creating this method to unite NGOs means that they will be within reach if the USG needs to disseminate information to them. Feedback from grassroots NGOs can also help understand the social and cultural factors driving the epidemic forward in each country. This can help provide a tailored response to each country to help with disease control.

A phased approach is recommended in which a pilot project starts in one country first and when success is documented, expanded to other countries. South Africa offers a suitable venue. They suffer from the emergence of drug-resistant TB strains, which makes addressing the AIDS epidemic even more challenging. The high number of NGOs already on the ground in South Africa ensures that this idea could rapidly progress to practical levels. Strategically South Africa is Africa's most important nation. The advanced level of the health community in some sectors of societies ensures adequate technical expertise for accurate statistical documentation of advances. The greatest efforts should target helping those regions with the highest rates of co-infection between tuberculosis and AIDS because this is the greatest risk not only in South Africa but in much of the rest of Africa. As one fine-tunes best practices in one country, they can be scaled up to other affected countries.

There are challenges to working with

grassroots NGOs such as developing a mechanism to allocate resources and to keep of track of the allocated funds. A continual review of financing programs by the U.S. Government Accountability Office will be necessary, which will add another layer of bureaucracy. However, addressing these challenges seems small in scope compared to the benefit to TB patients that can be gained.

CONCLUDING REMARKS – THE BATTLE AHEAD

The USG has the knowledge base and institutional framework to address TB; moreover, it has developed its policies in line with the global response. However, mechanisms need to be in place to catalyze the USG efforts through creative partnerships if TB is ever going to be defeated. Defeating TB requires a synergistic and coordinated effort among specialists in the field of science, economics, politics, and medicine and considering that TB patients need holistic care and are dealing with stigma. Collaboration among bureaucratic agencies, NGOs, and private institutions is necessary. One needs to form strategic channels of dialogue among various bureaucratic agencies such as the Center for Disease Control, the US Agency for International Development, and the National Institutes of Health. Only by building upon one organization's strengths and by relaying vital information efficiently will we build an effective global response to eradicating TB. The USG's strong presence in the international community and already existing knowledge and resources shows that the USG has strong potential to eliminate TB and can demonstrate global leadership on this issue. The return on investment is worth the effort on the part of the USG to lead the fight against TB.

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THE EFFECTS OF EXPENDITURE ON EARLY CHILDHOOD EDUCATION ON RATES OF GRADE REPETITION

BY RENUKA REGE

ABSTRACT. There is significant diversity across nations in the amount of public funding governments provide for early childhood education programs and the level of regulation they impose upon them. These differences in government policy lead to various degrees of efficacy in enhancing children's cognitive development and preparing them for school. This study examines the relationship between government expenditure on early childhood education and the rate of grade repetition in primary school in fifteen OECD countries. It also examines effect of total public and private expenditure on early childhood education on the rate of grade repetition in primary school. Simple linear regression analysis was performed, demonstrating that the relationships between these variables are not statistically significant. In future studies, numerous other variables that could have an effect on grade repetition rates in primary school should be taken into account. A brief qualitative examination of the early childhood education systems of France, Sweden, and the United States offers some general conclusions as to the characteristics of preschool systems that result in the most positive outcomes for children's school readiness and school performance.

The importance of early childhood education to children's development has become increasingly recognized in countries around the world. A substantial body of research demonstrates that the early years of life are instrumental in children's long-term cognitive, social, and emotional development. There is growing consensus that participation in high quality education before primary school significantly improves children's school readiness and school performance (Kamerman et al. 2003). As these conclusions have become more widely accepted, enrollment in child care and the demand for educationally oriented preschool programs has risen around the world. In most industrialized countries, governments have taken on the task of meeting at least some of this demand for early childhood education programs, and government policy plays a key role in shaping the nature of these services.

There is significant diversity across nations in the degree to which governments

are involved in the provision of early childhood education programs to families with young children. Government policies provide different amounts of public funding to preschool programs and impose various levels of control and regulation upon them. Early childhood education systems range from universal programs that are completely funded and controlled by the government to more varied programs that are provided by the private sector and paid for by children's parents (Boocock 1995). Differences between preschool education systems lead to various levels of efficacy in enhancing children's cognitive development and preparing them for school. This study examines the impact of differences in government funding on the effectiveness of early childhood education programs.

VARIABLES

There are many factors that influence the effectiveness of early childhood education

policies in improving children's development, school readiness, and school performance. These variables include integration with the education system, training of teachers and staff, equality of access to preschool services, and parental involvement in the preschool education process. One of the most important variables affecting the impact of preschool programs is the amount of government investment in early childhood education. A review of early childhood education policies in twelve countries published by the OECD in 2001 highlighted the importance of substantial public investment in early childhood education to ensure the quality of these programs. Sufficient funding for preschool services is a precondition for fulfilling most of the other measures of quality mentioned above. For example, the level of funding dictates the amount of teacher training and the extent of access to preschool programs, both of which have a profound impact on the ability of early childhood education systems to enhance children's development.

The level of government spending on early childhood education reflects the weight countries attach to these programs and their belief in their potential to be effective. In 1995, the European Commission on Childcare recommended that countries spend approximately 1% of their GDP on early childhood education (Tolani and Brooks-Gunn 2008). UNICEF has also defined 1% of GDP as a benchmark for government spending on early childhood education programs (2008). Thus, government expenditure on preschool services is widely viewed as a useful indicator of the efficacy of a country's preschool system in improving children's cognitive and social development and preparing them for school.

There are numerous ways of conceptualizing children's development, school readiness, and school performance as

influenced by participation in early childhood education. These variables include students' performance on aptitude tests, their behavior in the classroom, ratings by teachers, and high school graduation rates in the long-term. One of the most popular measures of children's success in school is the proportion of students that fail or must repeat a grade at any point in their education. Several studies have shown that participation in early childhood education affects children's chances of failing or having to repeat a grade in the future (Boocock 1995). Children who attend preschool programs develop essential skills that prepare them to advance successfully through primary school and beyond.

In France, the main reason for the expansion of the preschool education system during the 1970s and 1980s was concern over the large quantity of children who needed to repeat a grade in primary school. A national study conducted by the French government to evaluate the results of this expansion demonstrated that the more years children attended preschool, the less likely they were to have to repeat a grade (Boocock 1995). Policymakers and researchers have long recognized that rates of grade repetition can be affected by early childhood education programs and have attempted to formulate policy that maximizes these effects. Thus, the rate of grade repetition in a country is a useful measure of children's school readiness and academic performance and is clearly linked to participation in preschool programs.

THEORY

This study examines the relationship between the level of government expenditure on early childhood education programs and the proportion of students that are required to repeat a grade later in school. The amount of investment a country's

government directs toward early childhood education dictates the amount of funding available for teacher training, full-day programs, the enforcement of standards, and other aspects of preschool programs that significantly affect their quality (UNICEF 2008). The level of public expenditure on preschool services also determines whether programs can provide universal access to high quality early childhood education to all families with young children. Thus, the amount of government spending on early childhood education has a direct impact on both the quality of the programs and the proportion of young children that are served.

The quality of early childhood education programs significantly influences their potential to have a positive effect on the cognitive and social development of children. The amount of teacher training affects how well children are cared for and taught, the teacher-to-child ratio and class size determine how much attention each child receives, and the strength of the focus on education defines how well children are prepared for school. In addition, the proportion of young children which high quality preschool programs are able to serve directly impacts the fraction of children that are properly equipped for school. The quantity of children that are well-prepared for school in turn determines the proportion of children that are required to repeat a grade. The strength of the fundamental skills that children possess when they enter primary school has a significant influence on the likelihood that they will face difficulty in school and have to repeat a grade (Kamerman et al. 2003).

Thus, a credible causal relationship exists between the variables chosen for this study. The amount of public expenditure on early childhood education affects both the quality and the universality of preschool programs, which determines the proportion of children who are sufficiently prepared for

primary school and the fraction of students who must repeat a grade. The predicted relationship between these variables is a negative correlation in which the proportion of students required to repeat a grade decreases as the amount government expenditure on early childhood education increases.

RESEARCH DESIGN AND OPERATIONALIZATION

This study measures the variation in the variables across fifteen OECD countries: Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden, the United Kingdom, and the United States. These countries were chosen because they have similar levels of economic development, making it possible to profitably compare their public spending on early childhood education and their grade repetition rates. Additionally, these were the OECD countries for which complete was data available for each of the variables. Public expenditure on early childhood education was calculated as a percentage of total public expenditure in each country in the year 2007. This data was obtained from the OECD.Stat Extracts database.

The data on the proportion of students required to repeat a grade was obtained from the results of the OECD Programme for International Student Assessment (PISA) survey of fifteen-year-olds that was conducted in 2009. The rate of grade repetition was measured by the percentage of students who reported that they had repeated a grade once, twice, or more times in primary school in each country. Only grade repetition rates in primary school were considered in this study because primary school directly follows early childhood education. Thus, students' performance in primary school has the

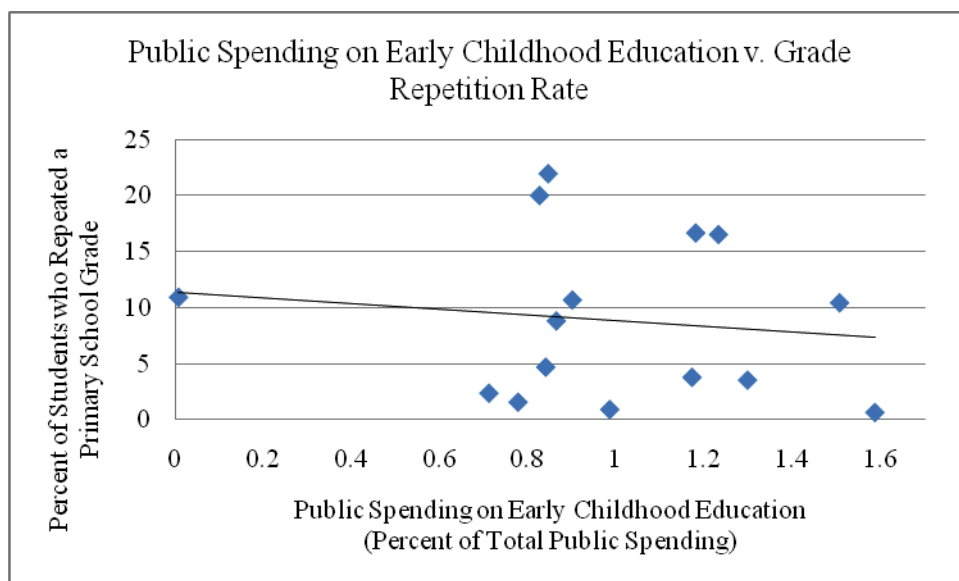
greatest probability of being influenced by their experience in early childhood education.

DISCUSSION OF RESULTS

Simple linear regression analysis was performed to determine the effect of public expenditure on early childhood education on the rate of grade repetition in primary school. The results of this analysis are shown in the graph and table below. The graph and the regression coefficient of -2.55 demonstrate a negative correlation between public expenditure on early childhood education and the rate of grade repetition in primary school. However, because the

magnitude of the t-ratio is less than 2 and the p-value is greater than 0.05, the possibility that the observed relationship between the two variables occurred by chance cannot be rejected. The relationship between public spending on early childhood education and grade repetition rates in primary school is not statistically significant according to this statistical model. The adjusted R-squared value of -0.06 indicates that only 6% of the variation in grade repetition rates is explained by public spending on early childhood education programs. Thus, the observed relationship between the variables is not very strong.

Because the amount of public



Effects of Public Spending on Early Childhood Education¹ on Rate of Grade Repetition²

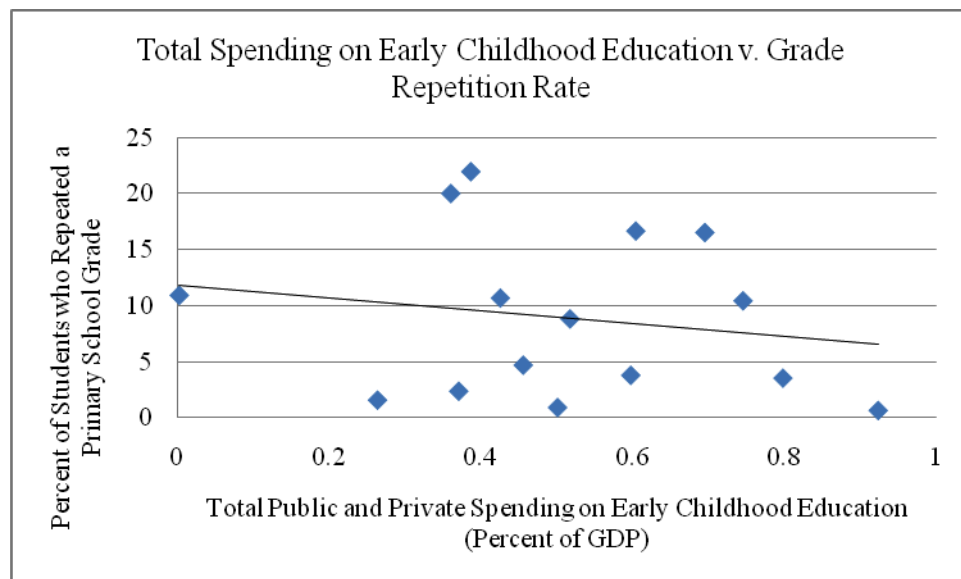
Regression Coefficient	-2.55
Standard Error	7.37
T-ratio	-0.49
P-Value	0.63
Adjusted R-Squared	-0.06

1. Percent of total public spending
2. Percent of students who repeated a grade in primary school

expenditure on early childhood education does not explain the rate of primary school grade repetition very well, the effects of other sources of funding for preschool education were also considered. In some countries, a large proportion of the money spent on early childhood education programs is not spent by the government but is rather spent by private entities including parents, companies, and international or domestic NGOs. In these countries, government expenditure on preschool services does not provide a complete picture of the resources that are allocated towards early childhood education programs. Private sources of funding are also likely to have an

effect on the quality and universality of preschool services, which determines the proportion of children who are well-prepared for school and the percentage of students who are required to repeat a grade. Thus, the effect of total expenditure on early childhood education including public and private funding sources on the rate of primary school grade repetition was also examined.

Total public and private spending on early childhood education was calculated as a percentage of GDP for each country in the year 2007. This data was also obtained from the OECD.Stat Extracts database. The results of the simple linear regression



Effects of Total Spending on Early Childhood Education¹ on Rate of Grade Repetition²

Regression Coefficient	-5.81
Standard Error	7.3
T-ratio	-0.69
P-value	0.5
Adjusted R-square	-0.04

1. Total public and private spending as a percentage of GDP
2. Percent of students who repeated a grade in primary school

analysis of the relationship between total spending on early childhood education and the rate of grade repetition in primary school are shown in the graph and table below.

The graph and the regression coefficient of -5.81 demonstrate another negative correlation between total public and private expenditure on early childhood education and the rate of grade repetition in primary school. Like with public expenditure, however, the magnitude of the t-ratio for total expenditure is less than 2 and the p-value is greater than 0.05. Therefore, the possibility that the observed correlation between these two variables occurred by chance cannot be rejected, and this relationship is not statistically significant either. The adjusted R-squared value of -0.04 indicates that only 4% of the variation in the rate of grade repetition is explained by total public and private spending on early childhood education. Thus, the observed relationship between these variables is not very strong either, and total expenditure on early childhood education does not provide a better means of explaining grade repetition rates than public expenditure on preschool programs does.

EXPLANATION OF RESULTS

There are several possible reasons why such a weak relationship was found between public and total expenditure on early childhood education and grade repetition rates in primary school. The amount of money spent on early childhood education is just one of many factors that affect the quality and universality of preschool programs and their ability to adequately prepare children for school. One of the chief determinants of quality in early childhood education is the nature of the regulations imposed by the government on preschool programs. How high the standards required by the government are and how uniformly

they apply to preschool services directly impacts the proportion of programs that provide high quality early childhood education to students (Kamerman et al. 2003). How rigorously these standards are enforced also has a large effect on the quality of preschool programs and the likelihood that they prepare students well for primary school and affect the percentage of students that must repeat a grade. Thus, government regulation of early childhood education programs could confound the relationship between expenditure on these programs and the rate of primary school grade repetition.

Another factor that influences the quality of early childhood education programs is the curriculum followed by teachers and staff in preschool settings. The extent to which a preschool curriculum is defined and applied consistently to all programs affects the share of students that receive a high quality early childhood education (UNICEF 2008). The content of the preschool curriculum and the degree to which it is oriented toward the primary school curriculum play a key role in preparing children for school and shaping their chances of having to repeat a grade in the future. The level of integration of early childhood education with the primary school system has a significant impact on the likelihood that students will be required to repeat a grade. Thus, preschool curriculum is another factor that could confound the correlation between expenditure on early childhood education programs and grade repetition rates in primary school.

In addition, there are several variables other than the quality and universality of early childhood education programs that influence the percentage of students that must repeat a grade in primary school. One such factor is the high degree of variation in countries' grade retention practices. Countries like Belgium, France,

the Netherlands, and Portugal have very high rates of grade repetition that are above 15%. In these countries, there is a strong belief that grade repetition has significant benefits as a remedial measure for students who face difficulty in school. Therefore, teachers and school heads in these countries are more likely to require students to repeat a grade than they are in other countries (Eurydice 2011). Cultural differences in grade retention practices help explain why countries like France, which has a high level of spending on early childhood education and a very developed preschool system that should prepare students well for school still has a one of the highest rates of primary school grade repetition. Thus, variation in countries' grade retention cultures has a confounding effect on the relationship between expenditure on early childhood education and the percentage of students required to repeat a grade.

