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Letter from the Editors

Boyd A. and Grace C.S. Martin are the founders of what is now known as the Martin Institute. The Institute provides the university community with a plethora of programs focusing on teaching, research, and outreach to examine why conflict occurs and identify conditions necessary for peace. Each semester Martin Forums bring experts to Moscow to present on a broad range of topics. In the spring the Borah Symposium offers a glimpse at solutions to international issues through case studies.

The Martin Institute oversees an interdisciplinary degree and minor in International Studies. Students select a regional focus and minor in a language that exists in their region. Students also choose an issue emphasis among International Relations, Global Economics and Business, or Global Resources and Development. This interdisciplinary program enables students to form innovative policies that will solve the complex issues of today, as well as those that will arise in the future.

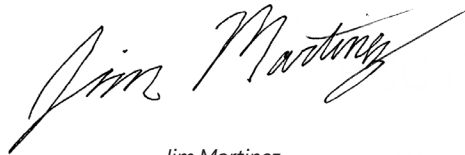
The Martin Institute and Program in International Studies strive to set students on an international path from the very beginning of their studies at the University of Idaho. The freshmen seminar encourages students to work together in order to understand the growing complexities of our world. In their sophomore year, students participate in the United Nations/Model United Nations series, culminating with a simulation of diplomacy and complex problem solving with students from all over the world at a conference in New York City. After completing an international experience, students have several options on how to close out their senior year as an International Studies major. Four to five students become Martin Scholars, and have the opportunity to complete a funded research internship focused on a multi-disciplinary topic. Scholars for 2012-13 examined Ethics in International Discourse, mentored by Dr. Graham Hubbs of the Department of Philosophy, while Scholars for 2013-14 are studying global diplomacy with Professor Pingchao Zhu of the Department of History.

All seniors in the International Studies degree must write a white paper in their capstone course. These papers take hours of research and review and are a culmination of the undergraduate work that International Studies students complete. After carefully reviewing several white papers, we have chosen a selection of what we believe exemplifies the diversity and strength of this year's capstone class. It is with great pleasure that we present to you the 5th volume of the Journal of the Martin Institute | International Studies.

Best,



Liz Kane



Jim Martinez

*It now becomes necessary for us to put our major global problems
into a socially relevant global framework.
Our world has become too complex, too interdependent,
to answer these questions by simplistic answers.*

These problems call for creative thinking...

– Boyd A. Martin, founder of the Martin Institute and namesake
of the Martin School, at the Institute's inauguration, 1980



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Reducing Maternal Mortality in Chad

– Magdalen Hand

Since the enactment of the Millennium Development Goal (MDG) 5A, the African country of Chad has been working to reduce their maternal mortality ratio (MMR) 75% by 2015. Chad has successfully reduced their MMR by 15% since 2000. However, Chad still remains far from reaching MDG 5A and currently has the highest MMR in the world. To ensure economic and developmental progress in Chad the issue of a high MMR must be addressed. By examining solutions to cultural, financial, and physical barriers that prevent women from seeking care Chad could drastically reduce its MMR. The solutions suggested to overcome these barriers are; training community health workers, creating financial access to care, and changing attitudes towards women. To maximize the efficiency of reducing the MMR Chad must adopt the Health Extension Program; this program encompasses education, access to healthcare, and woman empowerment.

BACKGROUND

Every minute, at least one woman in the world dies from complications related to pregnancy or childbirth, approximately 529,000 women a year.¹ The death of a mother has a huge impact on the family and the economy she leaves behind.² Women constitute 70% of agricultural workers across Sub-Saharan Africa, 92% of the informal sector, and 45-60% of the non-agricultural GDP.³ The UN Secretary General, Ban Ki-Moon, estimates the global financial impact of maternal and newborn deaths to be \$15 billion per year in lost productivity.⁴ In order to continue economic growth and social progress reduction of maternal mortality must be a top priority. For these reasons, reducing the maternal mortality ratio (MMR) 75% by 2015 is Millennium Development Goal 5A.⁵

The World Health Organization defines maternal

- 1 "Why do so many women still die in pregnancy or childbirth?" World Health Organization.
- 2 UNFPA. CARMMA: Stirring Continental Conscience into Action Success in Maternal Death Reduction. (pg.4)
- 3 Africa Progress Panel. Maternal Health: Investigating in the Lifeline of Healthy Societies & Economies.(pg.24)
- 4 Africa Progress Panel, 27.
- 5 UNFPA, 4.

mortality as, "the death of a woman while pregnant or within 42 days of termination of the pregnancy irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental cause."⁶ Maternal mortality is measured by using the MMR: the number of maternal deaths in a given period per 100,000 live births during the same period.⁷ MMR averages 16 for developed nations and 240 for developing nations.⁸ Looking at the MMRs and taking actions to lower these rates is imperative, not only from a humanitarian standpoint but also imperative from a global economic standpoint.

The country of Chad has the highest MMR, at 1,100/100,000, not only within Sub-Saharan Africa but globally.⁹ A country known for its political instability, corruption and poverty Chad's high MMR is due to both issues related to culture and access to healthcare. Culturally, women are subjugated in Chad; they aren't highly valued, they are victims to female circumcision/female genital mutilation, marriage at a young age, and high fertility rates.¹⁰ Access to healthcare also contributes to high MMR, with the rate of attended births in Chad being merely 22.4% caused by a lack of both trained professionals and infrastructure, such as roads.¹¹ Also, women in Chad have little medical coverage, so even women who do have access to medical aid often cannot pay for it.

If maternal mortality could be lowered in the high-risk area of Chad it is likely the implementations that worked in Chad will work elsewhere. These implementations could be used as a model for other countries with high MMRs. Investing in strong health systems overall requires investing

in lowering the MMR.¹² Four key approaches can lower the MMR in Chad: training Community Health Workers to breakdown the barrier to access, creating financial access to care, and changing cultural attitudes towards women.

POSSIBLE SOLUTIONS:

Approach 1: Training Community Health Workers to Breakdown Access Barriers

The lack of access to care in rural areas is a major contributor to Chad's high MMR. Chad has approximately .28 nurse/midwives per 1,000 people in their population. However, this average does not give a full picture of the shortage in rural areas. Rural areas lack both facilities and trained healthcare workers.¹³ 8 million out of the 11 million total population live in rural areas, making access to care a problem for the majority of the population.¹⁴

Community Health Workers (CHWs) provide the key to improving access to care and health-education in Chad. CHWs are community members who are trained to perform medical tasks in their region. A study in Ghana found that increased training and mobilization of community health nurses drastically reduces mortality rates among women and children.¹⁵ Chad needs to follow the model put in place in Ethiopia called the Health Extension Program (HEP). With help from UNICEF, Ethiopia trained Nearly 34,000 Health Extension Workers (HEWs) through their HEP. HEWs are local women who are trained that go work in rural areas to advise women about the free medical help available. Nearly 15,000 health posts have been set up throughout the country. These health posts allow women in the surrounding community to have better access to healthcare personnel at birth.¹⁶

In order to implement this program UNICEF would have to work closely with Chad's Ministry of Health (MoH), which is in charge of stating

6 Jamison DT, Feachem RG, Makgoba MW et al., editors. *Disease and Mortality in Sub-Saharan Africa*. 2nd edition. (Washington (DC): World Bank, 2006).

7 Jamison DT, Feachem RG, Makgoba MW et al., editors.

8 WHO, UNFPA, and the World Bank. *Trends in Maternal Mortality: 1990 to 2010*. (pg.19)

9 WHO, UNFPA, and the World Bank. *Trends in Maternal Mortality: 1990 to 2010*. (pg.38)

10 Center for Reproductive Rights. *Laws and policies affecting their reproductive lives: Chad*. (pg.101)

11 World Bank. *Reproductive Health at a Glance; Chad*. (pg.1)

12 Africa Progress Panel, 4.

13 Africa Progress Panel, 8.

14 "Rural Poverty in Chad." [Rural Poverty Portal](#).

15 Africa Progress Panel, 14-15.

16 "In rural Ethiopia, health extension workers bring care to new mothers." UNICEF.

national health objectives for the health sector and formulating new policy. This would allow them to gain governmental support for the HEP. UNICEF would also need to coordinate the Regional Health Delegations (RHDs) in order to implement the joint strategy set out by the MoH.¹⁷

Approach 2: Creating Financial Access to Care

Women play a major role in Sub-Saharan economics; however when it comes to maternal health women in Chad do not receive the financial support they need. Approximately 11.2% of the population claimed that health facilities were too expensive, not including the financial burden transportation puts on family.¹⁸ Another major cause of high MMR rates in Chad is the delay in transport to emergency facilities during childbirth due to the lack of financial resources to pay for transport.¹⁹ Chadian women have a mean health coverage of 40%, but this mean is drastically inflated because it includes the wealthiest Chadians.²⁰ Chad could alleviate financial stress on women by putting in place a community-based health insurance as well as performance-based financing. Community-based health insurance, based on a model out of Rwanda, includes the pooling of resources at a community level with the intention that everyone in the community will receive access to healthcare. Through the specific community-based health insurance program in Rwanda, women have access to give birth in health facilities for free if they seek antenatal care; this gives them incentive to pursue both types of care.²¹

Performance-based financing, a program that has also been implemented by Rwanda, includes measuring the quality of performance by healthcare provider and quantity of clients; good results are rewarded with an increase funding by the government. Through this program Rwanda was able to achieve a reduction in maternal

mortality from 152 per 1,000 live births in 2005 to 103 per 1,000 live births in 2007. By implementing both community-based health insurance and performance-based financing Chad could lower the financial burden on the women and therefore lower its MMR.²²

Approach 3: Changing Attitudes towards Women

Because the value of women is often marginalized economically, politically and socially in Africa, focus on the value of women will be required to improve maternal health in Chad. Chad ranks only 152nd out of 157 countries in the Gender Development Index.²³ Financially and intellectually rely on their husbands who oftentimes prevent them from seeking family planning and care.²⁴ The MMR could be lowered in Chad by improving the literacy rate and putting pressure on political leaders to focus more on women. Sri Lanka succeeded in reducing their MMR by expanding female literacy rate.²⁵ By being literate women have more access to information on family planning, pregnancy and birth. At 30%, Chadian women have a relatively high attendance level in primary education. However, the average age to marry is 15.6 years which prevents continuing education, and high literacy rates.²⁶ Focusing on promoting further education in primary education classrooms, where many women receive all their formal education currently, would promote higher literacy rates and therefore reduce Chad's MMR.

Pressure on political figures is needed to ensure that the value of women, including the right to literacy, is not overlooked. This pressure should come from local as well as international nongovernmental organizations and intergovernmental organizations (NGOs and IGOs). In Sierra Leone changes regarding women's rights were made in 2008 through collaboration and steering group meetings between the government, civil society, and the

17 Waly, Wane, Bernard, Gauthier. "Bypassing health providers: The quest for better price and quality of healthcare in Chad." *Social Science & Medicine*. (2011): 541.

18 World Bank, 3.

19 "Chad: Country Profile." World Health Organization.

20 "Chad: Country Profile." *Countdown to 2015: Maternal, Newborn, & Child Survival*.

21 Africa Progress Panel, 19.

22 USAID. *A Vision For Health: Performance-Based Financing in Rwanda*. (pg.5)

23 World Bank. *Reproductive Health at a Glance; Chad*. (pg.1)

24 Africa Progress Panel, 11.

25 Jamison DT, Feachem RG, Makgoba MW et al., editors.

26 Center for Reproductive Rights, 89.

community.²⁷ In Chad, focus groups including local and international NGOs and IGOs would need to work closely with the MoH. This entails conducting weekly meetings with the vice president and monthly meetings with the president of Chad to help steer them to see the value of a women.


RECOMMENDED COURSE OF ACTION:

Implementing a Health Extension Program (HEP) is the preferred solution for Chad; the program offers the most realistic plan in reducing MMR in the specific region. Since independence in 1960, the country has experienced ongoing political instability which cumulated on the 1979 civil war. Because of this political instability, Chad needs to have a more community-based focus. While the HEP would need to be supported by the government the main implementation of the program would come from Regional Health Delegations, a level ran by the specific communities in which they exist.²⁸

HEP also crosses solution boundaries that cause social issues, such as the maternal mortality ratio. The implementation of HEP not only eases stress on women by providing access to healthcare workers, but it also crosses into the spreading of education, the empowerment of local women, and easing the stress on infrastructure. For example, females will be selected for HEWs because most of the HEP packages relate to issues affecting mothers and children; the empowering local women.²⁹ Local HEWs are able to connect with local mothers, using their own culture to combat cultural norms that prevent healthy births, such as cultural mindsets on female genital mutilation or youth marriages. This all-encompassing course of action is ideal for creating positive change in Chad where women are not highly valued and there is a lack of infrastructure, and education.

Under its National Health Policy Chad already has a decree, decree No. 519/PR/91, which gives the Minister of Public Health jurisdiction to

supervise the opening of private dispensaries for doctors, dentists, and midwives. The Minister of Public Health provides authorization for members of these dispensaries to practice their profession.³⁰ This decree acts as stepping-stone for implementing a HEP. As mentioned earlier, the first and second steps to implementing HEP are working with Chad's MoH and RHDs, the third step would be to better facilitate the HEWs. This can be done by providing basic tools like mobile phones, bicycles and supplies to handle trauma and blood transfusions. Phones allow for communication with the midwife, while bicycles allow the midwives to get to rural areas relatively quickly.³¹

Through implementation of this program Chadian mothers would receive access to more information in regards to family planning, pregnancy, and birth as well as access to a healthcare. This multi-strategy approach will increase Chad's success in lowering their MMR and reaching Millennium Development Goal 5A. 

27 Africa Progress Panel, 22.

28 Wane, Waly, Gauthier, 541.

29 Bilal, Herbst, Zhao, Soucat, and Lemiere. "Health Extension Workers in Ethiopia: Improved Access and Coverage for the Rural Poor." (pg. 434)

30 Center for Reproductive Rights. (pg.96)

31 Africa Progress Panel, 28-29.

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Sustainable Solid Waste Management in Mexico City and Buenos Aires: Incorporating informal refuse collectors into and improving on the current solid waste management system

– Linette Moseley

Increasing populations in large Latin American cities has led to a steady increase in the amount of waste generated. Waste is most often dumped in landfills within or outside of the cities, as is the case in Buenos Aires, Argentina and Mexico City, Mexico. Argentina and Mexico have both been at the forefront of sustainability and green living in Latin America. While both cities have struggles to overcome within their current solid waste management system, cost effective strategies can be implemented to increase quality of life and sustainability in the region. The most important hurdle being, the incorporation of waste pickers, or informal refuse collectors, into the existing system. This strategy utilizes an already mobilized workforce to increase recycling and sustainable practices. Along with this both cities can incorporate other strategies, such as source separation and waste to energy technologies, to involve the community in improving on the current systems to ensure a green and maintainable solid waste management system.

INTRODUCTION

Sustainable municipal solid waste management (SWM) grows as a problem in developing countries of Latin America due largely in part to steady increases in urban populations. See appendix A for a working definition of municipal solid waste. Open unsanitary landfills, common in many Latin American countries, create air, water and soil pollution due to the mixing of waste which releases noxious chemicals into the air and harmful leachates into the soil. Collection rates and practices vary greatly between countries, cities and municipalities. Buenos Aires, among the few, achieves nearly a 100% collection rate after largely privatizing its municipal solid waste services.¹

Mexico City's population grew by over 2 million people between the years 1990 and 2000 alone.² Mexico City generates over 12,000 tons

1 Martin Medina. *The World's Scavengers: Salvaging for Sustainable Consumption and Production*. (AltaMira Press, 2007), 167.

2 United Nations Human Settlements Programme. *Understanding Slums: Case Studies for the Global Report on Human Settlements. The Case of Mexico City, Mexico*. (pg. 5) http://www.ucl.ac.uk/dpu-projects/Global_Report/home.htm

of waste per day³ of which about 70% of refuse is collected, although only about 35% makes it successfully to landfill.⁴ Appendix B displays the waste management stream in Mexico City as of 2004. Open incineration and illegal dumping are common problems present throughout the city. Mexico collects only 12% of GDP in taxes, less than half that of Argentina, making formalized SWM costly and difficult.⁵ The closing of Mexico's largest unsanitary landfill, *Bordo Poniente*, shows the government's willingness to improve SWM but also displaced many informal refuse collectors (IRC).

Mexico City is among the large percentage of Latin American cities that do not have programs for source separation of waste, and few countries actively pursue recycling programs. Growing numbers of IRC or, more commonly referred to as waste pickers, or *cartoneros*, make their livelihoods in Latin American cities including Mexico City and Buenos Aires through separating and selling recyclables and providing collection services, although their exact numbers prove difficult to calculate. Buenos Aires has made efforts to improve the system of sustainable SWM and recognition/incorporation of IRC in the last ten years. The government has begun to formalize IRC and use their services in a new "Zero Waste" SWM strategy, more on the Zero Waste Law in Buenos Aires in Appendix C. Buenos Aires, along with Mexico City, currently has no formal recycling program in place, leaving IRC to collect and sort through trash to find resalable items.

After laws passed in both cities legalizing IRC, see appendix D for the relevant law in Buenos Aires, cooperatives and organizations of IRC have increased in Latin American cities. IRC involved in cooperatives report a higher standard of living compared to working independently.⁶ IRC and cooperatives have yet to be fully incorporated into SWM in Mexico City, leaving living and working

conditions poor and unstable. This activity highly increases vulnerability of these individuals due to their lack of health care and sanitary services. IRC expose themselves to serious health risks, expanded on in appendix E, when sorting through non-separated garbage without proper protective equipment. Child labor is common within this informal sector due to children of IRC dropping out of school at a young age to work.⁷⁸ The increased need to provide sustainable and sanitary SWM in these areas places additional responsibilities on cities that are already unable to serve all current residents.

POSSIBLE SOLUTIONS:

Integration of IRC into SWM strategies

Mexico City could benefit from encouraging public-private partnership within the SWM system. The informal refuse sector accomplishes high retrieval rates of recyclable waste, up to 80% in some cases.⁹ The formalization of IRC could prove beneficial in both cities; by setting up performance standards and regulations as to the transport and dumping of waste materials, municipalities and IRC could benefit from an increased income due to the sustained reliability of the institutionalized system. In this system IRC cooperatives receive jurisdiction of various sections not served by formal MSW services to pick up waste, transport it to a transfer station or green center where separation would occur, which would also employ various IRC not involved in cooperatives.

Another option would be to empower cooperatives within the region to grow, take ownership of the recycling efforts of their municipality and provide separation and collection services.¹⁰ Cooperatives working as small businesses or micro-enterprises strengthen their access and position to industry and

3 Susan Wismer and Adriana Lopez de Alba Gomez. "Evaluating the Mexican Federal District's integrated solid waste management programme" *Waste Management and Research*. 29 (2011), 480.

4 Medina, 131.

5 Martin Medina. "Serving the unserved: informal refuse collection in Mexico" *Waste Management and Research*. 23 (2005), 392.

6 Medina, *The World's Scavengers*, 81.

7 David C. Wilson, Costas Velis and Chris Cheeseman. "Role of informal sector recycling in waste management in developing countries" *Habitat International*. 30:4 (2006), 797-808.

8

9 Gesellschaft für Technische Zusammenarbeit. GmbH (GTZ). *Role of the Informal Sector in Solid Waste Management and Enabling Conditions for its Intergration: Experience from GTZ* (pg. 1)

10 Medina, *The World's Scavengers*, 80.

government, which gains stability and better prices for their workers.¹¹ Both of these would encourage more IRC to join cooperatives and eventually, either supported by government or organizations, receive better social services and more reliable pay for their work as in the case of the Linnis Ganda program started in the Metro Manila area of the Philippines, more on this initiative in appendix F. Incorporating the informal sector would save cities money and increase recycling behavior, which in turn would improve environmental footprints. See appendix G for the successes and advancements made in Buenos Aires towards this goal.

Provide IRC and Families with Basic Protection and Care

In lieu of or before formalizing IRC into SWM systems the basic need for protective equipment can be met. Government, cooperative, NGO, IGO or a combination of any should take responsibility for funding and distributing basic protective equipment to IRC throughout the city. This basic step decreases risks of infectious diseases among IRC. Basic protective equipment includes, but is not limited to; gloves, footwear, masks and tools to sort waste. The same entity would fund education initiatives on the importance of protective equipment and education on how to properly use such equipment. To encourage IRC to participate, refund programs can be included, where feasible, for food or health checks in turn for picking up said equipment.

Vaccination programs are of key importance to the health and wellbeing of IRC, wherein micro-insurance programs could prove a beneficial way to encourage IRC to receive vaccinations.¹² Building sanitation facilities outside of or near dumpsites for IRC that work within dumps can decrease risk of spreading disease and infection.¹³ Education enhances IRC employment opportunities as well. Where feasible, ideally with the aid of NGOs and/

or CBOs (cooperatives), programs can provide vocational training to IRC along with training in health, hygiene and family planning.¹⁴ One should consider incorporating childcare and increased access and/or incentive to education in order to reduce IRC child labor.

Source Separation of Trash

Neither city implements a system of at home waste separation currently. The source separation of waste, even at the very base between wet and dry components, would give home owners more awareness and responsibility in improving their own environments and improving conditions for IRC. By homeowners separating trash IRC would come into less contact with harmful substances. Cooperatives or the government can create campaigns informing citizens of proper separation techniques. Incentives for trash separation need to be researched and used in ad campaigns to encourage this activity. This will incorporate the positive support of IRC, supporting their efforts to improve recycling within the city and change their sometimes-negative image.

In some parts of Mexico, donations of recyclables to cooperatives are tax deductible for businesses. Cooperatives should enter into agreements with business and/or government for the recovery rights of already separated materials, which would enhance IRC situation by removing the need to sort through garbage and walk miles a day to find recyclables.¹⁵ Separate colored bags could be distributed or sold by cooperatives to designate between types of waste. Eventually, this separation would ideally evolve into separating of recyclables so that IRC collect already sorted bags of recyclables and eliminate their contact with harmful substances. Another idea to encourage separation of waste comes from a program started in one region of Mexico City that could be widely expanded throughout the city. This program, created by local vegetable and plant vendors and the Mexico City secretariat of the environment, set up a market of local farmers where residents

11 ["The informal recycling sector in developing countries." Public Private Infrastructure Advisory Facility: Grid Lines.](#)

12 United Nations Human Settlement Programme. *Solid Waste Management in the World's Cities: Water and Sanitation in the World's Cities 2010* (pg. 17)

13 World Bank: Urban Environment Thematic Group. *Toolkit: Social Assessment and Public Participation in Municipal Solid Waste Management* (pg. 131)

14 World Bank: Urban Environment Thematic Group, 133.

15 ["The informal recycling sector in developing countries." Public Private Infrastructure Advisory Facility: Grid Lines.](#)

can trade recyclables for vouchers to buy fresh produce.¹⁶

Privatizing Collection Services

Buenos Aires collection services run mostly through private waste collection companies.¹⁷ The government sectioned the city into regions where varying private business collects and transports waste, appendix H expands on the current MSW management system in Buenos Aires. This method has proved highly efficient for the city of Buenos Aires as shown in their near 100% waste collection rate. Mexico City could privatize its waste services in a similar way. The government would provide contracts to IRC cooperatives, micro-enterprises, businesses or a combination thereof that have access and connections to areas currently not served by present MSW services.