Evidently, there are numerous other variables that could have caused this study to find such a weak correlation between expenditure on early childhood education and the rate of grade repetition in primary school. The next section briefly examines the early childhood education systems of France, Sweden, and the United States in an effort to determine some of the characteristics of preschool systems that lead to the most positive outcomes for children in terms of school readiness and school performance.

FRANCE

The French early childhood education system is called the *école maternelle*, or nursery school. It is a national, universal system to which all children between the ages of two and six have equal access. France's full-day preschool program is provided at no cost to parents and is managed by both national and local

government entities. The *école maternelle* has a nationally defined curriculum that focuses on academic activities, and the government implements standardized licensing requirements for all other forms of early childhood education. The recruitment and training of preschool teachers and staff is also regulated by the government, and preschool teachers hold the same civil service status and salaries as primary school teachers. Studies have shown that the longer a student attends *école maternelle*, the lower his or her chances of failing or repeating first grade are, especially for children from disadvantaged homes (Boocock 1995; Tolani and Brooks-Gunn 2008).

SWEDEN

Sweden's early childhood education system is also a national, universal system, but it serves children from birth to seven years of age. These full-day childcare and preschool programs are based in centers and family childcare homes, and they are subsidized by local governments at a low cost to parents. Like France's preschool system, the Swedish system has national standards for the training of teachers and staff, maximum group size, students' daily routine, and design of the preschool environment. These regulations are rigorously monitored by local governments and enforced by access to funding. Studies have found that children who entered Swedish childcare before one year of age performed significantly better on aptitude tests and received better ratings from their teachers on social and emotional characteristics than children who entered childcare later or were cared for at home (Boocock 1995; Broberg et al. 1989; Andersson 1992).

UNITED STATES

The United States' early childhood

education system is much more diverse than France's or Sweden's and is composed of private, national, and state-run preschool programs. Private programs are paid for by children's parents, and public programs are targeted towards children from low-income families whose parents are unable to afford private preschool services. Public programs can be half-day or full-day, and they serve eligible four-year-olds and some three-year olds. While there are no national standards for preschool curriculum or training of teachers and staff, some states have implemented such regulations and other states have not. One way in which the national government supports early childhood education is through the Child Care and Development Fund (CCDF), which is a grant provided to states who then allocate subsidies to low-income parents to help them pay for private preschool programs. The national government also gives child care tax credits to low-income parents (Tolani and Brooks-Gunn 2008; Kamerman et al. 2003).

The U.S. government also runs a preschool program called Head Start, which provides grants to local public and private non-profit entities to supply comprehensive education, health, and nutrition services to children from low-income families. States also fund their own public pre-kindergarten programs, which are based in local school districts. Studies have shown that students who attend Head Start programs experience cognitive benefits in the short-term, but these benefits diminish by third grade. One possible explanation for the fading effects of these programs is that disadvantaged children are likely to attend poor-quality primary schools afterward, which effectively cancels out any benefits they may have gained from attending Head Start. Researchers have found that the sources of public funding for preschool services in the U.S. are not sufficient for all parents who

wish to enroll their children in early childhood education programs, and there is no assurance that all preschool services meet a minimum standard of quality (Tolani and Brooks Gunn 2008; Kamerman et al. 2003).

CONCLUSION

The results of the simple linear regression analyses demonstrate that neither public expenditure nor total expenditure on early childhood education has a statistically significant effect on the grade repetition rate in primary school. The possibility that the observed relationship between the variables occurred by chance cannot be rejected, so it cannot be concluded from this statistical model that there is a significant causal relationship between them. Based on the results of this study, it cannot be concluded that a link exists between funding for early childhood education and students' performance in primary school. In future studies, other variables that could affect the quality and universality of preschool programs as well as the performance of students in school should be taken into consideration. In addition, a more in-depth assessment of the early childhood education systems of specific countries should be conducted to attain a better understanding of the features of successful preschool systems.

However, a brief examination of the early childhood education systems of France, Sweden, and the United States offer some general conclusions as to the characteristics of preschool systems that result in positive outcomes for children's school readiness and school performance. National early childhood education systems that ensure universal access for all children tend to have a positive impact on the cognitive development of the greatest number of students. These preschool programs are generally full-day and are provided at little or no cost to parents.

Preschool systems that have rigorously enforced national standards for curriculum, teacher training, and other aspects of early childhood education are the most likely to provide high quality preschool education to all students and positively influence their school readiness and school performance. Countries should seriously consider these aspects of successful preschool systems when formulating policy on early childhood education.

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**GLOBAL STANDARDS, GLOBAL JUSTICE:
THE CASE FOR JOINING THE INTERNATIONAL CRIMINAL COURT**

BY JULIA RETТА

ABSTRACT. The International Criminal Court is a permanent criminal tribunal established for the purpose of prosecuting individuals for genocide, crimes against humanity, war crimes, and the crime of aggression. As of October 2011, the United States has not become a member of the Court; nor has it signified any intention to do so in the future. The main concern of the US government is that the Court would be used by unfriendly nations for political purposes, and that politically motivated charges would be levelled at US citizens and military abroad. This paper argues why it is in the United States's best interest to join the Court. There is no other institution like the International Criminal Court with its innovative and international approach of bringing individual criminals to justice for gross human rights violations. Furthermore, if the United States were a member, it could leverage its influence to seek reform and improve the Court's weaknesses. The concerns that critics of the Court use to justify US nonparticipation are largely unfounded or irrelevant, and the benefits far outweigh the costs of joining. If the United States wants to maintain its positive image abroad and its legitimacy in championing the cause of human rights, it must play a more active role in cooperating and eventually joining the International Criminal Court.

The United States has long proclaimed itself a champion for human rights, whether through its instrumental role in the Nuremberg war trials or its lawmakers and politicians who criticize nations for violating human rights (Johnson 2001, 68). And yet, the US has still neither signed nor ratified the Rome Statute, which would make it a member of the International Criminal Court (ICC) – the world's first permanent criminal tribunal tasked with holding individuals accountable for war crimes, genocide, crimes against humanity, and aggression (ICC 2002). If the US considers itself such a strong supporter of human rights and justice, why does it refuse to be a part of this groundbreaking international justice mechanism?

The ICC represents a huge leap forward for human rights because of its goal of global jurisdiction, its permanence, and its widespread support among leading

nations. The US government's justifications for not ratifying the Rome Statute are neither legitimate nor reasonable, and if it continues to withhold its membership, both the US and the ICC will be deprived of economic and political benefits. In the global community, the ICC is already playing an important role in bringing criminals to justice and working to eliminate issues such as impunity and lack of accountability when leaders enjoy too much power and commit serious human rights violations. By isolating itself from the Court's functions and processes, the US is giving up the significant influence it could have in shaping the formation of the ICC and lobbying for important changes to make it a more effective and fair institution.

A policy change is of utmost importance to the US's role in global politics. Human rights is a topic that has garnered huge attention and support in the

last century, and the means of monitoring and enforcing norms have been hotly debated by international organizations. One of the driving forces behind the ICC's creation was the concept that there was a need for international criminal tribunals due to a "massive failure of justice at the national level" (Kirsch 2004), that is, situations like those in Cambodia and Uganda where millions of innocent civilians were slaughtered, yet there was no national legal system to bring the criminals to justice. The rise of citizen and NGO activism has also contributed to global attention on human rights, due to the numerous protests and other grassroots campaigns that draw attention to situations like Darfur and other human rights violations. Additionally, on a broader note, states have a vested interest in prosecuting these crimes because they do not only affect individuals, but also the regional stability and peace in the broader global community.

Although the ICC's jurisdiction covers not only human rights, but genocide and war crimes as well, it is seen by many in the global community as a huge step forward towards an international system of justice, which is, according to Executive Director of Human Rights Watch Kenneth Roth, "one of the most important priorities for the human rights movement" (Scheffer, Roth, and Thiessen 1998). In countries without functioning legal systems in place, human rights groups have been forced to use stigmatization, exposure, public pressure, and occasionally sanctions to protect human rights, but these measures often fall short. Treaties and declarations designed to promote human rights have done very little, because they lacked the ability to bring perpetrators to justice and make reparations to victims – both key functions of the ICC.

Although other international courts exist, the ICC is groundbreaking in several respects. Firstly, it is a permanent

institution, unlike former temporary criminal tribunals that lacked the power to prosecute anything beyond their specific circumstances. The ICC's jurisdiction also extends far beyond previous tribunals. As it seeks to become global in its reach, the ICC has expanded to 117 member states, effective on November 1, 2011 (ICC 2011). More significantly, the ICC has made enormous advancements in victim protection and reparation, including establishing a Trust Fund for monetary compensation, as well as providing rehabilitation (ICC 2011). The ICC is a more effective mechanism for administering justice than other regional or global courts because it virtually sweeps away political and diplomatic immunities that would ordinarily protect state officials from prosecution for even these severe crimes, thus dedicating itself to eradicating the impunity that impedes true justice in the international community. Additionally, the ICC embodies the notion of command responsibility – holding military or civilian authorities of a state liable for crimes committed by their subordinates if they did not try to prevent or repress these crimes (Cassese 2003). Its focus on prosecuting individuals rather than entire countries is far more effective in punishing the human rights and war crimes abuses of powerful dictators, who reign virtually unchecked by their own governments and regimes. It is also the first court to identify crimes against women as crimes against humanity, thanks to the lobbying efforts of numerous NGOs for the Rome Statute to safeguard women's rights (Amnesty International 2005).

What, then, can be gained from US participation in the ICC? The membership of such an economic and diplomatic world power has obvious benefits to the institution itself. The ICC would gain significant financial and political resources from US participation, thus expanding the scope and efficiency of its functions. As one of the

permanent five members of the Security Council and a widely recognized global power, the US lends legitimacy to any organization or institution it joins. US membership would boost the ICC's reputation in the eyes of the rest of the world and perhaps even encourage other countries to ratify it. The US is in the unique position to put pressure on other states that rely on its military and foreign aid, and particularly those with weak human rights records such as Pakistan and Israel.

The US also has much to gain from joining the ICC. It is crucial that during this early development stage of a new international organization, the US makes its voice heard during meetings of the ICC's Assembly of States Parties in order to make changes or adjustments to the Statute. The most important issues on the table include the definition of the crime of aggression and the checks and balances on the Prosecutor's power – issues that affect the US whether or not it is a member of the ICC (Bellinger, Waxman, and Scheffer 2009). Furthermore, the ICC promotes knowledge of and compliance with the laws of war and other humanitarian principles – the spread of which can only be beneficial to US armed forces abroad. When combatants are ill informed about the laws of war, it represents a huge threat to the safety of the US military who are aware of these laws and abide by them. According to experts at the American Academy of Arts & Sciences, "Crises fueled by gross violations of international law will continue to occupy American attention" (Sewall and Kaysen 2011). Wide-scale atrocities such as genocides and war crimes almost always have larger repercussions for regional stability, including armed conflict, massive refugee flows, arms trafficking, and other organized criminal activity. Therefore, the US has a deeply vested interest in promoting the order of law on an international scope. In a report by Bruce

Broomhall of the International Justice Program and the Lawyers Committee for Human Rights, he outlines the political benefits as well, saying that in the international sphere, "where the crime was egregious and the public clamour for justice significant, could the United States resist calls to provide diplomatic or other support and let its allies take the credit for promoting accountability?...It is far more likely that a future U.S. government will see the political advantage in supporting a prosecution in the court, if only as a matter of raw political calculation" (Broomhall 2001).

Not only is it clear that the US can serve its own interests by protecting human rights and prosecuting international crimes, but the International Criminal Court is also the best mechanism for achieving both of these goals. As evidenced earlier in this paper, it is much more effective than temporary tribunals, which are a more expensive and less efficient means of prosecuting international crimes. Furthermore, the ICC's method of dealing with horrendous crimes does not cause the extensive collateral damage that sanctions are known to cause, as it deals solely with the individuals responsible for crimes, and delivers justice on a narrow, precise scope.

If the status quo of affairs remains and the US continues to isolate itself from the ICC, it will harm its global image and its legitimacy in criticizing other states' human rights records. The concept of international criminal justice is new and constantly evolving, and American leadership in this new area of international relations is crucially linked to domestic and international perceptions of the legitimacy of American leadership. According to the American Academy of Arts & Sciences, "A state that relies upon the power of its political ideals can only stray so far from those ideals without losing the ability to inspire confidence internally and

internationally” (Sewall and Kaysen 2001). The United States has already established its leadership in the human rights arena through its instrumental role in creating the Universal Declaration of Human Rights, the Nuremburg trials, and other human rights treaties and conventions (Johnson 2001, 68). The ICC is seen as the ultimate symbol of human rights enforcement, and it represents a “test of America’s commitment to international and universal concepts of justice and human rights – its willingness to be bound by the rules it establishes for others” (Sewall and Kaysen 2001). The US is showing the world that while its government loudly decries the poor human rights practices of other countries, the same government refuses to be a part of a pioneering mechanism for international justice. This hypocrisy invites justified criticism from other nations and undermines the US’s legitimacy in the sphere of human rights.

Besides the consideration of America’s image abroad and skepticism of its commitment to human rights, the US is currently at a disadvantage for not having a judge on the ICC or participating in the significant decisions being made as the Court establishes itself. By remaining detached from the process of the Court’s development, the US is giving up the great influence and guidance it could wield in the early stages of formation. The United States played an undeniably pivotal role in the formation of the United Nations; it has the potential to do so again with the International Criminal Court, but instead chooses isolation. The more productive course of action is positive cooperation and engagement with the process of the ICC’s formation and pressuring countries from within to create a system of checks and balances instead of straight refusal to consider membership (MacAskill 2009).

Despite these persuasive arguments

for US participation in the ICC, critics still raise many objections to membership. First and foremost is the theoretical problem of the Court’s supposed threat to state sovereignty. This brings up the larger debate of the importance of global imperatives versus self-governance. Although membership in any international organization compromises state sovereignty, this supposed threat is largely overblown. Increasingly in the last half-century, states have recognized the need to sacrifice some of their autonomy in order to cooperate more closely and seek common solutions to world-wide problems. The crimes covered by the jurisdiction of the ICC are such pressing, global-scale problems. If states can make an effort to cooperate through international organizations on issues relating to the environment and promoting development and democratic ideals, then it follows naturally that they should extend that cooperation to bring justice to those individuals who commit massive crimes that threaten global peace and stability. The United States supported establishing ad hoc criminal tribunals for the cases of Rwanda and the former Yugoslavia, and has championed humanitarian intervention through international organizations in the past. The US should not abandon its commitment to human rights simply because it wants exemption for its own citizens from the same human rights standards by which it criticizes other nations and heads of state.

Additionally, the ICC portrays an international cooperation that is much closer to a global civil society than a system of global governance. It deals with the legal areas of justice and prosecution, but it does so under a system of checks and balances that is even still being expanded, in order to ensure fairness and decentralization of power. The ICC operates under complementarity to domestic courts, and was never intended to be the sole governing

power in the realm of international justice – merely as a last resort mechanism when other measures have failed.

A serious concern of the Bush administration was that the ICC would launch politically motivated prosecutions of US citizens abroad (MacAskill 2009). This fear was blown far out of proportion considering two key characteristics of the ICC: its intention to serve only as a last-resort court dealing with crimes on an enormous scale and its principle of complementarity. The US has a strong domestic legal system, so it is highly improbable that the ICC would step in – rather, it would defer to the US's domestic courts (Kirsch 2004). Furthermore, many states have recognized the need for powerful states like the US to join the ICC, making it even more unlikely that the prosecutor would open a case investigating a US citizen, when US participation in the ICC is considered so essential (Scheffer, Roth, and Thiessen 1998).

A final objection raised by critics is that it would be difficult to ratify the ICC because its principles and functions are not compatible with the US Constitution. It lacks the requirement of a trial by jury, as well as other constitutional protections for the accused that the US holds dear. Despite this skepticism, the Justice Department has ruled that there are no constitutional barriers to joining the ICC (Sewall and Kaysen 2011). Any citizen travelling abroad is subject to the jurisdiction of foreign courts, and so they already face some possibility of foreign prosecution for crimes under ICC jurisdiction. Additionally, the American military justice system does not even extend the right to trial by jury to active duty members of the Armed Forces. According to experts at the American Academy of Arts & Sciences, “the ‘costs’ of supporting the ICC — in terms of compromising constitutional protections — are little different than the

costs incurred in establishing a different system of justice for members of the military, or reaching extradition agreements with foreign countries, or travelling abroad as an American within the jurisdiction of a foreign judicial system” (Sewall and Kaysen 2011). No new risks are posed, and the ICC would be extremely beneficial in bringing Americans back to US soil quickly and efficiently to face trial (given the system of complementarity), rather than provoking a crisis or military intervention.