This gives opportunity to collect more waste, from more areas, more efficiently. This also sets standards and regulations which could cut down on or eliminate illegal dumping within the city. Small loans could be provided to IRC cooperatives/micro-enterprises to invest in more sustainable waste collection equipment. Ideas can be taken from Buenos Aires in encouraging each privatized collection company to construct a "Green Center" for resource recovery where the activities of sorting, baling and storing materials are managed and carried out by a cooperative of IRC.¹⁸

Closing Unsanitary Landfills to Construct Sanitary Landfills

This option would prove more feasible after the implementation of improved recycling and separation methods has been achieved. Mexico City closed its largest unsanitary landfill *Bordo Poniente* in late 2011 without an alternative SWM strategy created, creating backups of trash and higher transportation costs for moving trash to landfills outside of the city. The closing of unsanitary landfills can decrease greenhouse gas emissions and encourage the sustainable restructuring of SWM systems. With correctly allocated funds

and/or aid from IGOs and NGOs with interests in improving environmental sustainability, new sanitary landfills and green recycling centers can be constructed in place of illegal dumping and large open landfills such as *Bordo Poniente*. Sanitary landfills and recycling centers cost a significant amount of government funds but once constructed would be able to employ large numbers of IRC and other Mexican citizens.

An option to find more cost effective methods and technologies could be reaching out to networks with expertise in waste management. Waste Recovery—International Partnership (WR) is one such organization based out of Borås, Sweden involved in connecting with universities, municipalities, companies and NGOs throughout the world to share knowledge and technology, research collaboration, technical solutions and project management and administration and resource recovery.¹⁹ More cooperation between countries in South America is encouraged as well so that countries such as Buenos Aires can share any research on and technology pertaining to its success in constructing sanitary landfills to cities like Mexico City struggling in this area.

Incorporate Waste to Energy Technologies

Once proper separation of MSW has occurred, the process of incorporating waste to energy technologies can be implemented. A higher percentage of waste in developing countries composes of wet or organic waste which includes, but is not limited to, foodstuffs and plant material.²⁰ On average over 50% of a developing city's MSW could be readily composted making it a viable option for both cities.²¹ Composting takes once used resources of organic waste and recycles them into a useable product for agriculture within and outside of the country. The composition process can be inexpensive and reduces methane emissions, one of the large contributors to greenhouse gases. This would greatly increase waste diversion away from

16 Emilio Godoy. "Swapping Trash for Fresh Produce in Mexico City" *Inter Press Service News Agency* (2012).

17 Medina, *The World's Scavengers*, 171.

18 Global Alliance for Incinerator Alternatives. *On the Road to Zero Waste: Successes and Lessons from Around the World* (pg. 77)

19 Mohammad J. Taherzadeh and Olle Engström. "Converting Waste to Wealth" *Soka Gakkai International Quarterly* 71 (2013), 5.

20 Medina, *The World's Scavengers*, 55.

21 World Bank: Urban Development Division. *Urban Waste Management: Composting and Its Applicability in Developing Countries* (pg. 3)

final disposal in landfills. Government subsidies for composting efforts outside of the city would create a notable incentive for farmers and cooperatives to participate. This can support decentralized community composting or large-scale centralized composting of which the government would have more control of. See appendix I for costs and benefits of composting.


Converting MSW to energy requires advanced and costly technologies. Both cities have contracted private companies to innovate and implement waste to energy technologies at their largest landfills. One option uses a steam powered plant to burn MSW and generate electricity. Proper operation and construction of the combustion system ensures that harmful organic compounds are not emitted.²² This method produces a form of ash that would need to be properly stored and/or disposed of. The volume of this compared to MSW in landfills is significantly smaller. Bio-gasification can also be used on organic food wastes to create both fertilizer and energy through composting.

RECOMMENDED COURSE OF ACTION:

The city of Buenos Aires must continue to encourage and support IRC activities. All future SWM policy and restructuring should come from the Zero Waste law already implemented. The government can and should expand the program of registering IRC to incorporate as many IRC into cooperatives as possible. Through these efforts IRC can achieve better living and health standards whilst reducing child labor and lack of education. More of the six private waste companies have to invest in building green centers and employing various cooperatives to operate within their structures. The government, particularly the *Gobierno de ambiente y espacio público*, needs to encourage, educate and implement a program for source separation of trash throughout all regions of the city. Cooperatives within the city could help with these efforts or spearhead the campaigns throughout the varying regions in which they operate. Buenos Aires is moving in

the right direction to further invest in waste-to-energy technologies to create useable products from the tons of waste produced annually residing at sanitary landfills outside of the city. Their wide use of sanitary landfilling practices makes for good conditions to continue to implement technologies to create useable energy for the city or outlying regions of Argentina.

Mexico City needs to further establish their program to recognize IRC, equip them with protective equipment and improve living and health conditions of the IRC within the city limits. Public-private partnerships have to be made between government, business and the community based Mexican cooperatives of IRC, with the help of various NGOs and IGOs to improve collection rates and participation in recycling. IRC can be part of an integrated SWM system wherein cooperatives of IRC take ownership of collecting and sorting through recyclables to sell to transport or green centers. The government needs to construct smaller, community-run centers to boost employment opportunities for IRC besides sorting through trash, which has been proven to expose workers to serious health risks. With the increase of government supported cooperatives, better working conditions for the thousands of IRC arise, as has been proven in Buenos Aires. Education and health benefit programs through the government, local NGOs or cooperatives could also prove useful in expanding employment opportunities for this informal sector of workers.

The city also needs to embark on a nation-wide campaign of separating trash at the source, most basically between wet and dry waste components. Municipalities can expand voucher programs such as the farmers market, recyclables for fresh produce example in Chapultepec. The city is currently focusing much of the sustainable waste management finances and strategies on financing a private company in waste to energy technology ventures. These efforts and funds should be more reasonably allocated to cost effective, community-based strategies as previously mentioned. IRC cooperatives when given enough financial and legal support can tackle many of these issues, ultimately saving the city money to close unsanitary open landfills and construct newer, sanitary ones in the future. 

22 Lawrence A. Ruth. "Energy from Municipal Solid Waste: A comparison with coal combustion technology" *Progress in Energy and Combustion Science* 24:6 (1998), 545-564.

APPENDIX A

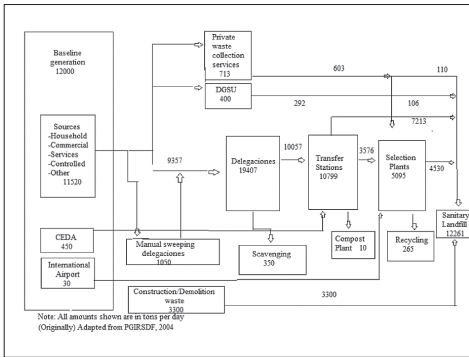
Working Definition of Solid Waste

A working definition of municipal solid waste from the United Nations Human Settlement Programme²³ is as follows; wastes generated by households, and wastes of a similar nature generated by commercial and industrial premises, by institutions such as schools, hospitals, care homes and prisons, and from public spaces such as streets, markets, slaughter houses, public toilets, bus stops, parks, and gardens.

4. Guarantee the necessary space for final disposal, incorporating new technologies.
5. Environmental projects that include the implementation of recovery and recycling systems of municipal solid waste.
6. Increase the amount of materials that return as post-consumer raw material to industry.
7. Contribute to the management of the value chain of recycling.

APPENDIX B

SWM in Mexico City



24

APPENDIX C

Buenos Aires Zero Waste Law

The main objectives²⁵ of the "Zero Waste" Law in Buenos Aires are as follows;

1. Educate neighbors and large generators on the need for source separation of waste, recyclables and garbage differentiating between.
2. Minimizing waste by consolidating practice of separation of recyclables at home.
3. Formalization and integration of urban recyclers in the public service circuit differentiated collection.

²³ United Nations Human Settlement Programme, *Solid Waste Management in the World's Cities*, 6.

²⁴ Wismer, 3.

²⁵ "Basura Cero." *City of Buenos Aires*.

APPENDIX D

Buenos Aires' Law 992

On December 12, 2002, Buenos Aires' Legislature enacted Law 992. The main points covered at the following:

1. Scavenging in the city is declared legal, and the previous scavenging ban is repealed.
2. Promotes an integrated waste management approach that includes the recovery of recyclables from waste. The previous ban on recovery of recyclables is repealed.
3. It recognizes the rights of individuals, cooperatives or others already recovering recyclables.
4. It mandates the city to coordinate with other governments and organizations for designing programs that benefit scavengers.
5. It mandates the preparation of a plan for the separation of materials at the source.
6. It creates an educational program to raise awareness on the social, economic and environmental benefits of scavenging and recycling activities, especially when materials are separated at the source of generation.
7. It creates a registry to which scavengers can join. When they join they will be provided with an official ID, gloves, and an outfit they can wear while working.
8. It creates a program that will provide advice on how to form scavenger cooperatives and micro-enterprises, marketing, as well as on how to reduce health risks from scavenging.

9. It prohibits the recovery, sale or use of food wastes.
10. Based on this Law, the Program on Scavengers, *Programa de Recuperadores Urbanos, PRU*, was created on May 23, 2003, administered by the city.
11. Registered scavengers are allowed to recover recyclables from the streets; they can also negotiate with households, businesses and organizations for the right to recover recyclables from them.
13. Scavengers are not allowed to recover hazardous or hospital wastes...
16. A Registry of Scavenger Cooperatives and Micro-enterprises is created, *Registro Permanente de Cooperativas y Pequeñas y Medianas Empresas, REPYME*.

Adapted from *The World's Scavengers* by Martin Medina.²⁶

APPENDIX E

IRC Health Risks

The risk of infections and parasites is three to six times higher for IRC than for baseline populations. Risk of respiratory diseases increases due to the inhalation of particulate matter, bio-aerosols and volatile organic compounds. Exposure to hazardous wastes often not separated from MSW in developing countries can lead to cancer, birth defects, metabolic problems and failure of organs among other risk factors. Punctures caused by glass, needles or other sharp objects can lead to infections, tetanus, hepatitis and HIV among others. The intense physical activity of IRC contributes to back and joint injuries from carrying and moving heavy equipment. Studies suggest that risks of mortality grow up to 30% among IRC. In Mexico the average life expectancy of waste workers is 39 years compared to 69 in the rest of the population.²⁷

²⁶ Medina, *The World's Scavengers*, 173-174.

²⁷ United Nations Human Settlement Programme, *Solid Waste Management in the World's Cities*, 14-16.

APPENDIX F

Linnis Ganda IRC Program

The Linnis Ganda program in the Philippines was started by the Metro Manila Women Balikatan Movement, a local NGO. The program is composed of a network of scavenger cooperatives throughout all cities and towns that comprise the larger Metro Manila area. They conducted an education campaign for the separation of dry and wet waste in households and businesses. Junk shops, provided with small loans from the Balikatan Movement, were set up as the middleman whose position was to buy recyclables from scavengers or now called eco-aides, whom are provided with ID cards and uniforms. The cooperatives now work with 897 middlemen whom each work with several eco-aides. The cooperatives can receive loans from the Philippine Dept. of Trade and Industry. In Metro Manila alone, more than 2,000 scavengers purchase 15,000 tons of recyclables per month from approximately 20% of households.²⁸

APPENDIX G

Current Governmental Efforts in Buenos Aires

The government of Buenos Aires began an informal recyclers' registry that listed 7,479 IRC as of August, 2011 although the government estimates a number closer to 5,500 of which 2,500 are organized.