Unfortunately, there is a lack of empirical evidence to testify for the ICC's efficiency. Because the court is a fairly new institution, it will be years before experts can accurately measure its impact on states' behavior and the global community. Despite its newness, the ICC is clearly a one-of-a-kind institution: it targets individuals effectively, has innovatively created a reparation system for victims, and operates without the impunity for high-ranking officials that has troubled international courts for years. If the US chooses not to be a part of it, little will be gained and much will be lost. The political concerns expressed by the Bush administration are negligible at best, and by refusing to ratify the treaty, the US forfeits its chance to play a significant role in shaping the Court's future. As stated by a report by the American Society of International Law's Task Force on US Policy Toward the International Criminal Court, the way to deal with these objections and concerns is through positive engagement with the Court, not strict opposition (American Society of International Law 2009). The Task Force recommended that the US engage positively with the court, taking steps toward ratification; it also advised Congress to pursue an agenda that would enhance flexibility in the US government's interactions with the Court and to hold hearings to re-examine whether the US

should become party to the Rome Statute (American Society of International Law 2009).

US policy towards the ICC seems to be slowly improving. In 2009, Secretary of State Clinton has indicated her regret that the US is not yet a member, and US officials are cooperating with the ICC more closely than ever before (MacAskill 2009). Perhaps this cautious progress is best illustrated by the UN Security Council's unanimous vote to refer the gross human rights violations in Libya to the ICC for investigation of crimes against humanity (Baldwin 2011). The Security Council did so knowing that the ICC is the only court of its kind and was specifically engineered for situations like Libya, where the ruling regime has hugely overstepped its bounds and mistreated its people. The ICC should not be expected to bring an end to international criminality, but that is not the purpose of a judicial system. It can act as a deterrent in certain circumstances, but the Court's primary aim is to bring to justice and hold accountable those individuals who have committed the most severe crimes against their fellow humans. It is in the US's best interests, of diplomacy and national security, to ratify the Rome Statute and become a part of this innovative mechanism of international justice. Only by becoming an active participant can the US lend its voice to the discussion of what the processes and scope of the International Criminal Court should look like in the future, where it will continue to play the paramount role in enforcing human rights and bringing about justice on the international level.

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WOMEN’S LITERACY IN PAKISTAN: CURRENT DISPARITIES AND FUTURE PROSPECTS

BY TARA SLOUGH

ABSTRACT. Pakistan’s literacy rate currently ranks among the lowest 10% of nations in the world and efforts to address this critical need have failed to keep pace with rising literacy rates across most other South Asian countries. Of particular concern in Pakistan, however, are tremendous disparities between the literacy of males and females. This gender gap reflects disparities in school enrollment and accessibility, particularly in regard to urban/rural divides and socioeconomic barriers. Low rates of female literacy must be addressed in order to accelerate development and combat extremism in Pakistan. This paper offers policy recommendations for both USAID and NGOs that may be undertaken in an effort to lessen disparities in literacy and educational attainment between Pakistani men and women. The strategies for reducing illiteracy discussed in this paper include supply-side infrastructure improvements, performance-based incentives, conditional cash transfers (CCTs), teacher training, and region-oriented education initiatives. It is critical that USAID and NGOs undertake complementary policies to promote literacy amongst Pakistani females in a timely manner.

PART I. THE COSTS OF LOW FEMALE LITERACY IN PAKISTAN

INTRODUCTION

Low levels of female literacy and education in Pakistan pose tremendous challenges for the nation’s governance, stability, and development. Pakistan currently ranks 182nd of 201 nations in overall literacy at 49.9% (Central Intelligence Agency 2011). Pakistan’s literacy rate falls below the average literacy rates in South and West Asia (64%) and even Sub-Saharan Africa (62%) (Winthrop and Graff 2010). More striking, however, is the critical disparity between the literacy of Pakistani men and women. The CIA estimates male literacy at 63% and female literacy at 36% (Central Intelligence Agency 2011). While additional estimates of literacy in Pakistan vary slightly¹, all measures point to the

current failures of and the crisis resulting from Pakistan’s education system.

Historically, Pakistan has consistently experienced low rates of literacy. At the time of its partition from India in 1947, literacy rates for all adults stood below 20%. While these rates have consistently improved since that time, Pakistan has failed to achieve the same advances as its neighbor, India (see Figure 1). In the past decade, in particular, Pakistan fell far behind other South Asian nations’ advances in youth literacy (ages 15-24). Further, lower disparities between male and female literacy rates indicate progress in mitigating gender inequality in the rest of South Asia (see Figure 2). Only India, Nepal, and Pakistan retain significant gender disparities in literacy (UNESCO Institute for Statistics 2008). However, this gender gap in Pakistan (20.7%) is larger than India’s gap (14.0%) or Nepal’s gap (11.2%) (UNESCO Institute for Statistics 2008).

¹ The Pakistan Federal Bureau of Statistics indicate a male literacy rate of 69%, a female literacy rate of

44%, and an overall literacy rate of 56% based on the findings of an internal nationwide 2007-2008 survey.

Pakistani policymakers have consistently attempted to address the nation’s low levels of literacy within both male and female populations. Each

education policy issued since the 1970s includes a framework for expanded adult literacy. The 2001 “National Plan of Action on Education for All (2001-2015)”

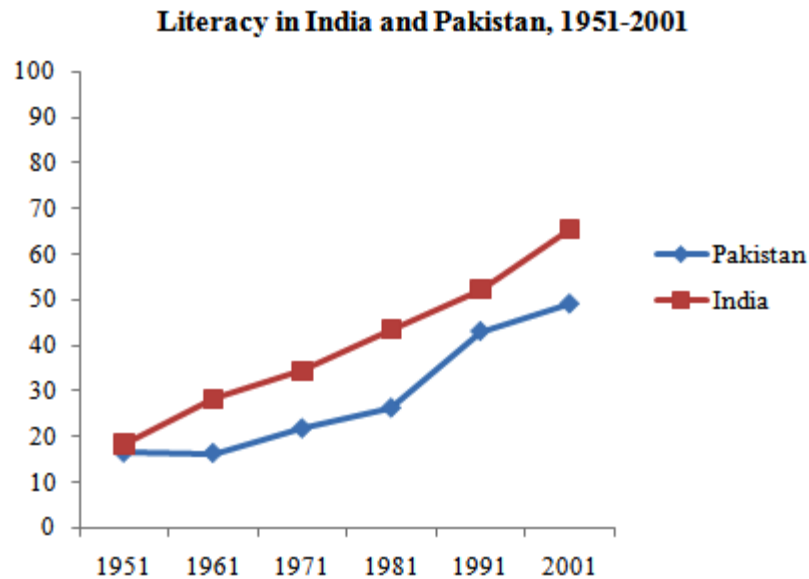


Figure 1. Source: UNESCO.

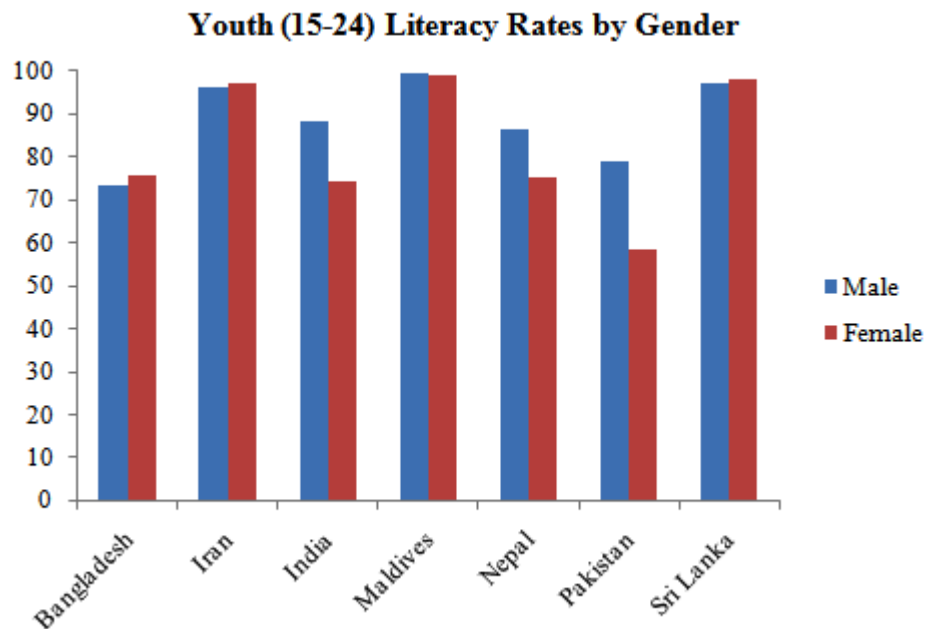


Figure 2. Source: UNESCO.

collaboration between the Pakistani Ministry of Education and UNESCO set benchmarks for literacy over a fifteen-year period (see Table 1).

These goals have clearly not been achieved. The most recent calculation of adult literacy (2008) indicates that the Phase I benchmark, scheduled for completion in 2006, is far from meeting these goals. Progress on the stated goals for women’s literacy has fallen even further behind this projected schedule. The most recent policy, the 2009 National Education Policy, seeks to implement the Millennium Development Goals (MDGs) for education. In order to achieve this goal, Pakistan must implement universal primary education by 2015. During the 2007-2008 school year, only 57% of Pakistani children were enrolled in primary schools. Based on current statistics, therefore, this alignment with the MDGs by 2015 seems highly unlikely (UNESCO Islamabad 2010).

Public opinion in Pakistan demonstrates a longstanding desire to address gender disparities in educational access and improve educational prospects for its citizens. Surveys reveal that 70% of Pakistanis believe that females should be educated to the high school or university level (Winthrop and Graff 2010, 38). Further, Stephen Cohen asserts “it is evident that Pakistanis crave education for their children—the streets of every major city are plastered with advertisements for schools,

technical training, and advanced study” (Cohen 2004, 248). These latent desires underscore the need for educational reform in Pakistan, particularly the expansion of opportunity for the women of Pakistan.

This paper seeks to provide a comprehensive discussion of the disparities in Pakistan’s education system that account for such low levels of women’s literacy. Further, the effects of these critical inequalities with regard to Pakistan’s development and stability outline the need for United States and NGO support for Pakistani educational policy and institutions. Part II offers policy recommendations for both entities within the United States and NGOs.

DISPARITIES IN ACCESS TO EDUCATION

An examination of the concentration of illiteracy among the Pakistani population suggests that rural, poor females are far more likely to suffer illiteracy than other Pakistanis. Geographical disparities between provinces and between urban and rural areas exacerbate the disparities in girls’ access to school. Second, families’ socioeconomic backgrounds influence the likelihood that girls receive education. Access to and the quality of schools also creates disparities in education, and is somewhat dependent on geographical and socioeconomic constraints.

National Plan of Action on Education for All (2001-2015)

Phase	Years	Overall Literacy Goal	Goal by Gender
Phase I	2001-2006	61%	Male- 71.5% Female- 50.5%
Phase II	2006-20011	68%	Male- 77% Female- 65%
Phase III	2011-2016	86%	Male- 86% Female- 86%

Table 1. Goals for Pakistani Literacy as specified in the National Plan of Action on Education for All (2001-2015). Source: Choudhry and Parajuli, 2005.

GEOGRAPHY

Regional disparities in education appear clearly in a comparison between literacy rates among Pakistan’s four states as well as the Federally Administered Tribal Areas (FATA) (see Figure 3). Among the four provinces, male literacy varies very little from province to province with a range of 66% (Balochistan) to 70% (Punjab). However, women’s literacy varies much more significantly between provinces, ranging from 23% (Balochistan) to 48% (Punjab). These figures indicate that regional variation in administration of education policies is more likely to adversely impact female students than male students. Literacy rates within FATA are even more sobering. Males in FATA are ten times more likely to be literate than females (30% vs. 3% respectively). Regional variation in literacy rates is most often explained by urban and rural disparities in literacy (see Figure 4). Urban populations routinely experience higher literacy rates and educational attainment than rural populations. The severity of the urban-rural gap in literacy undercuts the aforementioned

regional disparities in literacy. Balochistan, in particular, has a much lower population density than the other provinces. Thus, the lower female literacy rate may be explained because much of Balochistan’s population is rural.

The urban-rural disparity in literacy has often been attributed to the failures and corruption of government-run (public) schools. Rampant corruption in the administration of government schools limits prospects for student achievement. Teaching jobs in government schools are frequently awarded to the highest bidder, not the most qualified applicant. Jobs in Pakistan’s 65,000 rural schools are most desirable because teacher absenteeism goes unpunished in remote areas (Cohen 2004, 239). As such, the quality of educational offerings in rural areas decreases as a result of the government’s inability to provide enough effective educators. Moreover, cultural norms suggest that female students must be taught by female instructors (UNESCO 2010, 19). A shortage in supply of female teachers in rural areas propagates the cycle of female illiteracy within subsequent generations of rural girls.

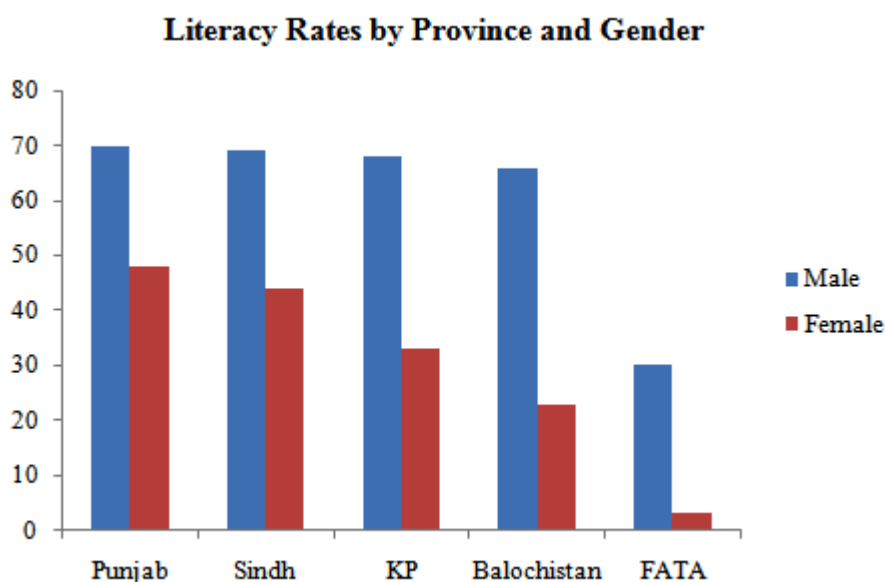


Figure 3. Source: Winthrop and Graff, 2010.

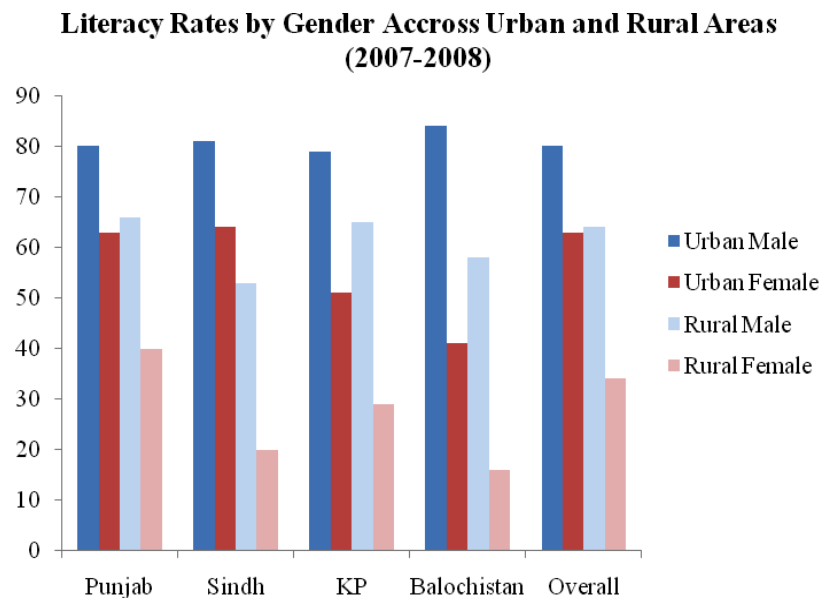


Figure 4. Source: UNESCO.

The educational prospects of Pakistan’s rural children (particularly girls) remain bleak. The equalization of school attendance rates of boys and girls in many urban areas represents progress towards lessening the degree of disparity between male and female literacy rates in the future. However, rural boys remain more likely to receive a primary education than rural girls in all provinces (see Figure 5). The disparity between the enrollment rates between rural males and females exceeds 15% in Sindh and Khyber Pakhtoonkwha. Until these disparities in access to primary education are addressed, the literacy rate of Pakistan’s women will lag behind the literacy rate of Pakistan’s men.

SOCIOECONOMIC FACTORS

In addition to regional variation in education patterns, the socioeconomic status of a girl’s family influences the likelihood that she will receive an education. Prior to 2004, government-run primary schools charged for

students to enroll (UNESCO 2010, 17). Families bore some instructional costs as well as the costs of uniforms and/or textbooks. In many cases, the cost proved prohibitive for socio-economically disadvantaged families. Moreover, when a family could only afford to educate some of their children, males were almost uniformly educated before females. In a society in which men are significantly more likely to join the formal labor force than women are, there exist few incentives for the education of women. The removal of tuition charges at public schools will enable the continued enrollment of female students (where there is access to schools and females teachers).

THE IMPORTANCE OF MITIGATING DISPARITIES IN LITERACY

DEVELOPMENT

The 1994 International Conference on Population and Development in Cairo established the empowerment of women

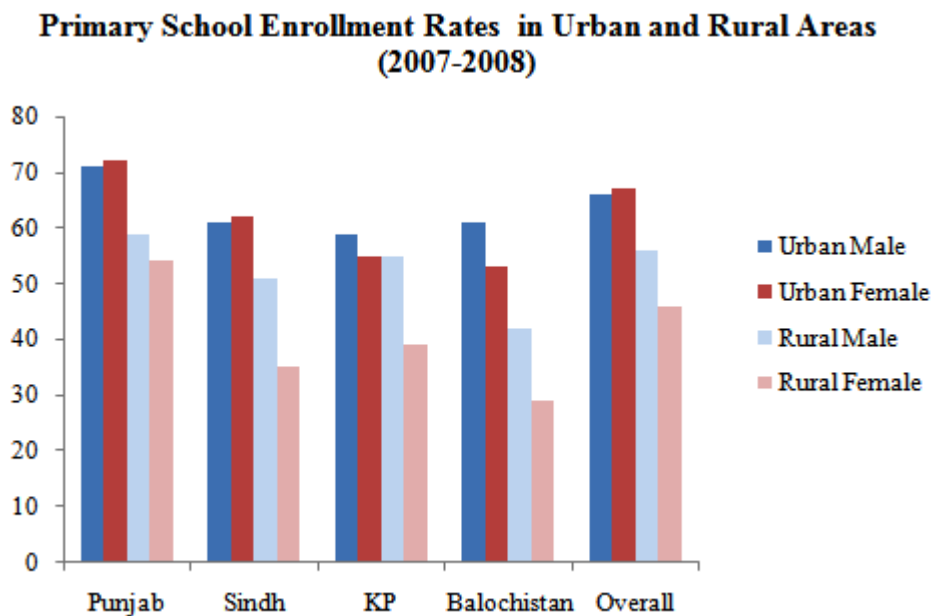


Figure 5. Source: UNESCO.

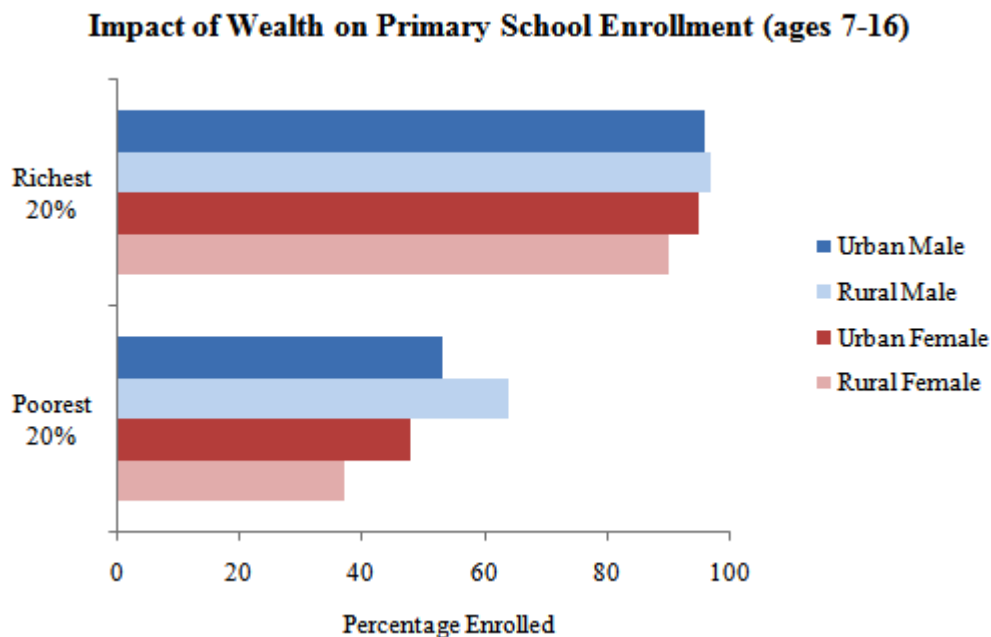


Figure 6. School enrollment of students from families in the richest and poorest quintiles. Source: UNESCO, 2011.

through improved healthcare and education as one of the cornerstones of development. The United Nations Development Program (UNDP) aims to promote gender equality as

one of its eight core Millennium Development Goals (MDGs). Two of four Pakistan-specific indicators for this empowerment of women include the

achievement of gender parity in primary school enrollment and in literacy among youth age 15-24. Achievement of these goals will assist in poverty reduction and will promote democratic governance.

Pakistan faces tremendous challenges as it strives to cope with a rapidly expanding population. The UN projects that the Pakistani population will increase from its 2000 population of 142.7 million people to 348.7 million people in 2050, surpassing Russia, Brazil, and Indonesia to become the world’s fourth most populous nation (United Nations 2004). With 63% of its population under the age of twenty-four and an annual population growth rate of 2%, it is unlikely that this demographic explosion will be slowed. In order to support and feed this rapidly-increasing population, Pakistan must sustain high long-term economic growth. Empowerment of women through expanded access to primary education will both slow this population explosion and offer opportunities for economic development. Policies aimed to “slow population growth, reduce poverty, [and] achieve economic progress are mutually reinforcing” (UNFPA 1995).

Educated women are more likely to join the labor force, marry later, and have fewer children than their less-educated peers (Coleman 2004). Had Pakistan made literacy gains commensurate with East, Southeast, and Central Asian countries since its independence, its 2004 population would have been 115 million as opposed to 145 million (Ibid.). The current rates of women’s workforce participation (see Figure 7) reflect the opportunity for the incorporation of millions of Pakistani women into the labor force, which would fuel economic development. However, without formal education, increased workforce participation of women will not be feasible.

The United States consistently claims that it seeks to promote democratic governance in Pakistan. Illiteracy excludes millions of Pakistanis from active engagement in the democratic process. Because illiteracy more likely afflicts Pakistani women than Pakistani men, women face steeper barriers for entry into the political process. With this disenfranchisement of such a large segment of the Pakistani populace, Pakistan’s limited

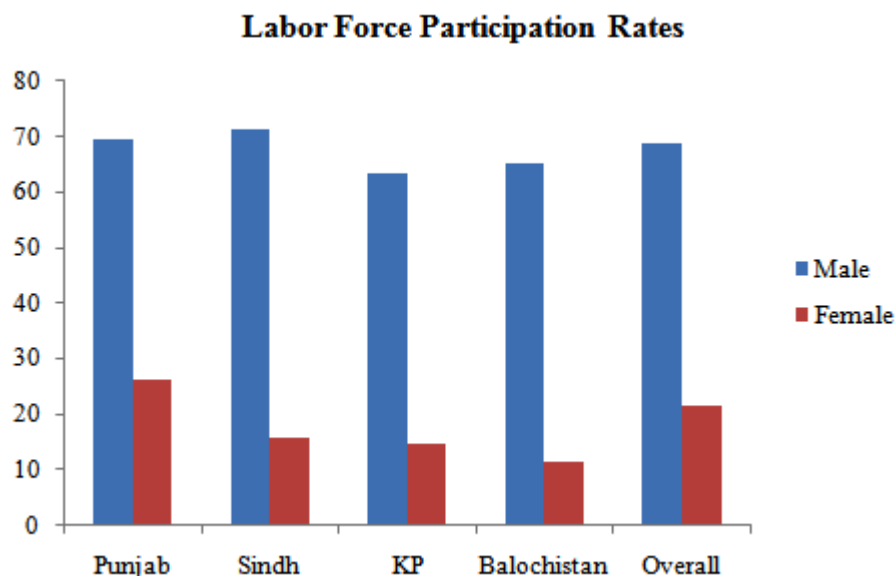


Figure 7. Source: Federal Bureau of Statistics Labour Force Survey 2009-2010.

democratic prospects offer little hope for improved stability in the near future. Moreover, intersecting patterns of rapid urbanization of the Pakistani population and unemployment (as a result of lack of adequate training) may further destabilize Pakistani cities.

COUNTERING EXTREMISM

Disparities in literacy between males and females serve as indicators of the failed state of public education in Pakistan. Winthrop and Graff (2010) suggest several mechanisms through which the failures of this institution promote public support for anti-government militancy. First, the failure of the government to provide basic services (such as public education) to its citizens erodes trust in government. The Pakistani government-run schools employ 100,000 more individuals than the number of soldiers in the Pakistani Army, yet the aforementioned corruption within the bureaucracy governing the government-run schools erode schools' legitimacy and efficacy. Grievances with all individuals working in public education—from corrupt bureaucrats to absent teachers—further contribute to low attendance rates in primary schools. Twenty-six percent of parents whose children do not attend school suggest they choose not to send their children to school because the “standard of education is not good” (Sathar 2008).

A second grievance with the state of Pakistani public education results from the insufficient access to government schools in rural areas. The urban-rural divide creates mass disenfranchisement among excluded populations (Winthrop and Graff 2010). Incidentally, the majority of militant activity in Pakistan is concentrated in rural areas (primarily FATA, Balochistan, and Khyber Pakhtunkhwa) where urban-rural divides in education are most devastating. Anger over

the government’s failure to provide adequate public education and consequent frustration over lack of economic opportunity may fuel individuals’ increased propensity towards extremist alternatives.

Lack of equitable provision of education to Pakistan’s women effectively silences the voices of many women in the public sphere. Numerous studies demonstrate that women worldwide have advocated progressive, anti-extremist agendas. Throughout the news media and academic literature, women have consistently emerged as voices of moderation, capable of refuting political or religious extremism without resorting to violence. The severe lack of women’s empowerment as manifest in low literacy rates in Pakistan deeply constrains the potential for women to challenge the propagation of extremist ideals in Pakistan.

PART II. POLICY RECOMMENDATIONS

The Pakistani government holds the ability to make significant strides towards eliminating gender-based disparities in literacy and promoting universal primary education. Two immediate policies that could mitigate current disparities include: a) the passage of legislation making primary school compulsory for all students and b) fulfilling repeated commitments to raise education spending to 4% of GDP. Over the past twenty years, education spending has stagnated at ~2% of GDP (UNESCO Islamabad 2010). The United States, in conjunction with other governments, should pressure their Pakistani counterparts to implement these reforms. Absent these commitments to the education of all girls and boys, any systemic shift in public education will be very difficult. However, international donors (international governments and NGOs) can better direct their resources to reach a more equitable

percentage of Pakistani children.

The United States government and a number of large NGOs, including the World Bank and UNESCO, already devote significant resources to improve Pakistani educational institutions and limit gender disparities. As the United States presence in Pakistan increased over the past decade, funding for educational programs increased substantially. The USAID education budget for Pakistan in FY 2010 totaled \$330 million, the highest amount given to any nation (Birdsall 2010). While this degree of spending is wholly necessary to make critical improvements to Pakistani educational institutions, it can be more effectively apportioned and distributed to promote maximum efficiency and effectiveness. Further, NGOs can shift strategy in order to best complement USAID spending. The following policy recommendations offer suggestions for both USAID and NGOs.

RECOMMENDATIONS FOR USAID

USAID should focus its efforts along two tracks. First, it should focus on expansion of education through a supply-side provision of educational infrastructure; and second, it should incentivize and reward the performance and progress at the district level. Because of the decentralization of the education system in Pakistan, these reforms are most appropriate for implementation at the district (sub-provincial) level (Commonwealth Education Fund 2004).

SUPPLY-SIDE EDUCATIONAL INFRASTRUCTURE IMPROVEMENTS

Much of the current literature indicates that educational disparities should be addressed through the supply-side provision of educational resources such as physical school facilities and educational resources

such as textbooks (Winthrop and Graff, 2010).² Public opinion surveys suggest that a majority of Pakistanis support the education of females through the primary and even secondary levels. In order to facilitate the enrollment of additional female students in both primary and secondary schools, physical school facilities must exist to accommodate these additional students.

Within Pakistan, a majority of parents prefer that their students attend sex-segregated schools (UNESCO Islamabad 2010). Female students, particularly those living outside of Punjab, Pakistan’s most populous state, face a critical shortage of schools that they can attend (see Figure 8). This disparity in the number of single-sex schools outside Punjab is understated because of low rates of female attendance at mixed-gender schools. Because the Pakistani government does not mandate compulsory schooling, parents likely choose to abstain from sending their daughters to school when a sex-segregated school is not available. Furthermore, Cohen (2004) adds that many mixed-gender schools lack latrines, preventing all female students from matriculating. Furthermore, distance from school facilities plays a significant role in preventing female students from attending school, particularly in rural areas. Half of all Pakistani schoolchildren (both genders) live within 200 meters of their schools (O’Neill 2010). Moreover, distance from schools impacted female attendance much more significantly than it impacted male students. The 2010 Learning and Educational Achievements in Punjab

² There are, however, several demand-side programs incentivizing student enrollment that have been effectively utilized by the World Bank. A fuller discussion of these programs, particularly conditional cash transfers, appears in the recommendations for NGOs.

Schools (LEAPS) study suggests that for every 500 meters a female student lives from a school, the likelihood of her enrollment drops 11-16%. For male students, this figure stands at only 4% indicating that distance from schools impacts female students three to four times as strongly as it impacts male students (O’Neill 2010).

In order to address these critical deficits in the provision of education for female students, USAID must embark upon an aggressive campaign to build girls schools in areas where schools are currently inaccessible. All schools should be built with the adequate facilities (i.e. latrines) to allow female students to attend comfortably. In order to use these funds most effectively, USAID officials must contract an extensive survey of the location of current schools and their proximity to population centers within rural regions. Funds should be concentrated outside of Punjab, as many current and past educational reforms and projects have been confined to Pakistan’s most populous province. The results of these programs are evident in the achievement of parity in the number of schools for females and males

within the province and comparatively higher literacy rates. The three remaining provinces and FATA need these supply-side investments in school infrastructure more desperately than Punjab. Furthermore, militant activity plagues Khyber Pakhtunkwa, Balochistan, and FATA much more frequently than Punjab (or Sindh).

USAID should finance and supervise the construction of these schools independently of the provincial or district-level educational authorities. Following the construction of the schools, they may be turned over to district-level administrators. By bypassing the administrative officials, the potential for corruption or misuse of funding allocations may be limited. Similarly, provision of additional supplies such as textbooks may be purchased (after consultation with district officials) by USAID officials and given to districts for use.

PERFORMANCE-BASED INCENTIVES

Performance-based incentives can be similarly implemented by USAID in order to enhance the efficacy of its investments.

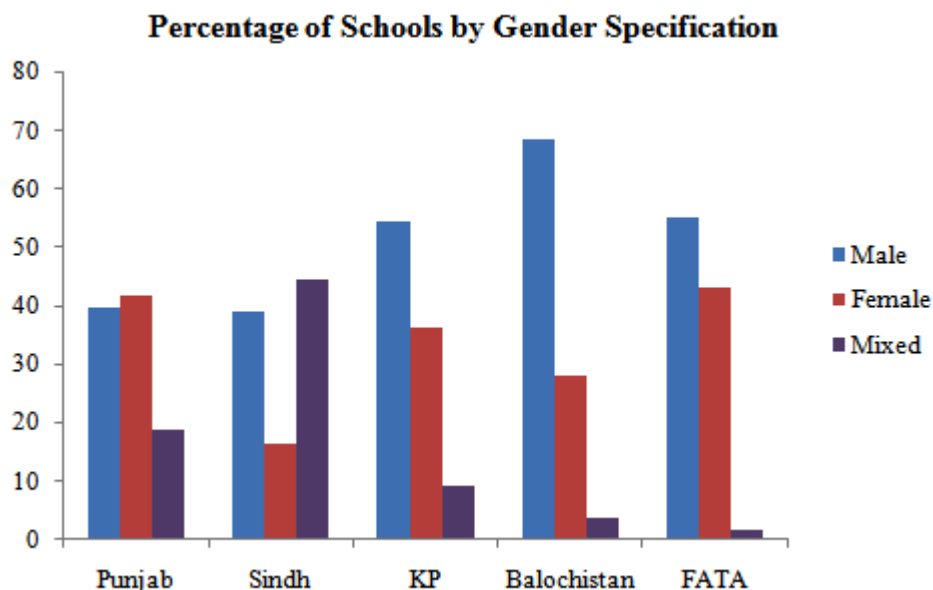


Figure 8. Source: UNESCO Islamabad, 2010.

In order to maximize the feasibility of this approach, Pakistani education officials and education experts and policy makers from the United States must jointly discuss and establish a single metric to track educational outcomes in Pakistan. Birdsall (2010) suggests that this metric could be a standardized test score, the primary school completion rate, or the percentage of all twelve year olds that enter secondary school. For the purposes of this discussion, a passing score on a standardized test administered immediately prior to primary school completion will be used as a sample metric. Once such a metric is established, aid can be distributed to districts based on “scores” on this metric.

A “Cost on Delivery” (COD) model for aid disbursal may be effectively implemented by USAID to incentivize school districts to increase primary school completion rates and the quality of instruction offered within primary schools. The COD model rewards districts per unit of progress. In this case, for example, for each successful test-taker (graduate of primary school), a district receives a fixed amount (the Center for Global Development suggests \$20) in aid from USAID (Birdsall and Savedoff 2010). In Pakistan, this model may be adopted to incentivize female completion of primary school by offering \$30 for each female that passes the standardized test. This model for a COD program offers districts incentives to increase both the quality of instruction (so that students can pass said test) and the number of primary school graduates.