A worker cooperative started in 1997, *El Ciebo*, not only recovers waste but trains families in the Palermo district how to sort trash. *El Ciebo* now manages the Green Center of Retiro where they receive waste from varying collection companies in the area to sort recyclables. They also collect recyclables from large businesses, supermarkets and the government in the area that *El Ciebo* has collection agreements with. Its members report a monthly salary of US \$511 or more each month.

The Movement of Excluded Workers is the largest IRC cooperative in Buenos Aires with around 2,500 members. The Buenos Aires government makes available buses to transport workers and the materials that they collect while providing them with a monthly stipend of US \$211, health and

²⁸ Medina, *The World's Scavengers*, 192-195.

risk insurance and uniforms. The cooperative also operates a child care center helping to reduce child labor common in IRC activities.²⁹

APPENDIX H

SWM System of Buenos Aires

Collection contracts awarded in 2004 divided the city into six SWM districts, five managed by private companies; *Cliba*, *Aesa*, *Urbasur*, *Nittida* and *Integra*, while the sixth is controlled by a governmental public body, Urban Cleansing Entity. These companies collect the waste from their designated districts and bring it to three transfer stations within Buenos Aires. From the transfer stations it is taken to landfill *Norte III* by the public waste disposal company *Coordinación Ecológica Área Metropolitana Sociedad del Estado (CEAMSE)*.³⁰

APPENDIX I

Composting

Environmental costs and benefits from composting

COSTS:

- potential odor emissions
- improper disposal of rejects

BENEFIT

- reduced landfill space
- reduced surface and groundwater contamination
- reduced methane gas emissions
- more flexible overall waste management system
- reduced transportation costs
- enhanced recycling of materials such as paper, metal and glass
- reduced erosion and improved efficiency of synthetic fertilizers
- reduced air pollution from burning waste³¹

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29 Global Alliance for Incinerator Alternatives, 74-80.

30 Global Alliance for Incinerator Alternatives, 76-77.

31 World Bank: Urban Development Division, 12.



Family Planning in Southeast Asia

– Erin Heuring

High population growth rates have become a growing concern in recent decades due to the pressures they place on infrastructure and the effects they have on the environment and people's quality of life. Specifically, Southeast Asia is struck with a more significant problem resulting from its unique climate, limited natural resource supply and high fertility rates. Lack of access to and knowledge about contraceptives exacerbates the population growth problem along with high maternal mortality, poverty and low education levels. By implementing my recommended solution of government incentives for smaller families, universal access to s and a partnership with United Nations Population Fund, Southeast Asian countries' populations would experience an elevation of their quality of life along with more opportunities for their children. Reproductive health is internationally recognized as a human right and it is necessary that the means to access reproductive health care be available to all people, especially those in rural or poorer communities. The provision of family planning methods in Southeast Asia would have a rippling effect on a multitude of problems facing the region and therefore should be at the forefront of each government's legal and political agenda.

I. BACKGROUND AND HISTORY

Overpopulation results from high levels of fertility paired with low levels of mortality. As the human population continues to live longer, survive diseases and improve their quality of life, certain areas of the world are experiencing problems associated with a high population growth rate. Asia, in particular, underwent a massive population boom in the past century. Some Asian countries recognized the problems caused by high population growth rates sooner than others allowing them to adjust both their governmental and social policies to address these issues. Despite these changes, high population growth rates continue to affect the quality of life of peoples inhabiting these areas in Southeast Asia, in particular, rural and poorer communities.

Global issues which can be attributed to overpopulation and high population growth rates are water supply shortages, depletion of

natural resources, increased levels of pollution, deforestation, high infant and child mortality, high maternal mortality, higher levels of infection and disease spreading, poverty, unemployment, and a growing demand for social services.¹ In Southeast Asia, these issues are magnified due to small land areas, limited natural resources, tropical climate and propensity towards extreme weather conditions, such as flooding and tsunamis. Due to the dense population in Southeast Asia, "projected increases in population—whether low-, medium-, or high-variant—combined with economic development and rising living standards, will place enormous strains on infrastructure, natural resources, and the environment."² Though cultural values vary across Southeast Asian states, the Asian culture overall emphasizes the importance of the family unit and encourages the production of children, especially sons. Before modernization, the need for having numerous children was merited, due to high child mortality and a dependence on child labor to aid the family. But now, as life expectancy increases, most children are expected to survive to adulthood. The difficulty then becomes providing the food and education to support these children. Many areas of Southeast Asia are feeling the economic effects of the growing number of mouths to feed. The Philippines is the largest importer of rice in Southeast Asia. Other countries, including the Philippines, are experiencing a shortage of fish, a main source of protein, due to overfishing of all types of fish in the region.³

An issue which exasperates the high population growth problem is the lack of access to modern methods of contraception and the ability to plan family size. According to the UNFPA, "the number of women who have an unmet need for modern

contraception in 2012 is 222 million."⁴ This number has decreased in developing countries since 2008, but increased in the 69 poorest countries. Currently, contraceptives aid in the prevention of 218 million pregnancies annually. If universal contraceptive use was attained, an additional 54 million unintended pregnancies would be prevented. This problem is twofold and the solution prescribed must address both the high population growth rate in Southeast Asia as well as lack of access to contraception.

II. POSSIBLE SOLUTIONS

Approach #1: Limited Government Intervention / Status Quo

Some governments, when faced with the problem of high population growth rates, don't consider it to be a problem or, instead, view it as a positive trend which will boost their economy by providing more workers.⁵ This kind of viewpoint can lead to little or no government action to curb the population growth. This potential reaction to high population growth rates could lead to maintenance of the status quo. At the very least, this approach will allow family planning programs which provide maternal health check-ups and basic reproductive health education but access to education about contraceptives and contraceptives themselves will be limited, if not, non-existent. Malaysia's family planning efforts can be an example of the maintenance of the status quo.⁶ The Malaysian government, until the 1960's didn't incorporate family planning methods because, "Malaysia was perceived to be relatively under-populated and the government did not see population growth as an obstacle to development."⁷ In the 1980's, Malaysia experienced a revival of Fundamentalist Islam as well as labor shortages due to industrialization. This combination caused the Malaysian government to rename the National Family Planning Program to

1 "October 1993: Science Summit on World Population." Joint statement by 58 of the World's Scientific Academies. <http://web.archive.org/web/20100210203604/http://www.interacademies.net/?id=3547>

2 "The Future Population is Asia: Fertility and Family Planning." United Nations (2001), 27. <http://www.eastwestcenter.org/fileadmin/stored/misc/FuturePop03Fertility.pdf>

3 Sam Eaton. *Food for 9 Billion: Turning the Population Tide in the Philippines*. PBS NewsHour (Jan. 23, 2012). http://www.pbs.org/newshour/bb/globalhealth/jan-june12/philippines_01-23.html

4 Guttmacher Institute. *Adding It Up: Costs and benefits of Contraceptive Services Estimates for 2012*. (pg 1) <http://www.guttmacher.org/pubs/AIU-2012-estimates.pdf>

5 Eaton.

6 Warren C. Robinson. John A. Ross. "The Global Family Planning Revolution: Three Decades of Population Policies and Programs" *The World Bank*. (2007), 257. <http://siteresources.worldbank.org/INTPRH/Resources/GlobalFamilyPlanningRevolution.pdf>

7 Ibid., 261.

the National Population and Family Development Program, emphasizing healthy family and population growth instead of smaller family sizes. A status quo approach is religion and culture sensitive with an importance placed on maternal health and basic reproductive health education. Accessible and inexpensive contraceptives are deemphasized or unavailable which doesn't allow for parents to choose their family size.⁸

Approach #2: One Child Policy

When the People's Republic of China (PRC) was faced with the problem of rapid population growth, the government immediately realized the potential negative effects and implemented a strict one child policy, known as *jìhuà shēngyù zhèngcè*, or "family planning policy".⁹ Initially, the PRC focused on family planning and the promotion of contraceptives but found that "there was still a lack of a deep understanding of the seriousness of the population problem and the government still had not worked out a clear population policy..."¹⁰ It only took 25 years for the population to grow from 500 million to 900 million. With numbers increasing at an unprecedented rate, the PRC began to enforce family planning policies aimed to curb the population growth quickly. In 1977, the one child policy was introduced to the Chinese population. Under this policy, urban families are allowed only one child; exceptions are made for rural families, minorities and parents that are both only children. Additionally, this policy must provide free or affordable contraceptives and extensive maternal health care availability.¹¹ A strict one child policy enforced on the whole region of Southeast Asia would swiftly reduce the fertility level and result in a lessened economic burden on families and the government. In order to achieve this though, all states would need to provide free contraceptives and the infrastructure to make

these contraceptives and education about their use available to rural communities.

Approach #3: Incentives for Small Family Size

The third policy option is that implemented by Singapore in the early years of their National Family Planning Program. The Singaporean government was acutely aware of the growing population problem because of Singapore's limited space and natural resources. This is a common concern among Southeastern Asian countries and the availability of food and resources is a driving force behind the need for family planning programs. Singapore enlisted government action to curb population growth, less severe than China's one child policy, but still, "noted for its innovative, and in some views stringent, programs and policies."¹² With a family planning policy similar to Singapore's, the government must assume complete control of all aspects of the policy; NGO's only play minor roles. The Singapore National Family Planning Program supported a two-child family as the norm and encouraged families to delay the birth of their first child and to space the births apart. The goal of this program is to reach a population growth rate of zero and achieve a replacement level total fertility rate.¹³ Aside from providing contraceptives, reproductive education programs and accessible maternal healthcare, this program endorsed a "comprehensive package of social policies, or incentives, used to promote the acceptance of sterilization and the small family and to discourage large families."¹⁴ Examples of this include restricted maternity leave, limited tax relief for larger families, and providing incentives for sterilization.

Approach #4: Incentives for larger family size for educated women

After Singapore's originally stringent family planning program proved effective in reducing fertility, the government relaxed and focused on positive incentives to keep family sizes small instead of negative punishments for larger families. Also, they adopted a policy which encouraged large families if the parents could support many children comfortably. The government specifically worked

8 Ibid., 275.

9 "Family Planning in China." Embassy of the People's Republic of China in the Republic of Lithuania. (1995) <http://www.fmprc.gov.cn/ce/celt/eng/zt/zfbps/t125241.htm>

10 Ibid.

11 Barry Naughton. "The Chinese Economy: Transitions and Growth." *The MIT Press*. (2007), 167. http://himalayancrossings.com/pdf/course/6459/04_naughton_chinese_economy_01.pdf

12 Robinson, 204.

13 Ibid., 205.

14 Ibid., 207.

to boost the number of children born to educated women. These incentives included priority for first grade registration and higher levels of tax relief for educated women who had at least three children. A policy which promoted more children born to educated parents and less to uneducated would decrease the financial burden on the latter, making achieving an education more attainable for the children of the uneducated parents. The difference between this solution and the previous is the intent to control what type of generation will be produced next. An emphasis on a more educated population will help break the cycle of poverty and advance the economic development of the country. This policy can be paired with other positive incentives for low income families to limit their children, like tax relief for small families. The money they will save from not having to feed a large family and from tax relief can be invested into their children's education. These children will then join the next generation of educated parents who are able to support larger families.

Approach #5: Universal access to contraceptives

The Philippines experiences high fertility rates and the highest rate of teen pregnancy in Southeast Asia.¹⁵ The Catholic Church remains a significant influence on public policy, especially in regards to family planning efforts. But in December 2012, the Filipino President Benigno Aquino signed into law the Responsible Parenthood and Reproductive Health Act which ensures access to contraceptives to all Filipinos, in particular those who live in low income and rural communities.¹⁶ The positive effects of this bill can be seen in the lives of young Filipino couples who grew up struggling to survive in large families but now can choose to limit their family size and provide more than enough for their children. As a solution, universal access to contraceptives would entail establishing contraceptive clinics in rural communities and towns which would educate the community about

contraceptive use and sell contraceptives at an affordable price. Meeting the reproductive health needs of women in Southeast Asia would "require increased financial commitment from governments and other stakeholders, as well as changes to a range of laws, policies, factors related to service provision and practices that significantly impede access to and use of contraceptive services."¹⁷ Additionally, an extensive age-appropriate sex education program should be implanted in elementary and secondary schools across Southeast Asia. The combination of education and access to contraceptives is essential for any family planning program and though some cultures and religions oppose contraception, the economic and social benefits should outweigh these sentiments.

Approach #7: Involvement of UNFPA

Partnerships with entities such as UNFPA would give Southeast Asian countries additional support in achieving the goal of universal access to and education about contraception. UNFPA believes reproductive health is a human right and, "the key areas of the UNFPA vision [are] that every child is wanted, every birth is safe, every young person is free of HIV and every girl and woman is treated with dignity and respect."¹⁸ UNFPA strives to offer programme countries a full sexual and reproductive health package including family planning services, skilled attendants at delivery, post-abortion care and STI and HIV/AIDS awareness and care. The gap between the need for contraceptives and availability of resources is growing and though, "the international community has agreed that reproductive choice is a basic human right... without access to relevant information and high-quality services, that right cannot be exercised."¹⁹ The UNFPA would partner with Southeast Asian countries' governments to help raise awareness and mobilize support and resources for family planning. The advantage of the UNFPA is they're field-centered and efficient and strategic to each country they serve, establishing, "five regional and six sub regional offices in the field that help coordinate work in about 150 countries,

15 Bonnie Tillery. "Family Planning Pilot Project in Philippines is a Success Story." (March 3, 2013). <http://www.overpopulation.org/Asia.html>

16 Republic Act No. 10354. "An Act Providing for a National Policy on Responsible Parenthood and Reproductive Health." Republic of the Philippines. (July 23, 2012.) <http://www.gov.ph/2012/12/21/republic-act-no-10354/>

17 Guttmacher Institute, 1.

18 United Nations Population Fund. *UNFPA*. Web. 9 May 2013. www.unfpa.org

19 Ibid.


arrears and territories.”²⁰ The UNFPA operates on donations and in 2010 reached a record of \$870 million. Southeast Asian governments could more effectively accomplish their family planning goals with the additional help of organizations such as UNFPA.

III. RECOMMENDED COURSE OF ACTION

It is important to take into consideration when determining a proper Southeast Asian family planning program the varying religious and cultural belief systems in place as well as a respect for and sensitivity to basic human rights. Balancing both sets of these values becomes difficult when policies which can improve quality of life come into conflict with revered religious and cultural values. Additionally, when choosing a family planning program, the government cannot lose sight of the reality that the people subject to the policy will be affected deeply by laws which involve their reproduction. With these thoughts in mind, the recommended solution would be a combination of government sponsored incentives for smaller family sizes as well as universal access to contraceptives along with a partnering with UNFPA.

Incentives for small families would include the aforementioned tax relief which Singapore incorporated into their family planning program. These tax reliefs would allow the parents of two or less children to support a smaller family without having to rely on having more children to support them financially. The money saved on food and gained from tax relief can then be put towards the education of the family's children, leading to a more educated next generation. The government shouldn't limit family size or restrict those families capable of supporting many children from having them. It's the right of the individual to determine how many children they want to have and incentives for small families should only encourage certain choices, not restrict freedoms. Voluntary approaches to family planning encourage freedom

of choice as well as discourage coercive and unsafe practices.²¹

Universal access to contraceptives should be implemented with sensitivity to religious and cultural beliefs but with the knowledge that it's the role of the government to work for the good of the people and the ability to control one's reproduction is a human right.²² Educational programs to teach proper use of contraceptives and benefits from their use should be incorporated into elementary and secondary schools, especially in rural and low income communities. The government should place special emphasis on the availability of contraceptive methods which are considered more effective and require little maintenance such as the IUD. Clinics to provide the sale of contraceptives and reproductive health education will be established in rural communities to ensure all persons access, especially, “to ensure that the contraceptive needs of vulnerable groups such as unmarried young women, poor women and rural women are met and that inequities in knowledge and access are reduced.”²³ Additional funding and resources needed for less-developed countries to implement the infrastructure to provide family planning services would be supplied by the UNFPA who works to ensure reproductive health as a human right worldwide. Access to contraceptives and family planning methods is essential to break the cycle of poverty and improve the economic wellbeing of countries in Southeast Asia.²⁴ 

20 Ibid.

21 “Reproductive Health: Ensuring that Every Pregnancy is Wanted” United Nations Population Fund. <http://www.unfpa.org/rh/planning.htm>

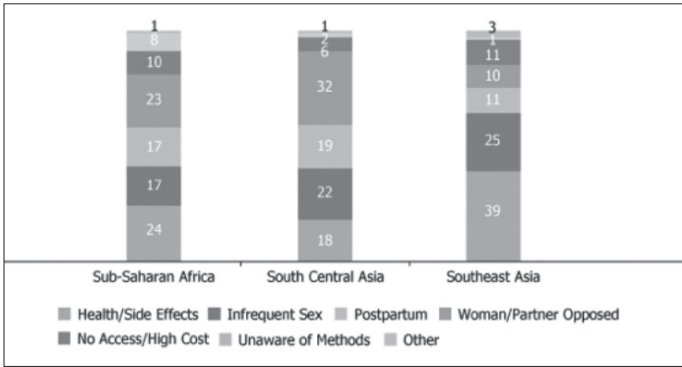
22 Emmanuela Gakidou. “Use of Modern Contraception by the Poor is Falling Behind.” *PLoS Medicine* 4:2 (2007), 2. <http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.0040031>

23 Guttmacher Institute, I.

24 Eaton.

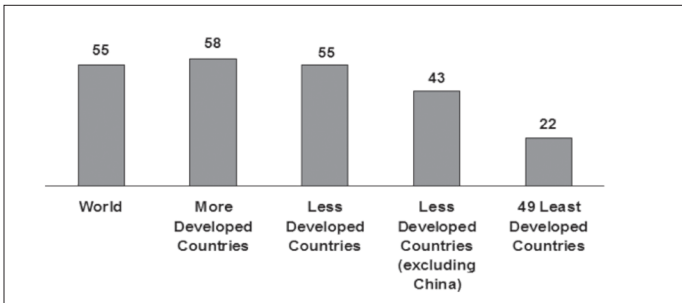
APPENDICES

Health Concerns and Opposition to Family Planning Are Leading Reasons That Women Do Not Use Modern Contraception, Even Though They Want to Avoid Becoming Pregnant.



Source: Jacqueline E. Darroch, Gilda Sedgh, and Haley Ball, (New York: Guttmacher Institute, 2011).

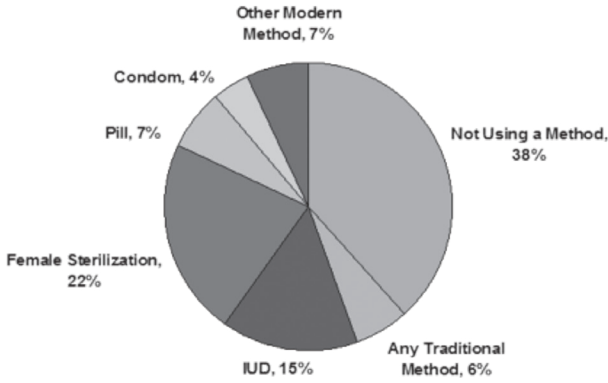
USE OF MODERN CONTRACEPTION WORLDWIDE - PERCENT OF MARRIED WOMEN 15 TO 49 USING MODERN METHODS



Note: More developed regions include Australia, New Zealand, Europe, North America, and Japan. Less developed regions include Africa, Asia (excluding Japan), and Latin America and the Caribbean; the UN designates 49 countries within these regions as least developed.

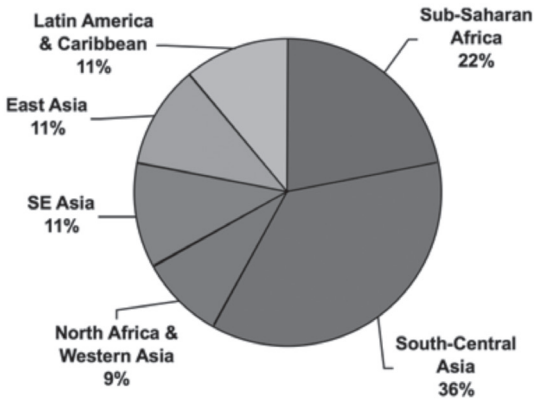
Source: Population Reference Bureau, 2009 World Population Data Sheet.

TYPES OF CONTRACEPTIVES USED AROUND 2007 IN DEVELOPING COUNTRIES -



Source: United Nations Population Division, World Contraceptive Use, 2009.

DISTRIBUTION OF WOMEN WITH AN UNMET NEED FOR CONTRACEPTIVES WORLDWIDE 2008-



Source: Guttmacher Institute, 2009.

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North Korean Refugees in the People's Republic of China

– Carly Lauffer

This paper addresses the ill-treatment of North Korean asylum seekers who illegally enter into the People's Republic of China (PRC) from the Democratic People's Republic of Korea (DPRK). In order to escape the abject poverty and oppression, thousands are making a life or death decision to enter the PRC in spite of cruel repercussions from the DPRK. This paper then discusses the issues surrounding the PRC's claims in regards to North Korean asylum seekers as "economic migrants" and how these claims are combated by multiple conventions, laws and treaties. This paper then discusses potential solutions regarding the treatment of North Korean asylum seekers in the PRC. The recommended solution is a combination of international pressure, access to international agencies and offering an alternative to repatriation. This will assist in the rebuilding of the PRC's credibility, international cooperation, and relations with the Republic of Korea.

INTRODUCTION

Hundreds of thousands of North Koreans have escaped from the Democratic People's Republic of Korea (the DPRK) into the People's Republic of China (the PRC) and other neighboring countries.¹ Mass numbers of North Koreans are illegally crossing into the PRC in order to escape the abject poverty and oppression instigated by the Kim-regime.² To avoid culpability under international law, the PRC regularly repatriates captured North Koreans within the PRC back to the DPRK, under the pretext of classifying such persons as "economic immigrants" and thus they do not qualify for protection under the 1951 United Nations Convention Relating to the Status of Refugees (the Refugee Convention).³ Upon entering the PRC, North Koreans face persecution if returned to the DPRK under pretext

1 [North Korean Human Rights Information. North Korea Freedom Coalition](#). The exact numbers of North Koreans who have fled the DPRK are unknown, this is a rough estimate.

2 Russell Aldrich. "[An Examination of China's Treatment of North Korean Asylum Seekers](#)," *The North Korean Review*, Volume 7- Issue 1. (2011). 36

3 Yeo Hoon Julie Park. "[China's "Way Out" of the North Korean Refugee Crisis: Developing a Legal Framework for the Deportation of North Korean Migrants](#)," *Georgetown Immigration Law Journal*. (2011), 01

of having espoused negative political opinion of the regime.⁴ Under decree of the North Korean Ministry of Public Security, defection is a “crime of treachery against the nation.”⁵ Those who are repatriated are known to be tortured, imprisoned in political penal-labor camps and, on occasions, executed.⁶

The DPRK’s economy began to decline with the collapse of the Soviet Union in 1991 and with the additional loss of trade with the PRC. Flooding in the mid-1990s and drought in 2000 and 2001 led to a collapse of DPRK’s agricultural industry. The economic crisis and food deprivation led to 12 to 13 percent of the total population dying from starvation.⁷ Moreover, the DPRK remains the most isolated and oppressed country in the world. Combined with economic hardships, starvation and immense oppression and isolation, North Koreans have resorted to making life or death decisions to migrate into the PRC and other neighboring countries, in spite of harsh repercussions from the regime.