In order for the COD model to be implemented effectively, however, USAID must employ auditors to assure that test scores are legitimate. Auditors can insure the validity of this process through the retest of a sample of the graduates claimed by randomly selected districts. If scores on this retest align with the original scores, funding

will be awarded. If there exist discrepancies between the two scores, districts will be penalized through the removal of any aid for that fiscal year. The implementation of a COD mechanism for disbursement of aid will be more costly than current methods of aid disbursal, but it effectively limits the corruption and misuse of USAID funds by districts.

A second performance-based incentive program that could be more easily implemented by USAID would provide competitive grants to districts that seek to embark on aggressive campaigns towards gender parity. This type of competition for educational aid may resemble the domestic “Race to the Top” program administered by the United States Department of Education (Birdsall 2010). In order to be eligible to compete for these grants, districts must agree to measure progress—both through metrics measuring progress towards gender parity (enrollment of female students and graduation rates) and through the implementation of standardized testing of students to assess the quality of education provided. Both a COD scheme for disbursal of aid and a competitive grant progress would improve transparency in the provision of aid to Pakistan’s students and schools.

RECOMMENDATIONS FOR NGOS

NGOs have devoted considerable efforts to measuring, publicizing, and mitigating gender-based educational disparities in Pakistan. Future work by these entities should utilize a three-pronged approach in response to Pakistan’s educational needs. First, the World Bank should continue to utilize and expand conditional cash transfer (CCT) programs to incentivize enrollment of female students. Second, NGOs should devote resources to developing teacher training programs for female teachers in Pakistan. Finally, NGOs of varying scopes

and means should respond to region-specific educational challenges through the development and implementation of region-specific programs.

CONDITIONAL CASH TRANSFER (CCT) PROGRAMS

In recent years, CCT programs have become a trend in international aid, principally from the World Bank and IMF. The World Bank implemented a CCT program to incentivize female enrollment in the fifteen districts with the lowest literacy rates of Punjab's thirty-four districts in 2004. Under the CCT scheme, a female student's family receives a monthly stipend of 200 rupees (approximately \$2.35 USD) contingent upon her school attendance. For girls who would already enroll in school, this stipend acts as an "incentive payment;" for girls who would not otherwise enroll in school, the stipend acts as an "income transfer," subsidizing the absence of other income that she could earn (Chaudhury and Parajuli 2006). An analysis of the effectiveness of this CCT program suggests that its implementation led to a 10-13% increase in female enrollment in schools over a two-year period.

This program could be easily expanded throughout Pakistan by the World Bank. Within Sindh, Khyber Pakhtunkhwa, Balochistan, and FATA, there exist districts with significantly lower literacy rates than even the poorest-performing provinces in Punjab. Demand-side incentives such as the CCT program provide immediate value to girls' education to their families. For less than \$200, therefore, CCT programs can influence girls' families to allow them to finish all six years of primary school.

TEACHER TRAINING PROGRAMS

NGOs can effectively work to mitigate

gender disparities in education through the implementation of teacher training programs for female teachers. Rural parents in particular prefer that their daughters learn from female teacher (UNESCO Islamabad 2010). However, the educational deficits experienced by the vast majority of Pakistani women ensure that few women have adequate qualifications or appropriate skill sets to teach. In light of recent efforts to accommodate more female students than ever before, there exists a critical need for qualified teachers particularly in rural schools.

Through its work with Strengthening Teacher Education in Pakistan (STEP) program, UNESCO has spearheaded efforts towards improvement in Pakistan's ability to educate female teachers. UNESCO is uniquely positioned to implement these improvements because of its ability to coordinate between diverse stakeholders (including the Pakistani Ministry of Education) and funding sources (including USAID and the World Bank). UNESCO's leadership on this front should be sustained and it should partner with funding entities to implement teacher training programs within each province. Training at the provincial level will improve recruitment efforts in areas where female teachers are most desperately needed (see Figure 9). Catering teacher-training efforts to the provincial level will also improve the quality of instruction across diverse linguistic and cultural regions within Pakistan.

REGION-SPECIFIC PROGRAMS

NGOs and non-profit organizations have the opportunity to meet individual needs at the community level and create region-specific programs to mitigate education inequalities locally.

These programs have provided

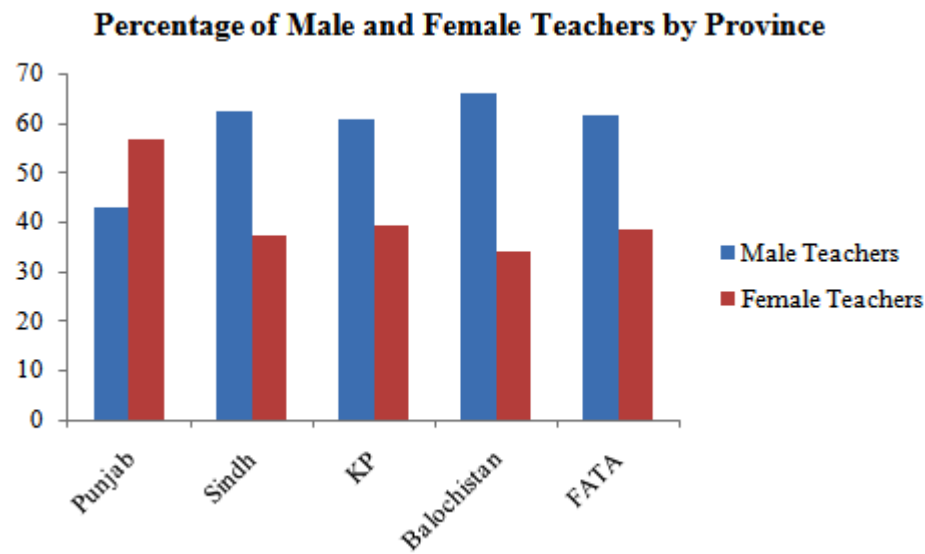


Figure 9. Source: UNESCO Islamabad, 2010.

invaluable assistance to local populations and must be continued and expanded. For example, the World Bank’s six-year Balochistan Education Support Project responds to Balochistan’s need for construction of additional primary and secondary schools. Large NGOs such as the World Bank, UNESCO, and UNICEF have the capacity to implement these type of projects across large areas (such as at the provincial level). These efforts also complement the valuable work undertaken by smaller NGOs devoted to improving education. The flexibility afforded by these approaches enables responses to community-specific and short term educational needs.

CONCLUSION

As foreign aid for improving Pakistani education increases, the Pakistani government’s reluctance to implement core reforms to improve public education and to ensure that female students receive equal access to these programs serves as a major

roadblock toward the achievement of gender parity in literacy. International attention to the failures of the current system may deliver the pressure needed to implement critical reforms. However, the clearest mechanism through which leaders can most immediately affect education in Pakistan is through the disbursement of aid. A collaborative approach between USAID and NGOs working in Pakistan in which complementary programs are implemented will best provide an extension of current educational opportunities for Pakistani children, particularly Pakistani girls.

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CALMING THE SEAS: CHINA, THE UNITED STATES, AND TRANSFORMING MARITIME RIVALRIES INTO PARTNERSHIPS

BY ANDY WANG

ABSTRACT. A considerable amount of research has been conducted on the nature of conflict, tension, and maritime security in the South China Sea. Although extensive studies on these subject matters have resulted in a myriad of potential and exhaustive solutions, only a very small percentage of these solutions encompass a “global solution” to these issues. As a result, these solutions are often highly subject specific, lacking the flexibility and robustness to be applied elsewhere. This paper examines conflict, tension, and maritime security in the South China Sea through the context of a potential Global Maritime Partnership (GMP). I argue that a GMP can successfully mitigate many of the tensions currently ongoing in the South China Sea and thereby contribute to an overall sense of maritime and energy security not only in the Southeast Asian region, but also globally. The GMP, if based on two separate level of membership, can address many of the sovereignty and logistical issues that have currently hampered the implementation of existing GMP-like institutions such as the Regional Maritime Security Initiative.

The recent surge of “rising China” literature in popular and pundit circles has led to an almost paranoia like sense of fear, mistrust, and suspicion of our biggest trading partner. But how well is this paranoia justified? Those that believe in it often point to the maritime aspect of Chinese foreign policy behavior by referencing the numerous incidents that have occurred in the South and East China Seas (SCS, ECS). More often than not, these pundits and commentators often attribute such incidents or inducements directly to Chinese aggression, ambition, and a desire to counteract the US’s global maritime hegemony by establishing a regional hegemony of its own. Simply put, purveyors of this view believe that these recent Chinese actions are the result of an offensively orientated foreign policy designed to challenge the existing state quo. Those that believe in this “Chinese Monroe Doctrine” view often come from realist-derived schools of thought and, unfortunately, believe that conflict is inevitable as all great powers must clash

(Mearsheimer 2004; Garrett 2006; Rogers 2010).

However, there is good reason to challenge the underlying assumption that these analysts use, namely, that Chinese maritime policy is offensively orientated. China’s maritime policy is best viewed through a defensive assumption which argues that recent Chinese actions in the SCS are the result of its economic and energy needs. Decades of globalization and Chinese economic liberalization have increased China’s reliance on maritime transit points and various sea lines of communication (SLOC). China’s maritime industry already accounts for 10% of its gross GDP and given that China: -obtains 85% of its imported oil by sea, -is the world’s leading importer of iron ore, -moves roughly 40% of the world’s container volume, -is poised to become the world leader in ship building, it is no surprise that China wishes to ensure continuity and safety (Erickson and Collins 2007). In addition, the SCS is resource and energy rich. It has proven reserves upwards of 7 billion barrels

with high end Chinese potential reserve estimates ranging to 213 billion barrels. Thus, many of China's "aggressive" actions can be explained by referencing China's need to defend its maritime and future energy needs instead of its outright ambition or goal of power-grabbing.

Indeed, it is this notion of energy and maritime security that is one of the most pressing concerns for Chinese authorities. However, therein a conundrum arises. It is clear that recent Chinese maritime activities have exacerbated long-simmering tensions and contributed to general upheaval in the South and East China Sea region. But if such actions, at least according to the Chinese narrative, is political and economic maneuvering done to ensure China's maritime security and thus, future energy needs, then is there any way to ensure regional maritime security for all while at the same time satisfying Beijing?

One increasingly studied possible solution to this question would be an extension of Admiral Mullen's "Global Maritime Partnership" (GMP) to China. Although it is unlikely that a GMP treaty or agreement with China, whether it is bilateral or multilateral in structure, would address all the issues or solve all the problems, it would lay a basic framework for conduct that would generally calm the tensions and disputes of all the parties involved. China has historically placed strong emphasis on diplomatic solutions for inter-state disputes and has consistently articulated its "five principles of peaceful co-existence" as official rhetorical evidence of its harmonious rise (Yonglong and Wenping 2009; Jiechi 2008; Jintao 2005; State Council 2005). A GMP with China would be a logical extension of this cornerstone aspect of Chinese foreign policy philosophy.

Unfortunately, current literature regarding the GMP is quite limited in depth and breadth. Although maritime and China

scholars have increasingly focused on the importance of the GMP and the potential role it could play in alleviating maritime tensions between China and the United States, such studies are often limited to general and broad conjecturing without any specific policy recommendations on the formation, extension, application, and function of such a partnership. In short, existing GMP studies provide little more than a literature review and vague statements calling for cooperation. In this paper I attempt to do several things. Firstly, I outline a rough but specific structural concept of the GMP. Secondly, I examine and propose various applications of the GMP in relation to China and the SCS. Thirdly, I examine the possibility of China participating in such an agreement as well its ramifications for currently contested maritime issues. I argue that a Global Maritime Partnership would ease many of the maritime disputes, especially those revolving around piracy and boundary demarcation, currently plaguing the South China Sea. In addition, because I argue that China's energy security is partially dependent upon its maritime harmony, I also focus on the global maritime partnership's impact on China's energy security through its generation of maritime harmony. In other words, the easing of various maritime pressures in the South China Sea should also lead to an increase in China's energy security, thus helping to alleviate a source of Chinese, and global, frustration. I first start out with a review of the relevant existing literature on China, the South China Sea, the issues at stake, and the concept of the global maritime partnership.

THE GLOBAL MARITIME PARTNERSHIP

The concept of a GMP can be traced to August of 2005 when US Admiral Mike Mullen announced the formulation of a new

plan for international maritime cooperation at the US Naval War College. His concept, known as the “1000-ship Navy” forms the backbone for what would eventually develop into the Global Maritime Partnership.

Mullen’s 1000-ship Navy concept comes from thinking in the post-Cold War era where the US has complete naval hegemony. With no longer the specter of WWII hanging over the world, Mullen envisions a broadening of the traditional roles of deterrence and war fighting of navies around the globe. Specifically, he argues that tasks for the 1000-ship Navy might include such things as protection of shipping, safety of sea lanes, maintenance of a consistent and lawful maritime realm, and protection against asymmetrical threats such as piracy. Obviously to make such actions necessary, various cooperative and logistical measures must be in place to guarantee the harmony, synchronicity, and integrity of the 1000-ship Navy. For this, Mullen argues for the development of new concepts, agreements, and infrastructure that would be based partly on existing framework such as the Proliferation Security Initiative (PSI) of the US Pacific Command’s Regional Maritime Security Initiative (RMSI) (Rahman 2008). However, it should be made clear that Admiral Mullen is not an idealist as he realizes the numerous problems that would arise should he advocate for “officially” implementing the GMP. As a result, most of the tangible actions stemming from the GMP will actually be channeled through existing organizations such as the International Maritime Organization (IMO), the World Customs Organization (WCO), the Jakarta Initiative, ASEAN, and MALSINDO. The Global Maritime Strategy is an overlapping strategy initiative and serves as the conceptual component to the GMP. It outlines ten starting principles (Rahman 2008):

- 1) a recognition of the continued primacy of national sovereignty
- 2) many of the problems that are challenging good order at sea can be solved when states respond cooperatively where they share a common interest
- 3) the scope of the network is limited to the maritime domain, from ports to the high seas
- 4) the network’s ‘fundamental building block’ will be the extant capabilities of individual states
- 5) the network is not limited to navies and will include all relevant national government agencies and maritime forces, and private industry players
- 6) states with the ability to export maritime security or security assistance should be willing to do so
- 7) states which require maritime security assistance should be prepared to request it of those willing and able to provide it
- 8) states must develop regional networks for maritime security as the key to constructing an eventual Global Maritime Network
- 9) to be effective, the network needs to be able to share information amongst its members, which preferably should be of an unclassified nature to overcome security concerns. Such information should include

- ‘commercial ship characteristics, accurate cargo manifests, merchant ship crew lists, sailing times, destinations, and current ship locations’
- 10) the security situation in the global maritime domain requires that efforts are initiated as soon as possible to strengthen national maritime security capacities, build regional cooperation and link regional arrangements to build the global network

The Global Maritime Partnership is in other words a way to unite the naval forces of “like-minded” countries around the world in order to tackle problems that would otherwise be insurmountable by lone-standing navies. As Admiral Mullen states, “The fleet is a global maritime partnership that unites maritime forces, port operators, commercial shippers, and international, governmental and nongovernmental agencies to address mutual concerns”. In addition, participation in the ‘navy’ would be completely voluntary and have no binding or entangling military or legal ties. In fact, Admiral Mullen envisions the fleet to be completely “free-form” and “self-organizing”. Thus the GMP appears to be an abstract concept or notion instead of a concrete charter of sorts. The GMP envisions voluntary, non-binding collaborative “understandings” that can address a broad range of maritime security related issues. It does not have a formal structure, nor is it led by any one country, rather, it is a “collective effort driven by partner requirements”. In early 2007, the Maritime Security Interagency Policy Committee of the US National Security Council dedicated a separate office for the development of the Global Maritime Partnership. The National Maritime Domain

Awareness Coordination Office has since taken over the development of the GMP. Although the Global Maritime Partnership is in and of itself a new international maritime arrangement, the underlying concept (that of maritime coordination and cooperation) is hardly such. Numerous existing organizations and agreements coordinate maritime actions between nations on a variety of issues such as on security or trade, albeit on a scale much smaller in scope than what the GMP’s namesake and Admiral Mullen’s speeches have suggested. Organizations that deal with piracy in particular are notable due to the high degree of coordination and joint action required to deal with the issue. The ReCAAP (Regional Cooperation Agreement on Combating Piracy and Armed Robbery) is perhaps the most widely utilized international organization that combats piracy in Southeast Asia. Most notable to the ReCAAP is its ISC (Information Sharing Center) where member nations and even individuals can have open access to important maritime security alerts and, if necessary, report an incident to the center. The International Maritime Organization (IMO) of the UN also plays an important support role in coordinating and disseminating information relevant to maritime security for all parties involved. Although these organizations are effective at coordinating and disseminating vital information, they are not used for actual joint action missions. For this, informal agreements between Southeast Asian states have taken hold. In 2005, the navies of Singapore, Malaysia, and Indonesia began coordinating their actions. Intelligence sharing, joint air patrols and joint naval patrols have been relatively successful in combating piracy in the SCS. As a result, Admiral Mike Mullen’s concept of the GMP is not new. There are numerous arrangements already in place that fulfill

functions typical of what would be required in the Global Maritime Partnership. What makes the GMP unique and notable is its ambitious scope (the colloquial 1000-ship navy) and nature. The GMP can hopefully build upon these existing arrangements and further expand their activities and increase their effectiveness.

SECURITY, CONFLICT, AND ENERGY IN THE SOUTH CHINA SEA

The South China Sea refers to the region of the Pacific Ocean that extends roughly from Singapore and the Strait of Malacca in the Southwest to the Strait of Taiwan in the Northeast. It is an area of approximately 1.2 million square miles and boasts of over 200 islands, most belonging to the disputed Paracel and Spratly Island chains (Rogers 2010; Vasan 2011). The South China Sea is a vital maritime transit point as over 65,000 ships, one-third of the world's trade, and one-half of its oil pass through its various choke points every year (Low 2008). As a result, such an important transportation avenue has expectedly generated broad concerns regarding its safety and reliability.

There are numerous ongoing security issues in the South China Sea. The most obvious and perhaps most important of these security issues is the lack of clear maritime delimitations. This has led to conflicting territorial claims by China, Vietnam, Malaysia, Taiwan, Singapore, Thailand, the Philippines, and Brunei. These demarcation disputes have existed for quite some time as all parties involved have pointed to some sort of historical precedent to justify its claims. For example, China's historical justification for its ownership of the Spratly and Paracel Islands goes as far back as the 3rd century as a result of references to the islands in the book, "Record of Rarities" which was published around that period. Vietnamese historical evidence goes as far

back as the 16th or 15th century due to "first contact" rights made by the Nguyen Dynasty (Buszynski 2010).

The 1982 UN Convention on the Law of the Sea (UNCLOS) reignited and reinvigorated these tensions. The UNCLOS not only established the 200 nautical mile concept of the EEZ (articles 55-75), but also the subsequent literature on the "rights" that respective countries enjoy in the EEZ (articles 76 and 77). According to the UNCLOS, states have the right to explore and exploit natural resources within their own EEZ. However, the problem stems from the fact that the SCS is a semi-enclosed area. As a result, numerous nations can legitimately claim the same area to be within their 200 mile EEZ.

Even before the advent of the UNCLOS, Southeast Asian states were scrambling to claim various aspects of the SCS, leading to conflict and tension. Indeed, various islands and reefs in the SCS have become militarized as various states rushed to exploit a particular technicality in international maritime law. As established by the Permanent Court of Arbitration in 1928 and the International Court of Justice in 2002, "effective occupation" takes precedence over the historical context of "first-contact" rights (Buszynski 2010). In other words, a state can legally exercise sovereign control over an area if it can prove that the area in question is already under its control despite the fact that the area may have been discovered and historically used by another state. Unfortunately, it is likely that this "effective occupation" precedent of international maritime law will lead to future strife and conflict as states can legally acquire land by, more or less, militarily controlling or exercising relative sovereign authority over the particular naval jurisdiction.

The strong impetus for conflicts that are territorial in nature comes from the

longstanding importance placed on borders and territorial continuity by the Chinese. China has historically focused significantly on border security due to its war-scarred, colonized past and precarious position. In pre-modern times, China was constantly under attack by various nomadic groups such as the Huns, Oirats, or Mongols which resulted in one of the best known manifests of border security, The Great Wall. This concept continued to develop due to China's traumatic and embarrassing colonization at the hands of European powers starting in the 18th century. This concept has extended well into the Cold War era due to its long border with the Soviet Union which ultimately resulted in border skirmishes. As a result, China has developed a particular sensitivity when it comes to territorial disputes to the point that territorial integrity has become a "value" of Chinese culture and history (Lampton 2001).

Virtually all parts of the SCS are disputed but certain areas demand special attention. Ownership debates over the Spratly (Chinese-Nansha) and Paracel (Chinese-Zhongsha) Islands are particularly heated and have led to long standing and even deadly animosities. All of the Spratly Island claimants (China, Malaysia, the Philippines, Vietnam, and Taiwan) with the exception of Brunei have built fortified military outposts on the island chain. Currently, Vietnam has over 27 outposts on the Spratly Islands while the number of other claimant's outposts is in the single digits (Buszynski 2010). In 1988, China and Vietnam fought over the Johnson Reef of the Spratly Island chain, resulting in the deaths of 70 Vietnamese sailors. The Paracel Islands, with its main disputants of China and Vietnam, have a similar bloody past. In 1974, China wrestled control of the islands from Vietnam with considerable naval-material and personnel casualties on both sides. Although China now has de facto

control over all of the Paracel Islands, its de jure standing is still very much in contention. Although interstate disputes of this magnitude have been rare and should not be expected to occur often in the future, lower level hostilities persist. Numerous reports indicate that China routinely harasses and detains Vietnamese fishing vessels. There are heated confrontations over fisheries, fishing rights, energy exploration and development rights due to the lack of clear maritime demarcation. Quintessentially, Southeast Asian states have a particularly rigid "private-territory" view (in that they do not believe the ocean to a "commons") of the SCS and as a result, a zero-sum great game of sorts has emerged where one countries access to territory or resources comes as the detriment to another (Bateman 2009; Richardson 2009; Mak 2008). Related to this lack of clear maritime demarcations in the SCS is the lack of definition or consensus on what constitutes acceptable actions within a particular state's EEZ. It is unclear what actions are and are not lawful within the 200 mile EEZ and as a result, this has led to a second significant threat to security in the SCS. In this context, China and the US are the main antagonists.

There has been a string of recent and substantial military maritime encounters between China and the US. The most heated of these encounters continues to be the Hainan Island Incident. In 2001, an American EP-3E Aries II surveillance plane collided with a Chinese F-8 interceptor while performing surveillance and tracking operations. In 2002, the oceanographic research ship USNS Bowditch was harassed by Chinese naval vessels and aircraft. In 2009, the USNS Impeccable and Victorious were harassed and actively dissuaded from their surveillance mission in separate incidents when Chinese vessels attempted to remove the ship's towed sonar arrays. In all these cases, the incidents took place outside

the internationally recognized and accepted limit of 12 mile territorial seas but within China's UNCLOS recognized EEZ. The main Sino-US debate currently regarding the 200 mile EEZ revolves around the basic question of, "what is, and what is not allowed inside the EEZ?" The UNCLOS, of which China is but the US is not a signatory of, allows the EEZ to be used for the owner state's economic and resource extraction purposes. However, it does necessarily prohibit military actions. The US position focuses on article 58 of the UNCLOS which states, "all states enjoy subject to the relevant provisions of this Convention, the freedoms...of navigation and overflight...and other internationally lawful uses of the sea related to these freedoms, such as those associated with the operation of ships, aircraft..." (Valencia 2010). In other words, article 58 allows the safe passage of ships and aircraft through another state's EEZ granted that ship and/or aircraft is lawfully using the sea. This begins the legal gray zone of the UNCLOS as it fails to define what is a lawful use of the sea.

Regarding the Hainan Island Incident, the Chinese claim that the aircraft was an "abuse of rights", which violates article 300 of the UNCLOS. China has speculated that the EP-3 in Hainan was not just "listening", but actively "tickling" China's perimeter radar and communication networks. In the case of the Impeccable, the Chinese claim that the ship was undertaking various forms of SIGINT (signal intelligence), electronic warfare, and identification and tracking of PLAN submarines. Article 300 forbids actions that interfere with the actions or rights of another state. Furthermore, China argues that such activities constitute a threat of force, which violates the UN Charter and the UNCLOS in general. This threat of force argument was best defined in the aftermath of the EP-3 incident. The US has conceded that the EP-3

was conducting non-hostile "tracking and surveillance" operations which should be legal under the UNCLOS. However, China has argued that tracking is a necessary prerequisite to targeting, thus, all tracking is inherently hostile since it is one and the same as targeting (Valencia 2010). In regards to the Bowditch and the Impeccable, the Chinese argue that the ships were conducting marine scientific research inside China's EEZ. According to articles 300 and 258 of the UNCLOS, consent is specifically required for such actions, consent that was not given by China. Perhaps the most persuasive Chinese argument comes not from the actions of the US ships but from the inaction of the US government. Since the US has not ratified the UNCLOS, China argues that the US does not have the legal standing to cite the UNCLOS articles in its defense. Predictably, the US position is not in alignment with the Chinese one. Although the UNCLOS spells out somewhat what actions are "interfering", what are not clear are the actions that were carried out by the US Navy ships. The activities carried out by the ships have been classified and with it, the best chances for knowing who is right in this debate. What we do know however suggests that the Bowditch was constructing hydrographic surveys and as the US claims, therefore exempt from article 258. As the US argues, since they do not intend to release the survey results to the private sector for exploitation or gain (part of the keeping it classified argument), it also does not violate the abuse of rights mentioned in article 300. In addition, the UNCLOS does not specifically prohibit military maneuvers or games within another state's EEZ. The US interpretation is one of free seas and unfettered access. Using this definition, none of the three incidents are in violation. It is important to point out however that although the UNCLOS does not specifically prohibit military exercises in another state's

EEZ, it does not explicitly condone it either. As a result, the legality of performing military exercises has become another gray zone subject to varying interpretations. Many UNCLOS signatory states have attempted to fill this void and offer some legal clarity by passing numerous unique laws barring military exercises without explicit approval of the host nation. Although these laws are strictly national laws that essentially amount to nothing more than official declarations which lack the force of international law, there does appear to be some sort of a paradigmatic shift regarding the interpretation of this specific aspect of the UNCLOS. This shift is not favorable to the US position in matters of activities that can and cannot take place within an EEZ. The third source for tension in the SCS is energy resource and transportation. It is best described as a “conflict intensifier” in that by itself it does not generate significant conflict but has the ability to aggravate and accelerate existing insecurities and conflicts. The SCS is thought to be somewhat well endowed with oil and natural gas reserves. Natural gas is believed to be the most abundant hydrocarbon in the SCS with high end Chinese estimates placing total reserves at over 2000Tcf (with over 900 Tcf around the Spratly Islands); oil, believed to represent about 30-40% of the South China Sea’s energy potential, is estimated to be at over 200 billion barrels. It should be noted that Chinese estimates vary greatly and are often several magnitudes of degrees higher than non-Chinese estimates. For instance, the United States Geological Survey (USGS) has estimated total natural gas resources in the SCS to be around 24Tcf and oil resources to be around 28 billion barrels; far from even approaching moderate Chinese estimates. The inflated nature of Chinese energy reserve estimates is an indicator of the conflict aggravating nature of SCS

resources. Because the high estimates represent in some ways unofficial Chinese intentions and motivations for the SCS, it is clear that China highly values the strategic and energy value of the SCS. In other words, the reason perhaps why Chinese estimates are so exaggerated is due to a subliminal drive to establish the SCS as “Chinese” by both state-level and lower level actors inside of China. Thus, the Chinese government may be being pushed into defending the SCS by sub-national actors with energy reserves as the justification.

In terms of energy and maritime commerce, the South China Sea is the door to many nations. China must once again be singled out for its particular reliance on maritime imports of energy goods. Reports indicate that over 80% of China’s total imports-much of it energy related-must at some time travel through SLOC in the SCS. As a result, China is particularly sensitive to any interventions in the SCS that would undoubtedly interrupt its energy supply (Vasan 2010, 2011; Buszynski 2010; RAND 2000). China has historically relied on the US to provide maritime and energy security in the SCS, however, this arrangement was obviously not ideal for either nation. In China’s case, it lacked the ability to generate security on its own and thus was forced to rely on US naval presence. However, given China’s rapid military modernization and procurement speed, China now has (or at least it believes) the ability to provide its own security in its regional corner. Thus, the energy issue exacerbates existing tensions in the SCS in two ways. Firstly, given that there are noteworthy energy reserves in the SCS, Southeast Asian states might be tempted to claim such resources and overlapping claims would generate tension. Indeed, this has been occurring. Secondly, China has almost unbearable pressure to ensure the SCS remains “open” so that energy can continue to flow in and fuel its

growing economy. Despite massive investments in overland energy transportation sources (such as potential oil pipelines from Pakistan, Burma, Russia, and Kazakhstan) and domestic energy production, China's dependence on energy imports will only continue to grow (Vasan 2010, 2011; Erickson and Collins 2010). As a result, China's economic growth is in many ways tied to its ability to generate SCS energy security. For the Chinese, its optimal arrangement would be to police the SLOC of the SCS with its own naval assets (Erickson 2010; Lin 2008). The possibility of conflict arises when China actively begins to attempt to assert its role as the main provider of SCS security, thus displacing the United States. However, as high-ranking White House officials have made clear, US withdrawal from engagement in the SCS is absolutely unacceptable. In their view, any attempt by the Chinese to shut the door on US participation in East Asian affairs is paramount to the establishment of a regional Chinese hegemony. Thus, in this facet of the SCS dispute, the realist power transition theory may indeed have sway. According to this theory, conflict is most likely to occur when a rising power approximately matches the strength of the existing status-quo power but is dissatisfied with some aspect of the status-quo (Tammen 2000).

It is easy to see the parallels between this theory and the situation on the ground; China is indeed a rising-especially military-power that is dissatisfied with the dominant power's role in SCS affairs. Although China's naval power does not even approach that of the US's, its relative maritime aggressiveness has indeed increased along with its naval capabilities. In 1995-1996, China launched a series of artillery, missile, and mock naval exercises near Taiwan in what many believe was an attempt to influence the outcome of the 1996 Taiwanese presidential election (Ross 2000).

President Clinton ordered two carrier battle groups (CBGs) to the area. Chinese hostilities almost immediately ceased as the carriers arrived.

The question now becomes, should the situation occur now and the US once again sends considerable naval assets to China, will China back down? The last major issue at stake in the South China Sea is piracy. Although recently the Somali pirates have captured media stardom with their extravagant tactics of ransoming ships and crews, the pirates of the Strait of Malacca and the South China Sea have been historically and strategically more relevant to world affairs. Preferring to rob the crew and steal the cargo rather than capturing the entire ship, these pirates are often composed of disenfranchised members or rebels of Indonesia, Malaysia, and Singapore. The number and severity of attacks carried out by these pirates have spiked in recent years and the International Maritime Bureau (IMB) has placed the Malacca Strait third on its pirate warning list, just behind the waters off of Somalia and Nigeria. *See Figure 2 for a full chart and listing of piracy incidents in the Asia Pacific Region*

There are at least two reasons why these pirates are more strategically disruptive and thus, more "important", than their Somali counterparts. Firstly, piracy in general is disruptive and a threat to security. Given the importance of the Strait of Malacca in international trade, the threat from pirates is only multiplied. Secondly, due to the lack of clear maritime demarcation in the South China Sea, these pirates have a greater ability to create friction among Southeast Asian states. Unlike the Gulf of Aden where pirate attacks occur either in international waters or off the coast of Somalia-a failed state by all regards-pirates that operate in the SCS jeopardize the fragile maritime balance of Southeast Asia by exploiting maritime

demarcation conflicts (Mo 2002). In the Gulf of Aden, states can cooperate on the piracy issue since it is international waters and even if such attacks occurred near the coast of Somalia, there would still be no real problems since Somalia is a failed state. As a result, an international flotilla has been assembled there to combat the piracy problem. However, due to the existing tensions in the SCS, such an international fleet presence is next to impossible to coordinate, plan, and execute. Pirates in the SCS often cross over real or imagined maritime boundaries when pursued by ships of a single state. Thus, the ship that is pursuing the pirates is forced into a no-win situation. If the ship crosses the disputed boundary to chase the pirates, then it is risking confrontation with the other state(s) that disputes the line in question. If the ship does not cross the line, then it is letting the pirates get away. By crossing these disputed borders and enticing chase ships to break maritime protocol, pirates in the SCS greatly endangers maritime security as a whole.

FORMING AND APPLYING THE GLOBAL MARITIME PARTNERSHIP

As mentioned above, the GMP is not a formal organization, does not have an actual framework, and does not have any mandatory requirements or necessary actions. It is this lack of structure and binding obligations that give the GMP its wide appeal. Many states, especially China, are reluctant to participate in international organizations if it means giving up some of their sovereignty or having to carry out certain actions it finds objectionable. As a result, the flexible nature of the GMP is well tailored to addressing these prominent concerns. However, the greatest strength of the GMP may well be its greatest weakness. Because the GMP has no structure, in many ways it has no meaning.

The GMP is always at risk of degenerating into nothing more than a statement of principles, similar to how the Israeli-Palestinian peace settlement never progressed beyond the Oslo Accords. Therefore, the GMP must be applied in a way that entices states to join while simultaneously it must have enough “teeth” to coordinate various maritime activities and, if necessary, “encourage” states to act a certain way or perform a certain action. It is important for the GMP to have the ability to recommend courses of action instead of the power to actually coerce or compel compliance. Although advocates against the formation of the GMP often overstate their concerns regarding the ability of the GMP to strip sovereignty from participating states and replace national naval capabilities, their basic argument is one of popular concern. If the GMP is heavily centralized and hierarchical in nature, it will be extremely hard to attract states to participate. As a result, the best approach to structuring the GMP would be to divide it into different grades of membership. Specifically speaking, my proposal for a future GMP would revolve around a two-level membership structure. The “first level” of membership would consist of voluntary participation in the actual GMP. “Second level” membership would consist of voluntary participation in at least one of the GMP’s associated organizations. As mentioned above, the GMP will require the help of various regional and international organizations to carry out its ultimate goal of maritime peace and security.

The GMP should have a somewhat centralized structure in that it would be composed of a central “hub” where global information and data can be collected and disseminated. By “hub”, I simply mean an information collection and exchange system, a sort of digital or virtual database and resource reservoir. A physical hub, location,

or headquarter for the GMP is not necessary, but may be useful. Thus, the first level structure of a future GMP might be similar to ReCAAP's ISC or the ICC's Piracy Reporting Center.