In spite of the PRC’s assertions, North Koreans qualify as refugees through the United Nations High Commissioner for Refugees (UNHCR) under the claims of persecution on “cumulative grounds” and *Sur place*.⁸ Although the PRC is a party to the 1951 Refugee Convention and the 1967 Protocol Relating to the Status of Refugees (the Refugee

Protocol), it is additionally in violation of these and other laws and conventions (see appendix 1). However, the PRC holds claim to its connection with the DPRK, as its ally and through the Sino-Korean Treaty and the 1986 *Mutual Cooperative Protocol for the Work of Maintaining National Security and Social Order in the Border Areas*.⁹ However, since the death of Kim Jong-Il in 2011 and the instatement of his son Kim Jong-un, the relationship has been growing unsteady between the PRC and DPRK.¹⁰ Kim Jong-un’s recent nuclear tests, in early 2013, have led to a call for action from not only the United Nations but the PRC as well. This has resulted in a bilateral commitment between the United States and the PRC to rid the DPRK of its nuclear weapons.¹¹ With the growing nuclear threat, it is imperative to address North Korean refugees within the PRC and to provide a safer alternative to repatriation without causing a mass migration of refugees into the PRC.

POTENTIAL SOLUTIONS

Remaining Constant

In spite of growing international attention addressing the treatment of North Korean Refugees within the PRC, the PRC can choose to continue their current engagements regarding North Korean Refugees. However, at the current rate, thousands of North Korean refugees are illegally crossing over into the PRC and neighboring countries annually to escape extreme poverty and oppression.¹² With the harsh environment waiting across the narrow Russian border and the heavily militarized border between the Republic of Korea (ROK) and the DPRK, the potential assistance and the wider less militarized border between the DPRK and the PRC

4 Aldrich, 41.

5 Roberta Cohen. “China’s Repatriation of North Korean Refugees.” Congressional-Executive Commission on China. Bookings. (5 March 2012).

6 Chan, Elim. Schloenhardt, Andreas. “North Korean Refugees and International Refugee Law.” International Journal of Refugee Law. Oxford University Press. 1 July 2007. 4.

7 Ibid., 03.

8 UNHCR, Handbook on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and 1967 Protocol relating to the Status of Refugees. Handbook, *Supra* sec. 53 (In addition, an applicant may have been subjected to various measures not in themselves amounting to persecution (e.g. discrimination in different forms), in some cases combined with other adverse factors (e.g. general atmosphere of insecurity in the country of origin). In such situations, the various elements involved may, if taken together, produce an effect on the mind of the applicant that can reasonably justify a claim to well-founded fear of persecution on “cumulative grounds”.) Handbook, *supra* note 3 “for reasons of race, religion, nationality, membership of a particular social group or political opinion.” Handbook, *supra* note 4 (b) Refugees “sure place”

9 Chan, 04. “Article 4 of this agreement states: (1) Both sides shall mutually cooperate on the work of preventing the illegal border crossing of residents. (2) Regarding individuals who illegally cross the border, depending on the situation a name-list or relevant materials should be turned over to the other side {...}.”

10 Jayshree Bajoria. Beina Xu. “The China-North Korea Relationship.” Council on Foreign Relations. (21 February 2013).

11 Fox News. “Close Relationship Between North Korea, China Eyed as Country Joins U.S. in Calls for Denuclearization.” (13 April 2013).

12 Aldrich, 37.

makes crossing into the PRC the most utilized route (see appendix 2 for border map).¹³

However, by classifying North Koreans who enter into the PRC as “economic migrants,” the PRC is not obligated to follow the procedures underlined in the Refugee Convention and thus does not need to offer legal protection. As a result, an estimated 300 some North Koreans are repatriated to the DPRK each week and are denied access to the UNHCR and other formal procedures to determine their status.¹⁴ Those who are repatriated are tortured and sent to political labor camps, which are estimated to hold 200,000 prisoners (see appendix 3 for map).¹⁵

The PRC continues to violate the Refugee Convention and the Refugee Protocol and uphold its commitments with the DPRK. The PRC wants to prevent the collapse of the regime, specifically through the prevention of widespread migration into the PRC.¹⁶ However, if the situation remains uncorrected, the environment will either not change or worsen.

2) Holding the PRC to its International Obligations

By upholding the PRC to their international obligations, the PRC will need to make imperative changes in regards to the treatment of North Korean refugees. Currently, the PRC is in violation of several international and national laws and conventions, such as: Article 32, clause 2, of the 1982 *Constitution of the People’s Republic of China* and Article 8 of the *Extradition Law of the People’s Republic of China*.¹⁷ In addition to the Refugee Convention and the Refugee Protocol, the PRC is party to four different key international

human rights treaties.¹⁸ The treatment of North Koreans while in the PRC violates several of these conventions and laws, and remains largely uncooperative in granting access to international observers.¹⁹ In addition, the PRC regularly withholds the UNHCR unimpeded access to asylum seekers within the PRC.²⁰

The PRC needs to uphold its obligations and has been called upon by the international community to uphold its responsibilities in regards to North Korean refugees. The ill-treatment of North Koreans within the PRC has been recognized internationally and has been a key topic at hearings before the Congressional-Executive Commission on China.²¹ If the PRC is upheld to its obligations, it will need to allow the UNHCR and other entities unimpeded access to asylum seekers and offer legal protection. However, this may result in an overflow of North Koreans into the PRC and may make the PRC seem susceptible to Western influence and appear weak to the DPRK.²² The PRC will need more than legal arguments to be swayed into compliance and there will need to be enforced actions by the PRC and the international community.

3) Access to the UNHCR

By allowing North Korean refugees access to the UNHCR, the PRC can relinquish North Korean refugees to the UNHCR where they can determine a status appropriated for their given situation and thus reduce the pressure placed on PRC officials and forces. However, by further classifying North Koreans as “economic immigrants,” the PRC is disregarding its agreement with the UNHCR to allow the UNHCR personnel unimpeded access to

18 Chan, 2. (Four International human rights treaties: the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of the Child and the Convention on the Elimination of All Forms of Discrimination against Women.)

19 Ibid., 2.

20 Phil Robertson. “The Problem of North Korean Refugees in China and Possible Solution.” (19 July 2012), 03.

21 Hearing Before the Congressional-Executive Commission on China, One Hundred Twelfth Congress, Second Session, China’s Repatriation of North Korean Refugees. (5 March 2012). 03. (“At this time we call on China to uphold its international obligations and take immediate steps to end this cruel, barbaric policy of sending North Koreans back to persecution or death.”)

22 Park, 03.

13 Park, 3.

14 Chan, 3.

15 Amnesty International. Images reveal scale of North Korean prison camps. (3 May 2011).

16 Park, 2.

17 Ibid., 2. (Article 32, Clause 2, “may grant asylum of foreigners who request it for political reasons.” Article 8, “shall be rejected if the person sought has been or will probably be subjected to torture or other cruel, inhuman or humiliating treatment or punishment in the requesting state.”)

North Korean asylum seekers. The PRC continues to fall back on its claim of supporting its agreement with the DPRK.²³

However, the PRC must receive assurance from the international community that unimpeded access will not lead to an overflow of North Koreans and will not be a cause for the collapse of the regime. If this occurs, it may have an outcome similar to when Hungary opened its borders with Austria in 1989; this allowed for the departure of East German refugees. However, if the PRC were to openly advertise the benefits of voluntarily deportation it might cause an overflow of refugees from the DPRK and in return cause a collapse of the regime, a scenario similar to the collapse of East Germany.²⁴ By allowing the UNHCR access, it would reduce the occurrences of forced entry into foreign embassies and consular compounds, which receive immense international attention and can further reduce the strain placed on PRC officials and forces.²⁵

4) Voluntary Deportation

By offering North Korean refugees the option of voluntary deportation to the DPRK or the ROK, the PRC can reduce the costs associated with repatriating North Koreans back to the DPRK and can regain a more favorable status internationally. In accordance with Article 29 and 30 of the *Law of the People's Republic of China on Control of the Entry and Exit of Aliens*, the PRC can legally deport North Koreans within the PRC to the country of the PRC's choosing.²⁶ If modeled after the United States deportation laws, the PRC can follow a similar solution by offering North Korean refugees the option of voluntary deportation to a different country. In accordance with U.S. deportation law, the applicant must possess good moral character and be capable of paying their transportation costs for voluntary deportation.²⁷ However, the PRC might risk their relationship with the DPRK and an overflow of North Korean refugees into the PRC.

Nevertheless, North Koreans outside of the DPRK are entitled to dual citizenship and are permitted to South Korean citizenship under the ROK's *Nationality Act* and *Protection of North Korean Residents and Support of their Settlement Act in South Korea*.²⁸ The ROK continues to invest in a future unified Korea and has been known to pay for the costs associated with the deportation of North Koreans from other countries.²⁹ By doing this the PRC can regain a more favorable status internationally and can also reduce the costs associated with repatriating North Koreans back to the DPRK.

RECOMMENDED COURSE OF ACTION

In order to remedy the situation revolving around North Korean refugees within the PRC, measures must be taken with extreme care and consideration. In addition to the deteriorating relationship between the PRC and DPRK, Kim Jong-un's recent advance of nuclear testing and his crack down on the border has resulted in the standstill of high-level discussions between the two countries since December of 2012.³⁰

The growing fragile relationship between the two countries provides further cause for caution when considering a solution for North Korean refugees within the PRC. A recommended solution for this issue is a combination of three different recommendations. First, the PRC must be held to its international obligations. Through international pressure from entities such as the United Nations and NGO's, such as the North Korea Freedom Coalition, in addition to the added emphasis on the publicizing of the treatment of North Korean refugees, the PRC will be obliged to fulfill their obligations relating to the Refugee Convention and the Refugee Protocol, amongst other human

23 Robertson, 03.

24 Park, 02.

25 Chan, 11.

26 Park, 06. (Article 29 and 30, "any person who enters or leaves China illegally, establishes illegal residence or makes an illegal stopover in China" to "leave the country within a certain time" or "expel him from the country.")

27 Ibid., 06.

28 Ibid., 05. ("Under South Korea's *Nationality Act* and *Protection of North Korean Residents and Support of their Settlement Act in South Korea*, a "Korean national" is a person "whose father or mother is a national of the Republic of Korea at the time of his or her birth." Article 3 of the South Korean Constitution states that "the territory of the Republic of Korea shall consist of the Korean peninsula and its adjacent lands.")

29 Ibid. 01.


30 Ibid.

rights conventions. The PRC will not want to risk its credibility or legitimacy.

Second, the PRC needs to open up to the UNHCR and allow unimpeded access to North Korean asylum seekers. Without officially changing the statuses of North Korean asylum seekers from “economic migrants” to “refugee,” the PRC can utilize the UNHCR to determine a status appropriated for the given situation, without causing an overflow of refugees into the PRC. In addition, the PRC can reduce the number of occurrences that attract negative international attention, such as forced entry into foreign embassies and consular compounds and can reduce the strain placed on PRC officials and forces.

Third, the PRC can offer the choice of voluntary deportation to either the ROK or DPRK, by following a similar model to the United States deportation law. On the basis that North Koreans possess dual citizenship outside of the DPRK, the PRC has a choice to send them to either the ROK or the DPRK. Currently, the ROK remains the most suitable country for resettlement.³¹ The ROK continues to be committed to the idea of a future unified Korea. As a result, proposals have been made for the collection of a “unification tax” in preparation for the unification.³²

Through implementing this recommendation, the PRC would not only regain some of its international credibility and legitimacy but can also build relations with the ROK. Through the utilization of the UNHCR and other formal procedures to determine North Korean asylum seeker’s statuses, it can reduce the number of occurrences that attract negative international attention and can reduce the strain placed on PRC officials and forces. In addition, by providing the option of voluntary deportation, it would reduce the costs associated with repatriating North Koreans back to the DPRK and can influence a stronger relationship with the ROK. This method would not require the PRC to change the status of North Korean asylum seekers

and thus would not evoke a widespread migration or the collapse of the regime. 