First level membership obligations would be very lax. Members would have no formal obligations other than the request to provide various types of data. This may include anything from submitting a ship's manifest and itinerary to submitting incident reports should something happen at sea. States that choose to participate will be given access to the GMP's information database which will be composed of all the data that member states have submitted.

First level membership in the GMP is low risk and low obligation but would still yield tremendous benefits for all member nations. In this first level capacity, the GMP can serve several functions. As elucidated above, the GMP can serve as an information reservoir and exchange platform. Member states will be able to use the GMP's information reservoir to plan routes, look for hot or trouble spots, or use the popularly available information for various planning or statistical purposes. In addition, this function can allow the GMP to act like a maritime version of the International Organization for Standardization (the many ISO's we find in international business and practice). The GMP can standardize, categorize, and process the undoubtedly massive amounts of raw data that would be submitted to the GMP and churn out internationally recognized, used, and supported common standards. In this way the GMP would create an informal yet manifest framework for enhancing shared maritime domain awareness (MDA). Secondly, the GMP can function as an early warning tool. In this capacity, first level membership in the GMP would be analogues to a subscription to a weather website in that member states would receive

regular updates on all facets of maritime activities and, should something important happen or a crises arise, also receive warning notifications as well. Thirdly, member states can coordinate various actions with each other by using the GMP as a common medium for either discussion or information transfer. In essence, first-level membership in the GMP would be analogues to observer status in the organization. States would be given access to important information and activities with a minimum of requirements.

The second level structure of the GMP would be composed of various affiliated international or regional organizations that would carry out mission-specific aspects of the GMP. States would have the ability to pick and choose which, if any, second level organizations they wish to participate in. These second-level organizations could consist of organizations already currently established, or could be entirely new constructs based around the GMP. Essentially, second-level membership with the GMP would be analogues to cellular phone shopping. After one has decided to become a customer of a certain cell phone service provider (becoming a member of the GMP), the customer can then choose which "plan" best suites their particular needs (which GMP-affiliated organization to join). Some of these "plans" may have binding requirements, others may just provide additional information, it will be up to each individual state to decide which organization to join. Below is a list of the major maritime security related organizations, operations, and associations that may form the basis of the second-level structure of any future GMP. These organizations are regionally prominent and thus may be appealing for Southeast Asian states to join under the context of the GMP. *See Figure 1 for a full chart and listing of these organizations and its members*

ASEAN/ARF- The Association of Southeast Asian Nations and the more inclusive ASEAN Regional forum are regional geo-political organizations dedicated to, among other things, peaceful conflict resolution and inter-regional communication and dialogue. The ASEAN is perhaps one of the most widely used and widely know Southeast Asian organizations and thus, due to its relative notoriety, prestige, and large membership, it may be especially suited for resolving the various SCS maritime issues. China has historically used the ASEAN forum for important white paper announcements and declarations and China has hinted that the ASEAN might be the only place where it would be willing to go to negotiate a settlement to various maritime demarcation issues. Furthermore, the United States and the ASEAN have a relatively close relationship as there have even been talks about adding the US to the ASEAN based on the ASEAN +3 model. Indeed, several ASEAN members have declared support for this plan while no members, not even China, have openly dismissed this idea (Emmerson 2010). In addition, the focus of the ARF has been almost completely redirected in the aftermath of the 9/11 attacks to a direction more favorable to the implementation of the GMP. Whereas the pre 9/11 ARF debates used to focus mainly on singular areas of preventive diplomacy and regional confidence building measures, the post 9/11 ARF debates have centered on issues such as transnational crime and terrorism (Morada 2006). Such a shift in focus is beneficial for the GMP as it increases the demand for a comprehensive regional security framework provided by the likes of the GMP.

CSCAP- The Council for Security Cooperation in the Asia-Pacific is a non-governmental organization for track II diplomacy, political and policy discussion,

and general non-official discourse. It is essentially a forum where scholars, government officials, and others in their private capabilities come to meet and discuss matters of mutual interest or concern. The CSCAP may be extremely beneficial to the GMP in that the structure and function of the CSCAP is loosely representative of what the GMP should be like. The CSCAP is informal in the sense that it is catered for non-governmental channels of discourse; however, it is this exact informality and lack of “official-ness” that makes the CSCAP important and influential beyond its appearance. Because the CSCAP is not “official” in the strictest sense, participating states can often express and exchange ideas free of various pressures that would otherwise characterize formal correspondences. The exchanges that take place are real, tangible, and meaningful and in some ways they are a better gauge of the desired position of a particular government (as opposed to official declarations which may have been crafted with other influences in mind). EAS-The East Asia Summit is an ASEAN affiliated annual forum for dialogue on a broad range of strategic, economic, and political topics. Although initially devoted to mainly economic cooperation between its members, the EAS has branched out and notably, has undertaken conflict resolution and strategic discourse as one of its functions. Thus, this makes the EAS a particularly suitable venue for discussing various maritime issues. In addition, unlike other regional organizations in which state participation is lukewarm at best (for instance, the US led RMSI-PSI), major powers have expressed interest and enthusiasm in participating, giving the EAS additional power, clout, and influence.

ICC-IMB- The International Maritime Bureau is a specialized division of the International Chamber of Commerce which is dedicated to combating all forms of

maritime crime in relation to maritime trade and commerce. The IMB's main function is to detect and investigate maritime fraud but since the early 1990's, they have also paid heavy attention to all matters dealing with maritime interdiction. The IMB is most well known for its Piracy Reporting Center (PRC) which was established in 1992. It functions similarly to ReCAAP's latter developed ISC.

MALSINDO- Trilateral coordinated patrols between the nations of Malaysia, Singapore, and Indonesia. Operation MALSINDO arose out of the failure of the US led RMSI and PSI and began in 2004 to combat the escalating piracy problem in the Strait of Malacca. MALSINDO has been seen as relatively successful and is credited for the decline in the number of pirate attacks in the years after its establishment (Burns-Herbert, Batemen, and Lehr 2009). A state that decides to join MALSINDO should be prepared to dedicate at least some naval resources to joint patrolling and be willing to share various pieces of intelligence as it relates to piracy and overall maritime security. Most importantly, MALSINDO addresses many of the sovereignty concerns that went unsolved with the RMSI and PSI.

ReCAAP- The Regional Co-operation Agreement on Combating Piracy and Armed Robbery is a Japanese led regional maritime framework initiative that was the result of over three years of negotiations by 14 countries. It is primarily designed to enhance the maritime security of the general Southeast Asian region by setting binding obligations (such as anti-piracy operations, arrest and trial of perpetrators) to member states and increasing information transfer. ReCAAP is well known for its Information Sharing Centre. Although careful preparation and negotiations have helped, ReCAAP has not fully managed to dodge or address the

question of sovereignty that has plagued the RMSI and PSI. Specifically, Indonesia and Malaysia's absence is quite noticeable, but expected. As elaborated below, Indonesia, Malaysia, and China have particular sensitivities to the establishment of maritime regimes as it relates to their sovereignty.

RMSI/PSI- The Regional Maritime Security Initiative was US Pacific Command's (US-PACOM) attempt to institute a version of the Proliferation Security Initiative in Southeast Asia. The PSI concept was conceived by former US Ambassador to the UN, John Bolton, and was designed to intercept and interdict the maritime transportation of WMD-related materials (Valencia 2007). However, the RMSI's mandate is broader than the PSI's and essentially amounts to the establishment of small regionally based GMP's to combat common maritime issues (Low 2008, Global Security 2005). The RMSI has been met with rather lukewarm enthusiasm, partially due to the view that the initiative was a way to extend US influence and partially due to sovereignty concerns by South China Sea littoral states. Nevertheless, the RMSI offers important lessons for the GMP. The GMP may be better structured if separate nodes of the GMP addressed various regional concerns. In other words, although the GMP would still be "global", perhaps the GMP can, organizationally, be broken down into regional components, much like the US military's combatant command structure.

UN-IMO- The UN's International Maritime Organization is responsible for establishing a general framework for maritime matters. The IMO has been aggressive in dealing with maritime security issues by prompting regional actors to play a more active role in providing maritime security. The IMO played a crucial role in establishing the Jakarta Initiative in 2005 and helping Japan establish ReCAAP in 2004.

UN-ISA- The International Seabed Authority is the UN mandated independent organization that was established under the 1982 UNCLOS and the 1994 Agreement relating to its implementation. The ISA performs various functions in relation to its original charter, but now mostly operates as an informational reservoir/dissemination and policy coordination forum in regards to maritime demarcation and territoriality.

WPNS- The Western Pacific Naval Symposium is a regional forum that aims to increase naval cooperation, communication, and agreement for Western Pacific nations. The WPNS is currently composed of eighteen member and six observer navies and aims to: explore common understandings and concerns, “discuss and elaborate cooperative initiatives”, “explore new ways of enhancing friendship”, “develop navy-to-navy relationships”, and “discuss professional areas of mutual cooperation”. Unlike MALSINDO’s emphasis on joint action, the WPNS is a much more theoretical and informational organization in that it works to produce “diplomatic” changes and facilitate communication between its parties. In essence, the WPNS is almost an arbitration forum of sorts in that its members work to resolve mutual communication and coordination problems so that even if their navies cannot work together, at least they will not be at conflict.

The GMP should be embraced by Chinese authorities. China has long articulated its desire to use bilateral talks via a regional forum (especially ASEAN) as way to approach negotiated settlements for historical maritime disputes (Yan 2008; Chinese Ministry of Foreign Affairs 2000). The GMP offers exactly that, a bilateral or multilateral forum through which maritime dispute mediation can take place. In addition, the signing of a maritime agreement between the two powers would

not be unmarked territory. In 1998, China and the United States signed the Agreement on Establishing and Strengthening Maritime Military Security Consultation Mechanism which intensified maritime consultation between the two powers (Huayou 2010). Although China and the United States may not agree to the same approach in solving mutual issues, the important fact to note is that China and the United States realize that there are problems common to both states and that these problems can be better tackled through a bilateral or multilateral strategy of engagement, cooperation, and consultation. China has expressed interest in the rough GMP concept. When Beijing’s Navy Chief, Vice Admiral Wu Shengli, visited the Pentagon in 2007, Admiral Mullen floated his 1000-ship concept to China and called on Wu to consider “China’s potential participation in global maritime partnership initiatives”. Wu responded positively, “expressed interest”, and asked for more information.

In December of 2007, the China Maritime Studies Institute (CMSI) of the US Naval War College hosted its annual conference on the topic of “Defining a Maritime Partnership with China”. Top scholars and officials from Washington and Beijing attended, including PLAN Rear Admiral Yang Yi. The resulting book, *China, the United States, and 21st-Century Sea Power* identified numerous areas of mutual concern, potential cooperation, and advocated for the formation of a GMP (Erickson, Goldstein, and Li 2010). Although China did not have a direct role in publishing or writing the book, the fact that the book was constructed with Chinese input speaks volumes about China’s willingness to participate in such a maritime arrangement. Additionally, Chinese reviews of the book, both official and academic, have been extremely positive. Thus, it appears that there is at least superficial Chinese interest

in some sort of maritime partnership with the United States. However, even if assuming that China does find it politically hard to join the GMP due to tensions or disputes with other states, there are still ways of reaping the benefits of the GMP. The GMP is not exclusively a state level organization in that sub-national actors, right down to the individual fishermen or boat captain, can join the organization. In this fashion, various components of the Chinese maritime industry can join without needing to be officially “on the books”. In other words, Chinese companies, ships, and even large scale government affiliated organization such as the PLAN can join without needing the actual Chinese government to join. As a result, China can be part of the GMP without technically being part of the GMP. Although there is evidence of Chinese interest in a GMP like cooperative maritime agreements, there are still numerous significant obstacles that would need to be resolved before any maritime cooperative agreement could take place. Perhaps the most important one of these issues is the general concern over the role of the GMP, its relation with these “second-level” organizations, and how to ensure everything works in a complementary rather than competing fashion. The maritime regimes already in existence often have overlapping functions, requirements, and products which have led to competition instead of cooperation. The best example of this is the dueling nature of piracy reporting. Since 1991, the Piracy Reporting Center of the ICC-IMB has released yearly piracy reports and statistics. This dominance of piracy statistics was challenged with the establishment of ReCAAP and its ISC which also began to release yearly reports beginning in 2006 (Morada 2006).

The best way to address this problem is to specifically delineate the objectives,

statements, and purpose of the GMP. The GMP is not intended to replace, “look over”, or be responsible for any maritime regime. Rather, the GMP functions as the liaison or middleman between these organizations. In this function, the GMP will perform various support roles for these organizations. For instance, the GMP can offer its information reservoir for these organizations to use in order to assist them with whatever objectives they may have. Since the information reservoir is at least partly composed of data submitted by other organizations, in this fashion, the GMP is actually assisting data flow and information exchange to the betterment of all parties participating in the GMP. Taking the piracy statistic example, should the PRC of the ICC-IMB and the ISC of ReCAAP join the GMP, the GMP may make this competition mutually beneficial and thus complementary. For instance, a major criticism of ReCAAP’s ISC is that it is state based and participating states may have incentive to underreport the number of incidents (Sakhuja 2006). For the PRC, it is funded purely by private donations. Thus, at least on a conceptual and cynical level, the PRC’s number of functions and quality of which it conducts those functions is dependent on this unreliable source of income. The GMP can offset these inadequacies by using the PRC to fact check the ISC and using the ISC to supplement the PRC. In this function, the GMP can help fill the “gaps” or extend the reach of various organizations by essentially collecting all knowledge into a common pool and sharing that pool. The second major concern in applying the GMP to not only China, but any nation, is convincing them that the GMP is not a threat to their sovereignty or would otherwise be a tool for the extension of foreign intrusion. Sovereignty concerns have been a particularly touchy subject for states that border the Malacca Strait (Malaysia and

Indonesia) and China. However, although all three of these states are concerned about sovereignty, it is important to delve further into the issue in order to identify how these states are concerned with the sovereignty question specifically. In addition, China and Indonesia/Malaysia have different sovereignty concerns and arguments, thus, it is also important to examine these two unique positions and highlight their similarities as well as their differences.

For Malaysia and Indonesia (Singapore as well to an extent), their sovereignty concerns stem from their geographical location, namely, how they flank the Malacca Strait. These concerns led directly to the floundering of the US led RMSI and the PSI which were structurally similar to the GMP and would have established a GMP like maritime regime in the SCS to combat various maritime issues. The RMSI was met with forceful rebukes from Malaysia and Indonesia in the aftermath of then US PACOM Commander Chief Admiral Thomas B. Fargo's testimony before the House Armed Services Committee in 2004 in which he characterized the RMSI as 1) an extension of the PSI 2) an extension of the State Department's Malacca Strait Initiative (MSI) 3) using the resources of Malacca Strait littoral nations (Low 2008; Morada 2006; Valencia 2007). Although these criticisms ranged in topicality, the most blunt and concrete assertions were about the sovereignty question. For Indonesia and Malaysia, their opposition and fearfulness of maritime regimes stems from their view that the Malacca Strait is a private, not public, strait. In 1971, Malaysia, Singapore, and Indonesia formed the Malacca Strait Council (MSC) due to increasing concerns over maritime security, piracy, environmental pollution, and navigational safety (Forbes 1995). The MSC released that same year a joint statement now known as the 1971 Joint

Statement on the Malacca Straits. In the statement, the governments of Singapore, Indonesia, and Malaysia agreed to and articulated several things (Bin Hussin 2005; Djalal 2008; Forbes 1995; Morada 2006).

- 1) Safety of navigation in the straits is the responsibility of the coastal state concerned (Malaysia, Indonesia, or Singapore)
- 2) The need for tripartite cooperation and the establishment of a body to coordinate such cooperation and planning
- 3) Safety of navigation and internationalization of the straits are two separate issues
- 4) The straits are not international straits

The most important point made in the declaration was point 4 which articulated that the straits were private and thus not "international". In other words, the Strait of Malacca and Singapore-according to Malaysia, Singapore, and Indonesia-are not international waters with a guarantee of "free and unfettered access" but actually territorial seas subject to local national regulations and laws. This bold assertion of territorial sovereignty has been upheld by relevant international laws. Article 34 of the 1982 UNCLOS states:

- 1) The regime of passage through straits used for international navigation established in this Part shall not in other respects affect the legal status of the waters forming such straits or the exercise by the States bordering the straits of their sovereignty or jurisdiction over such waters and their air space, bed and subsoil.

- 2) The sovereignty or jurisdiction of the States bordering the straits is exercised subject to this Part and to other rules of international law.

In addition, even if this article was rejected, the Malacca and Singapore Straits would still be considered territorial waters instead of international waters due to the simple fact that the strait is not particularly wide and thus, falls inside the 12 mile definition set by UNCLOS Article 3. Because it is clear that the Malacca Strait is territorial waters, not international sea, it is easy to see the concerns Indonesia and Malaysia have in participating in maritime arrangements that are specifically directed at security issues in the Malacca Strait. Should have Malaysia or Indonesia participated in either ReCAAP or RMSI, they would have been essentially surrendering some of their sovereignty and territory by inviting naval ships from other powers to sit in their waters. In other words, Malacca Strait littoral states have the fear that by joining these maritime arrangements, they are losing some amount of their otherwise total control of the straits due to an “internationalization” effect. Using this logic, it is also easy to see why MALSINDO was so popular and relatively effective. Because MALSINDO only included the three littoral states of the Malacca Strait, cooperation was relatively easy and efficient due to the lack of any sovereignty concerns. The fact that the straits are considered their territorial waters have enormous implications for the establishment of any effective maritime regime that deals with the piracy issue. According to the UNCLOS Article 101, piracy is defined as “any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:

- 1) on the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft;
- 2) against a ship, aircraft, persons or property in a place outside the jurisdiction of any State”.

As a result, it is clear that UNCLOS refers to piracy only when it is outside of territorial waters and thus, on the “high seas”. For illegal acts committed within a state’s jurisdiction, the term “armed robbery” is used which means that armed piracy is guided by Articles 2-33 (Part II) of the UNCLOS. This difference is not nitpicking as the UN has issued several press releases addressing the importance of understanding the difference between armed robbery and piracy.

This distinction has important ramifications for maritime security cooperation and gives a clear observable framework for understanding the actions of Indonesia and Malaysia (Dzakirin 2010). Regarding all illegal actions that takes place in the straits as “armed robbery”, Indonesia and Malaysia insists that the general security framework, structure, and function for dealing with this threat to be under national, not international, control. Only when “piracy” happens do, as Indonesia and Malaysia argues, international maritime arrangements take over. As a result, Indonesia and Malaysia have been reluctant to join maritime regimes that deal with the Malacca Strait since they both view such arrangements as a way for foreign powers to exploit what is their territorial sea. This distinction between armed robbery and piracy is often glossed over despite its paramount importance and thus any functional maritime regime must take this into account. The GMP can overcome this problem several ways. Firstly and perhaps

most easily, the GMP can simply recognize this distinction and Indonesia/Malaysia's perspective by allowing Indonesia and Malaysia to combat "armed robbery" with their own resources. This concept can be expanded broadly into the GMP and thus the GMP will essentially have a non-interference clause where it specifically puts down in writing how a state's territorial seas is completely sovereign and under the jurisdiction of the respective state. Such a clause within the GMP would allow states like Indonesia to join and reap all the benefits of the GMP without subjecting it to undue sovereignty concerns. Secondly, the GMP can make its selling point the information it makes available and thus bypass this concern. In other words, should Indonesia and Malaysia be convinced that the GMP is nothing more than a maritime information regime (and thus there is no credible physical threat to their sovereignty), then perhaps they would be more willing to participate. For China, their sovereignty concerns stem from theoretical or anticipated fears rather than anything substantially concrete. Firstly, China believes that the GMP might be a front for the US (but potentially any other nation) to deploy significant naval resources within proclaimed Chinese territorial waters under the guise of combating piracy (Dzakirin 2010). In this fear, China believes that these deployed foreign military resources could, foreseeably, be used in a way to threaten Chinese security by either cutting off key transit points or by "cornering" or "boxing in" China's own ships and navy. In some ways, this argument parallels the Malaysian and Indonesia narrative in that China, like them, does not want foreign naval presence within its waters. However, the Chinese narrative is substantially more complicated. As mentioned above, maritime demarcation in the SCS is very hazy and although China claims most of the SCS to be its territory,

this interpretation is not likely to be true. Secondly, China's sovereignty concerns are very broad. Even if China does not believe that the presence of a foreign naval power within "its" waters is a challenge or threat directly to its security, it most likely will still object. This narrative is grounded in the Chinese fear of credible challenges to its interpretation of maritime demarcation in the SCS. As mentioned above, China argues that most of the SCS is its waters. The presence of foreign naval assets would be a de facto expansion of the narrative that the SCS is not Chinese waters (Morada 2006). This would be especially true for countries that surround the SCS like Japan. These two problems can be dealt with several ways. Firstly, the GMP must sidestep the maritime demarcation question by not allowing it to be brought up on the table. China fears participation in such agreements because such agreements would allow ships of its rivals to operate in supposed Chinese territories. A way to sidestep this Chinese concern would be to structure the GMP in such a way that China could participate with nations that are not its immediate concern. For instance, China would much less likely object to the presence of Australian ships in the SCS than the presence of Japanese or Vietnamese ships. Although it would be an overstatement to say that China would not be concerned with such a deployment, their immediate SCS maritime demarcation concern would at least be somewhat alleviated by the presence of ships that do not have a territorial stake in the region. In addition, it again must be emphasized that the GMP does not have to be an instrument for joint action; it can simply be an information regime. Joint action through the GMP can take place by joining a maritime organization (that may or may not be associated with the GMP) that does coordinate joint action. As shown by Figure 1, China has no problem participating in

information or diplomatic maritime regimes. However, it is just as clear that China does not join regimes that can actually dictate physical action. If China can be convinced that the GMP is more of the former and not the latter, then perhaps their fears will be greatly alleviated.

GMP AND ITS IMPLICATIONS FOR SCS MARITIME AND CHINESE ENERGY SECURITY

Should the GMP come to fruition, it would play a vital role in alleviating various maritime conflicts and subsequently contribute to both maritime and energy security. In terms of maritime demarcation, which is the first of the four major causes of tension mentioned earlier, a GMP like agreement should establish a common medium where Southeast Asian states can go to resolve their differences through negotiated settlement. All maritime powers in Asia seek closer cooperation and confidence building measures with China (Green 2010). However, this has proven elusive due to the lack of proper formal mechanisms for conflict resolution. The GMP, in association with other currently existing regional organization (most notably ASEAN and the ARF), can introduced these mechanisms. The first priority should be lower level or non-traditional issues that are of common concern to all states involved. These issues might include such things as terrorism, drug trafficking, smuggling, and environmental safety. By focusing on these issues which are less volatile yet still require cooperation to tackle successfully, confidence building measures can begin. After the GMP has established some precedent for joint action and mutual cooperation, parties can then advance onto more sensitive topics such as the demarcation disputes. In addition, because the Global Maritime Partnership is “global”, it can potentially be more flexible and

accommodating than regional organizations. In other words, the GMP can provide an avenue or forum for the unbiased mediation of disputes whereas regional organizations may heavily lean or tilt in a particular direction. It is clear that recent Chinese naval maneuvers and its overall military modernization and expansion have “spooked” its neighbors. As a result, security relations between the Asian powers and the United States have grown increasingly close and expansive. Because these states dominate regional forums, China may be reluctant to engage in dispute mediation through these forums. Indeed, the Chinese have often regarded multilateral institutes suspiciously, preferring bilateral deals and negotiations (Yuan 2010). Although in the last decade China has shown apparent willingness to participate in more regional and multilateral forums, there is still suspicion that China participates in such organizations for the sake of not “losing face” or influence instead of any real belief in the efficacy of such an approach (Christensen 2009; Economy 2001).

The GMP can deal with these problem by either invigorating bilateral talks or resolutions under the context of international law, or if preferred, by bringing in outside arbitrators that do not have a stake in the outcome. China is not likely to accept the latter solution; as a result, the GMP will most likely be used to facilitate negotiated bilateral settlements between China and the other disputants. Although it would be idealist say that the GMP can solve these longstanding tensions, the GMP can at least help the discussion along. Recent trends in diplomacy in the region suggest that China and the other actors involved are willing to “shelve” disputes in order to pursue joint development. If the GMP can continue this momentum with agreements based off of the 2002 Declaration on the Conduct of Parties in the South China Sea, which laid down

principles for peaceful resolution as well as the joint development of SCS resources, then perhaps a solution to the actual issue will not be necessary. Out of the four main sources of tension in the SCS, the GMP is perhaps best suited for addressing the second source of tension, the lack of clear definitions on what is and what is not allowed within a state's EEZ. Although the GMP would not be able to clarify hazy definitions or plug gaps in international law, the GMP can increase communication and predictability between states. In this fashion, the GMP will serve as a sort of declaration of intent notifier. Because participation in the GMP requires, at the very least, the submittal of vital information such as ship's manifests and itineraries, the GMP can divulge the location and mission of ships. As a result, Bowditch and Impeccable like incidents should be reduced. In this fashion, the GMP does not actually address the underlying issue of hazy definitions; rather, the GMP can effectively tackle the symptoms that arise from this problem. Perhaps one of the biggest issues that China has with the United States is the constant presence of the US Navy ships within China's EEZ. As mentioned above, the United States sees this as an exercise of free and unfettered access of the seas while China sees it as illegal military maneuvers and actions. The GMP cannot address the underlying issue in these cases; however, the GMP should have some ability to mitigate the damage caused by such incidents. The GMP is primarily an information sharing and communications regime. Incidents like the Impeccable or Bowditch affairs stem from mutual misinterpretations. As a result, the GMP should be able to alleviate at least some of the fears and tensions resulting from the misunderstandings and misinterpretations by facilitating contact between Chinese and American officials. Although China would still be displeased

with American conduct, and the actual incidents would most likely be unavoidable, it is highly unlikely that additional collateral damage would result.

In terms of energy, the GMP should improve China's energy security, or at least feeling thereof. Historically, China and the United States have had a relatively long and symbiotic relationship in terms of joint energy projects, developments, and information exchange. In the aftermath of 2001 Hainan Island incident, top level correspondences on energy issues and projects between the Department of Energy (DOE) and the National Development and Reform Commission (NDRC) continued unabated, indicating a strong degree of institutionalization that was able to survive political tensions (Christoffersen 2010). This trend of strong mutual cooperation in the field of energy development and information sharing has continued. US and Chinese oil and gas companies have communicated extensively using the US-China Oil and Gas Industry Forum. In 2004, the US-China Energy Policy Dialogue was established which facilitated communication on energy security and energy technology between the DOE and NDRC. The United States, through the DOE and the IEA, has been especially helpful to China in regards to the development of China's strategic petroleum reserves (Christoffersen 2010).

Although China-US cooperation on energy matters are extensive and have contributed to China's growing energy security, the South China Sea continues to be a problem for Chinese energy security. Perhaps the most prominent concern that China has is the possibility that another state, most likely the United States, might foreseeably intervene and interdict Chinese SLOCs in the South China Sea and thereby cut off Middle Eastern oil.

The GMP and its confidence building measures should erase this concern

as this concern is based more on alarmist thinking than logistical and political feasibility. Because China relies heavily on SLOC in the SCS, for the US to interdict in this arena would be paramount to an act of war. Although China and the United States do not see eye to eye on many issues, war is not a likely due to the nature of the economic and military relationship these two states occupy and enjoy. In addition, the US also heavily relies on SLOC in the South China Sea. As a result, it is much more likely that both powers would work together to ensure the energy security of both states. Indeed, one of the original purposes of extending the GMP concept to China was to increase the energy security of both states (Pollack 2006).

The second way of how the GMP can increase Chinese energy security is by addressing resource concerns. The South China Sea has considerable oil and natural gas reserves. However, extraction of these resources have become a sticky point as many of these resources are in areas where EEZ's overlap or are otherwise in disputed territories. Although, as mentioned above, the GMP would likely not be able to resolve these demarcation disputes, the GMP can be used in a way as to bypass these issues altogether; such as the pursuit of joint development schemes.

The last major issue of the SCS is the piracy question. Pirates of the SCS have at least partially contributed to the unprecedented and extraordinary growth of cooperation initiatives launched by Southeast Asian states. Although not all of these organizations function as intended (such as the case of ReCAAP which is plagued by internal disagreements) their presence indicates that there is a high degree of willingness to participate in multilateral agreements designed to combat the piracy issue. The GMP can continue this trend by providing and consolidating bilateral

agreements on piracy. Comparatively speaking, piracy is an "easy" problem to fix in the SCS in that all relevant parties agree to the fact that piracy is bad and a threat to free and unfettered oceans. Disagreements stem not from this debate, but rather, what is the best way to combat piracy. Thus, the piracy debate in the SCS revolves around policy. Multilateral organizations such as ReCAAP provide a good starting point for anti-piracy operations and coordination, but the nature of multilateral organizations precludes their usefulness for policy and execution. The SCS states disagree on how piracy should be combated, thus, a multilateral approach would be flawed in that the number of divergent opinions within a multilateral organization would ultimately doom it to inaction. A better approach would be to use bilateral or limited multilateral agreements between nations such as MALSINDO. MALSINDO has been widely praised for its effectiveness and as mentioned above, it is credited for reducing pirate attacks in the first year of its operation. This statistical fact is not an anomaly; rather, it is the result of careful coordination and planning between states that have similar policy intentions regarding piracy. The GMP can facilitate the development of effective bilateral agreements on piracy between like-minded states by performing information sharing tasks and establishing simple *de facto* "rules" which would undoubtedly further develop, perhaps into formal agreements, between like minded states.

CONCLUSION

The Strait of Malacca and the South China Sea is the door to not only Asia, but also the rest of the world. As a result, comprehensive maritime security requires a comprehensive approach of not just one or two nations, but a global commitment to

cooperation and engagement. Only by creating and implementing a global maritime partnership can the South China Sea be calmed and maritime and energy security restored. This paper has outlined the nature, complexities, and extent of the problems facing a peaceful South China Sea. It has gone into detail about the possible nature, structure, and application of a GMP. Although the GMP is far from a universal solution, and although many problems will continue to remain unsolved, one thing is clear; the GMP is good place to start if both China and the United States wish to cast aside their cold war, arms race animosities and start on a path of mutual cooperation and symbiotic development. The GMP remains a new and undeveloped topic. Although I have tried to espouse a practical policy approach to constructing the GMP, more work is needed. Future research should continue to try to bridge the gap between ideas and policy.

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ADDENDUM

X=Full Member O=Observer Status	A US	BR N	KH M	CH N	IN D	ID N	JP N	PR K	K O R	MY S	NZ L	PH L	SG P	VN M	US A	R US
FPDA*	X	-	-	-	-	-	-	-	-	X	X	-	X	-	-	-
MALS INDO	-	-	-	-	-	X	-	-	-	X	-	-	X	-	-	-
MMC A**	-	-	-	X	-	-	-	-	-	-	-	-	-	-	X	-
RMSI- PSI	-	-	X	-	O	-	-	-	O	O	-	X	X	-	X	-
WPNS	X	X	X	X	-	X	X	-	X	X	X	X	X	X	X	-
ASEAN/ ARF	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X
CSCAP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	-
EAS	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X
ICC- IMB*		The ICC is not a state level organization														
IMO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ISA	X	X	-	X	X	X	X	O	X	X	X	X	X	X	O	X
ReCAP	-	X	X	X	X	-	X	-	X	-	-	X	X	X	-	-

Figure 1-Participation of Asia Pacific States in Bilateral or Multilateral Defense, Military, Regional, and Maritime Arrangements

*Five Power Defense Arrangement. Other member is United Kingdom. A series of bilateral defense relationships. **Military Maritime Consultative Agreement. A bilateral confidence building measure between China and the US. Source: ASEAN/ARF "ARF Participants." ASEAN Regional Forum. ASEAN, 2005. 11 Apr. 2011/ EAS "About the East Asia Summit." East Asia Summit Research Initiative. ASEAN. 11 Apr. 2011/ CSCAP "Member Committees." CSCAP. 2008. 11 Apr. 2011/ MALSINDO "Launch of Trilateral Coordinated Patrols - MALSINDO Malacca Straits Coordinated Patrol." MINDEF. Singapore Ministry of Defence, 20 July 2004. 11 Apr. 2011/ (Morada 2006)/ UN-IMO "Member States." International Maritime Organization. United Nations, 2011. 11 Apr. 2011/ UN-ISA "Member States." International Seabed Authority. United Nations, 7 Oct. 2010. 11 Apr. 2011/ WPNS "Hawaii to Host 10th Western Pacific Naval Symposium." US Navy. 29 Oct. 2006. 11 Apr. 2011 Figure 2-Actual and Attempted Piracy and Armed Robbery Attacks, Jan 1994-Feb 2011

Asia Pacific	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Jan-Feb 2011
China	6	31	9	5	2	-	2	-	-	1	3	4	1	-	-	1	1	-
Indonesia	22	33	57	47	60	115	119	91	103	121	94	79	49	40	23	19	45	2
Malaysia	4	5	5	4	10	18	21	19	14	5	9	3	11	8	13	15	20	5
Myanmar	-	-	1	2	-	1	5	3	-	-	1	1	-	-	-	1	-	-
Philippines	5	24	39	16	15	6	9	8	10	12	4	-	5	6	8	5	5	2
South China Sea	6	3	2	6	5	3	9	4	-	2	8	6	3	6	7	13	25	1
Straits of Malacca and Singapore	6	4	5	5	2	16	80	23	21	30	46	19	13	7	10	9	7	6
Thailand	-	4	16	17	2	5	8	8	5	2	4	1	1	1	-	2	1	-
Vietnam	2	4	-	4	-	2	6	8	12	15	4	10	3	5	12	8	13	1
TOTAL	51	108	134	106	96	166	259	164	165	188	173	123	86	73	73	73	117	17

Source: 1994-2005 data from (Morada 2006). 2006-2011 data from ReCAAP Information Sharing Center. 2010 Annual Report. January 2011 Report. February 2011 Report. Reports available at <http://www.recaap.org/AlertsReports/IncidentReports.aspx>

As noted by Figure 1, states that are plagued by maritime security challenges are particularly likely to participate in these regional forums. Thus, the general enthusiasm that these states have shown should be viewed as a positive factor in the application of the GMP.