³¹ Park, 5. (“However, South Korea remains the most suitable country for resettlement, as the Koreans share a language, ethnicity, and history, and North Koreans are guaranteed citizenship under the Constitution of South Korea.”)

³² *Ibid.*, 5.

APPENDICES

Appendix 1 - List of laws and conventions the PRC is violating in regards to repatriating captured North Koreans:

1951 Convention Relating to the Statues of Refugees, 1967 Protocol Relating to the Status of Refugees, 1982 Constitution of the People's Republic of China article 32, clause 2, Article 15, 29 and 30 of the Law of the People's Republic of China on control of the Entry and Exit of Aliens, Article 8, Extradition Law of the People's Republic of China, 1988 Convention against Torture.³³

Appendix 2 - Border map of DPRK



Appendix 3- Map of North Korean political penal-labor camps³⁵



ADDITIONAL WORK CONSULTED

Chang, Yoonok. Haggard, Stephan. Noland, Marcus. "Exit Polls: Refugee Assessments of North Korea's Transition." Working Paper Series, wp 08-1. January 2008. <http://www.iie.com/publications/wp/wp08-1.pdf>

35 North Korean Now. Photographs: North Korea's Gulags.

33 Park, 2

34 Marc Pascal. "It may be time to remove North Korea from the Map." The Moderate Voice. (9 June 2009).



Slum Development & Economic Growth in Latin America

– Hilary Bowen

According to the United Nations HABITAT,¹ the formation of slums is directly linked to economic cycles.² The creation of slums based on rural to urban migration gives way to a heavy dependence on urban employment opportunities leading to tight job markets, unemployment and poverty. The densely populated low-income areas within and directly surrounding developed cities in South America have produced an economic whirlpool that is inhibiting capital growth within the countries. Using two of the most developed cities in South America with high slum ratios, this research suggests certain development initiatives will lead to greater economic growth and less dependency on illegal micro-economies and underdeveloped markets.³

I. INTRODUCTION

Because of the high number of export, and industrial economies in South America,⁴ short economic cycles are becoming increasingly common. As these cycles decrease in length, the impact on the margin of impoverished individuals increases.

While Argentina, and Brazil are in separate stages of the economic cycle,⁵ their similar slum population percentages create case studies with which to examine development options and financial initiatives.

On the verge of an economic downturn, Buenos Aires, Argentina is a capital city in which 39% of its residents live below the poverty line.⁶ It's reliance

1 UN HABITAT. *Slum-Dwellers to Double by 2030: Millenium Development Goals Could Fall Short*. Twenty First Session of the Governing Council. 16-20, 4, 2007. Nairobi, Kenya. Accessed March 2013.

2 **Appendix A:** UN HABITAT. *State of the World's Cities 2006-7*. pg 1. Accessed March 2013.

3 Rodgers, D., Beall, J., & Kanbur, R. (2011). Latin American Urban Development into the Twenty-first Century: Towards a Renewed Perspective on the City. *European Journal Of Development Research*, 23(4), 550-568. doi:10.1057/ejdr.2011.18

4 **Appendix B**

5 Economic Cycle: Also known as a Business Cycle: a cycle of economic activity usually consisting of recession, recovery, growth, and decline.

Miriam-Webster. 2013. Accessed. March 2013. <http://www.merriam-webster.com/dictionary/business%20cycle>

6 National Institute of Statistic and Cencus of Argentina. Linea de Pobreza y Canasta Básica. <http://www.indec.gov.ar/>

on Brazil, China and the U.S. as trade partners has elicited export dependency that cannot be sustained by the Argentine peso. Often saving in U.S. dollars,⁷ the Argentine population puts little trust in the peso, creating substantial inflation rates.⁸

As the economic forerunner in South America, Brazil's development strategies will have a continent wide effect. In the growth stage⁹ of the economic cycle, and on the verge of developed status,¹⁰ addressing Brazil's slums¹¹ in Rio de Janeiro could be the final stretch to strong international market influence.¹²

Definition of the Issue

If successful measures are employed by these two nations, the result will not only positively impact their economic growth and slum development, but will provide a model with which their smaller neighboring economies can imitate.

Finding solutions that accommodate the diversity and variables these two economic situations require, necessitates a generalization of goals relevant to the area. Firstly, in what way can slum development be incorporated into the financial net gain of the country? And secondly, Will this development help stabilize and increase the positive economic cycle of the country?

II. POSSIBLE SOLUTIONS:

Soft Urban Renewal

"Soft" urban renewal is based on a UN Habitat Best Practice award winning policy in Vienna, Austria.¹³ This idea has expanded through a network of slum upgrading projects taken on by governments, INGOs and NGOs alike. This approach centers on the idea that improving the environment, not just the housing of slums, will better involve slum dwellers in their own well being.¹⁴ The notion of putting resources in place that increase the percentage of slum dwellers that are integrated into the national economic system has spread into many development strategies. Though there are varying methods of soft development, the main factors of soft urban renewal include: housing revitalization, legal occupation of dwellings, taxation, and societal integration.

A. Security of Tenure

One system of slum upgrading requires a security of tenure.¹⁵ Within urban slums, squatters, illegally subdivided land, and structures on government property lend little confidence of permanence to those who live in them. Statistically, the more secure an individual or family is in their home increases how much they are willing to invest in the structure and property.¹⁶ Increasing property values would have a positive impact on national economies and could, especially in the case of Argentina, help sustain the sliding standard of living. Secure tenure allows an individual or family to legally occupy a piece of land.¹⁷ During the UN

7 See Appendix C: Even after the governmental connection with the U.S. dollar was severed. MOFFETT, M. (2012, June 14). Dollars Become Scarce as Argentina Cries Peso. *Wall Street Journal - Eastern Edition*. p. C1.

8 Cortés, C. R. (2009). *The political economy of Argentina in the twentieth century*. New York: Cambridge University Press. Accessed in Print.

9 On the rebound after low 2012 growth rates. Coutino, A. Fuentes, J. De Leon, M. Latin American Outlook 2013: Recovering the Potential. December 11, 2012. http://www.economy.com/dismal/article_free.asp?cid=236121

10 According to the World Bank and the CIA World Factbook calculations, the GDP must increase by \$475 per individual to achieve High-Income Status. Central Intelligence Agency. The World Factbook.

Brazil. <https://www.cia.gov/library/publications/the-world-factbook/geos/br.html>

The World Bank. How We Classify Countries. 2013. <http://data.worldbank.org/about/country-classifications>

11 Also called *Favelas*

12 See Appendix D

13 See Appendix E for case study. UN HABITAT. *Sustainable Urban Renewal Vienna Austria*.

14 Stuart Mackrell, John Turner et al., 'Freedom to build: Squatter settlements, self made communities, mass housing in the developing countries, do it yourself design, participation and the use of power, the profession's role in an explosively divided world', *RIBA Journal*, 81 (1974).

15 Urban housing tenure as opposed to land tenure

16 Archer, Diane. "Baan Mankong Participatory Slum Upgrading in Bangkok, Thailand: Community perceptions of outcomes and security tenure." *Habitat International* 36, no. 1 (January 2012): 178-184)

17 Or a dwelling. This includes ownership or lease. It is legal security.

HABITAT conference at Istanbul,¹⁸ it was agreed that there must be an increase in affordable tenure options.¹⁹ Creating policy for affordable tenure would give thousands of citizens legal property rights and security.

B. Home Ownership

A subgenre of security of tenure, home ownership, is the most successful way to ensure reintegration into the economy. Ownership allows for financial asset accrument, taxation, legal property claim and security. Exemplified by the Turkish government post WWII, Granting ownership to squatters in urban areas was a quick strategy for fiscal integration.²⁰ There were, however, complications in slum growth with the Turkish model because of the government handout. Within Latin America, It is not financially feasible for title allocation of dwelling to be free; however there is a possibility for ownership after a certain length of occupation. This would mitigate the immediate rise in property taxes, and give incentives for tenants to be financially responsible.

C. Slum Dwelling Renovation

Slums in Buenos Aires, and Rio de Janeiro, differ in structure type from the vertical concrete apartments in Vienna,²¹ however, a similar 'upgrading' process is being utilized in Sao Paulo, Brazil.²² Focused on relocating slum dwelling populations into more permanent structures, the Cingapura Project requires much of the work to be done by the recipients of the housing.²³ Funded by the Brazilian Government and the Inter-American Development Bank, this process could potentially be implemented in Argentina as well. However,

the focus on long-term development does not generate any source of revenue; rather it requires substantial government subsidies that would be difficult to sustain were there a downturn in the economic cycle.²⁴

D. Social Environment Development

Beyond attacking the housing problem, development in other sectors of slums has the potential to foster an environment of economic insurgence. Addressing transportation, small businesses and employment opportunities encompass the majority of the barriers between slums and successful economic cycles. This idea is exemplified by the recent construction of the Teleférico line in Rio de Janeiro.²⁵ The Gondola connects the Rio Norte, one of the most populated slum regions in Brazil, to six different stops throughout the city.²⁶ This approach allows slum populations to access employment opportunities without long commutes.

Government involvement

Much of the responsibility of addressing slums to increase economic growth rests with the government of the countries. In order for the soft urban renewal projects to be successful, there must be intricate government involvement. A suggestion of the combination of authoritarian and humanistic administration requires a mixture of legislation and policy changes and tangible application.²⁷

A. Decentralization: Local Legislature and Financial Responsibility

Because development projects happen at the local level, decentralization of development responsibilities cultivate arenas of area specific growth. The chain of collaboration from national government to local governments and subsequently from local governments to community organizations engages cities or communities in the development process. Community organizations

18 UN HABITAT. Report of the Ad Hoc Committee of the Session of the Twenty-Fifth Special Session of the General Assembly. Supplement No. 3. (A/S-25/7/Rev. 1)

19 Syagga, Paul M. Land Tenure in Slum Upgrading Projects. 2011. HAL-SHS <http://halshs.archives-ouvertes.fr/>

20 While the plots were small, they were also given development rights.

21 Ibid, 5.

22 Fernanda Magalhães. Francesco di Villarosa. Slum Upgrading: Lessons Learned from Brazil. 2012. Inter-American Development Bank. Washington D.C.

23 Smith, David. *Best Practices in Slum Improvement: The Case of São Paulo, Brazil*. Development Innovations Group.

24 90% of the project was funded by government subsidies. UN HABITAT, 7

25 Gondola

26 See Appendix F. Source: Maresch, Patricia. Senior Contributing Reporter. Gondola in Complexo do Alemão Favelas. The Rio Times. July 12, 2011.

27 Werlin, Herbert. "The Slum Upgrading Myth." *Urban Studies (Routledge)* 36, no. 9 (August 1999): 1523-1534

can provide an insight into the needs of the slum dwellers, while local government, if given at least limited financial autonomy, can implement local policy and customize infrastructure programs.²⁸

B. Citizen Involvement in Slum Upgrading

City development projects in which citizens have the ability to contribute show an increase in public involvement and approval ratings.²⁹ Both types of bottom up development; consultative, and participatory, have high success rates in small communities.³⁰ Mainly utilized in 'citizen empowerment' projects,³¹ integrating citizens into the development process on a large scale, could prove challenging. The consultative method could employ NGOs to increase individual involvement on a community level. Because the goal is to create employment, economic integration and an improved standard of living, involving slum communities in the development process will incentivize their move towards national financial contribution.

C. Growing the Job Market-Carefully

The creation of employment for slum dwellers may create the largest impact on economic growth. Brazil and Argentina's infrastructure has the development potential to attract foreign and national investment, in turn, creating jobs. One danger of job creation is the flash income dilemma.³² The upcoming World Cup and Olympic events in Brazil, exemplify this threat. Short-term job opportunities for construction, maintenance and

other labor-oriented jobs will become increasingly available, but are not sustainable. This danger can be mitigated contractually, however, the government must be aware of the pending potential labor crisis. Sustainable employment options must be made for those currently employed in flash income positions and the unemployed population.

Financial Solutions

Economic Impact of slums cannot be mitigated by development without the financial sector. The public sector has the power to push initiatives, policies and tax cuts that benefit Private sector businesses. These could be used to create incentives for Private investment in low-income development projects in urban areas.³³ Because these communities are focused on Slum development as a tool for increasing the GDP, and because market opportunities in development are easily exploitable,³⁴ the origin of the investment is critical. The financialization of development in Brazil and Argentina must be addressed delicately.³⁵

A. Capital Investment

Because many urban development projects are decided or agreed upon by national governments, capital investment becomes the jumpstart of the development arena. Developments made for national net gain are long term and must therefore be sustainable. One capital strategy employs the idea of implementing government development projects only after acquiring a secondary investor, negating high national costs. A second solution follows the decentralization initiative, using federal funds coupled with local funds to create sustainable investment options. If properly managed, wise investment of national funds in development projects will aid the rise and conservation of national economic growth.

28 The Cities Alliance. Urban Development: Promoting Jobs, Upgrading Slums, and Developing Alternatives to New Slum Formation. Reproduced section from the Millennium Project's Report to the UN Secretary General. Investing in Development: A Practical Plan to Achieve the Millennium Development Goals. Chapter 5 (pp 72-77)

29 Gasparre, Angelo. "Emerging Networks of Organized Urban Poor: Restructuring Government with Government Toward the Inclusion of the Excluded." *Voluntas: international Journal of Voluntary and Nonprofit Organizations*. No. 4 (January 2011): 779-810

30 Ruskulis, O. (2003, September 22–24). Making change happen: Reforming inappropriate and restrictive regulatory frameworks. Paper presented at the Workshop of the DFID KAR Project—Regulatory Guidelines for Urban Upgrading, Leamington, UK

31 Implemented mainly in marginalized demographic populations.

32 Ibid, 67

33 Resolution 21/7 of the 7th plenary meeting of the General Assembly of UN Habitat Jones

34 Marc Lacey, "Across globe, hunger brings rising anger," *The New York Times*, 18 April 2008:

35 Branwen Gruffydd. 2012. Bankable Slums: The global politics of slum upgrading. *Third World Quarterly* 33, no. 5: 769

B. Cooperative ownership

Assuming the development of property and housing, co-op ownership of the rented housing allows government regulations over the property but only partial ownership. The cooperative allows a combination of national and foreign investors revenue on their development, while negating the debt of the slum dwellers.³⁶ Tax write offs and decreased property tax percentages for joint share owners would foster investor retention, while still giving the government access to the sustainability of the projects. Allowing Non-profit partnership, private, and foreign investment into cooperative projects give the slum housing development projects sustainability and eliminates financial risk should one investor pull out.

C. The Use of International and National Private Contractors

Though decided on by the government, the development process contracts private companies to do on the ground construction. This is often the investment arena for international fiscal inflow.³⁷ There is a global knowledge base of development strategies and importing experienced contractors, offers success security. An inflow of foreign capital also aids the goal of economic development. Alternatively, Giving priority to national contractors for soft development projects continues the cyclical flow of national capital. A contractual clause, such as requiring a certain percentage of the labor to be done by local workers could also increase jobs for slum dwellers.

D. Use of Foreign Aid Directives to Develop Government Projects

Similar to the financial contribution of the IDB in Brazil's Slum Upgrading Project, is. Financial transparency and project report accountability would help to alleviate potential corruption of funds. Aid from shared sources based on a pre-determined governmental budget would subsidize the national cost of such projects. Though dependency is a factor in continued funding, the minimized costs allow the governments to account for this risk. There is, however, little historic

36 Ibid, 4

37 Goulden, R. (2011) Housing, Inequality, and Economic Change in Syria. *British Journal of Middle Eastern Studies*. 38, (2), 187-202.

incentive for foreign aid to be allocated to these development projects.³⁸ Because poverty reduction and economic growth rates for the region of Latin America as a whole fall behind those of other regions in need, the priority for Latin America to receive foreign aid is relatively low.³⁹

III. RECOMMENDED COURSE OF ACTION:


Combining solutions from the developmental, governmental, and financial arenas constructs a holistic approach to slum development and economic growth. Structural renovation rather than displacement will improve living conditions. Increasing housing tenure and allowing the option of home ownership will retain populations and create incentives for community development. Improved transportation and a focus on employment opportunities allows the integration of the slum populations back into the economic market. Decentralization of development projects and policy analysis while carefully incorporating citizen input will allow a successful understanding of the economic impact of the projects. Fiscally, the national management of investors while having a policy of multilayered development investment will create a secure and stable development platform.

CONCLUSION

Though formatted specifically for the large capital cities of Brazil and Argentina, this economic development model has potential to be implemented in many development strategies. The idea of using national private sector fiscal resources creates capital opportunities, while allowing for urban development and growth strategies. This is a globally relatable approach. The causal outcome of this plan can be projected based on investment totals, development budget, and marketing research, allowing it to be simulated

38 Bandyopadhyay, S. (2012). Do Countries with Greater Credit Constraints Receive More Foreign Aid?. *Review* (00149187), 94(6), 481.

39 Kye-Woo, L., Ji-Hye, S., & Park, T. (2012). Can the Current Aid to Latin America Contribute to Economic Growth and Poverty Alleviation?. *Asian Journal Of Latin American Studies*, 25(2), 83-114.

in a region before implementation. Economic cycles in Latin America are, however, unique. Their export dependence and ability to industrialize juxtaposed with the average standard of living have created economies that cannot support neither long nor mild cycles. The slum areas house the biggest threat to these South American economies. Without significant development, and an increase of the lower middle class, the impact of inflation, market crash, and unemployment rates will lead to a developmental regression. If properly implemented, structural and social soft urban development in large slum areas could not only mitigate this danger, but also create strong economic expansion. 

APPENDICES

Appendix A. According to UN HABITAT, a slum is a dwelling that lacks one or more of the following:

1. Durable housing of a permanent nature that protects against extreme climate conditions.
2. Sufficient living space, which means not more than three people sharing the same room.
3. Easy access to safe water in sufficient amounts at an affordable price.
4. Access to adequate sanitation in the form of a private or public toilet shared by a reasonable number of people.
5. Security of tenure that prevents forced evictions.

Appendix B. With the Monroe Doctrine dictating U.S. involvement in many of the South American countries for much of the 19th century, the development strategies of the nations became limited to trade relations, exports and industrial manufacturing.

Appendix C. Argentina's peso was pegged to the U.S. dollar from 1991-2002 to combat hyperinflation. The Convertibility Law was repealed in January 2002 officially severing the connection. There is still a strong presence of the U.S. dollar in Argentina's economy.

Baer, Werner; Elosegui, Pedro & Gallo, Andrés. (2002) *The Achievements and Failures of Argentina's Neo-Liberal Economic Policies*, Oxford Development Studies, Vol. 30, No. 1, pp. 63-85.

Appendix D. Slum Areas of Rio De Janeiro:



Appendix D (Cont.): Slum Areas of Argentina:

Slums Shaded in Red



Photo Sources: Brazil And Argentina respectively:

<http://media.economist.com/images/images-magazine/2010/24/am/201024amm965.gif>

<http://u.jimdo.com/www46/ots669d92b49c6e766b/img/i7a56580ba90e1714/1334142070/std/map-of-slums-in-greater-buenos-aires-source-christian-werthmann-and-john-beardsley-harvard-graduate-school-of-design.jpg>

Appendix E. The subsidized renovation project in Vienna, Austria aimed to update current housing and create affordable housing without the mandatory displacement of the dwellers. Foundational restoration and structural reframing allowed for affordable housing and small business growth. The plan includes 'Block Improvement Schemes' with local offices providing public project information.

Appendix F. Teleférico Line Statistics:

\$133 million project

3.5 Kilometer ride, 16 minutes in length (as opposed to approximately 50 minutes by foot to the first stop)

152 cabins holding 10 people each. Able to transport 3,000 passengers per hour

The 120,000 residents starting at Complexo do Alemão have 2 free rides per day including free continued SuperVia train transportation. Additional rides cost R\$1 (US \$.60)

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- Cover Page photo credit: Wandagirl21. Blogspot. May 2011. <http://tickettotravelwandagirl21.blogspot.com/2011/06/buenos-aires-argentina.html>



In Search of a Final Solution to Nuclear Waste Policy in Germany

– Gregory Dobak

As Germany continues to downsize its nuclear program and look for final storage solutions for its nuclear waste, it must address the political, financial and feasibility aspects of waste disposal. Germany's current downsizing is in a large part a response to public outcry over decades of irresponsible disposal and their resulting health and environmental impacts. This has led to waste disposal becoming both highly costly and politicized in Germany. This paper will analyze the options and possible solutions available to Germany and will ultimately conclude that a multipronged solution addressing all three aspects of disposal is necessary.

INTRODUCTION

Nuclear waste and responsible disposal is a fundamental problem for any country that has come to utilize nuclear power for research or for power production. This problem has been uniquely highlighted in Germany since the 1970's for a variety of reasons, including a high-energy consuming economy, legislation demanding domestic disposal and the highly politicized nature of nuclear power in Germany.¹ The German government has attempted to solve this dilemma by proposing a number of "permanent" domestic storage solutions to replace aging and temporary storage facilities but as to date no solution has been fully accepted or implemented leaving Germany in a nuclear waste limbo.²

In an attempt to clarify this extremely complicated problem the three main issues that must be addressed will be constructed into a "nuclear waste triangle" this triangle will highlight the three major conflicting interests that must be satisfied before coming to an adequate conclusion. The triangle's points are the political side the financial side and the feasibility side. Each of these points is

1 "Merkel confirms Germany won't export nuclear waste." *Deutsche Welle*. 01 Jan 2013: n. page. Web. 1 Apr. 2013. <<http://dw.de/p/17Eeb>>.

2 Gunther, Kuhne. "Judicial Progress in Germany's Nuclear Waste Disposal Policy, The Konrad Repository Decisions of 26 March 2007." *Nuclear Law Bulletin*. 2007.2 9-12. Print. <<http://www.oecd-ilibrary.org/docserver/download/6707021ec001.pdf?expires=1364860969>>.

interconnected to the others and each comes with its own unique set of issues that must be addressed.

The current state of nuclear waste disposal in Germany is a political, financial and structural quagmire consisting of ageing infrastructure and depository projects bogged down with political scandals and run away budgets. This has been in large caused by the huge scandal revolving around past dumping practices, and the current cleanup of the ASSE II disposal site. The ASSE II depository which was a salt mine turned nuclear waste depository started in the 1970's and is currently being assessed for decontamination. It is likely that all of its 126,000 barrels of nuclear waste will need to be removed following safety fears stemming from improper disposal and future water contamination. This is estimated to cost four to ten billion Euros but may exceed that estimate given the scope and technical challenges posed by the ASSE II depository.³ This site has effectively polarized the German people, frozen several new disposal projects and created widespread mistrust of the government.⁴

The technical side of the problem is equally complex. The two leading proposed final repository sites, the Konrad and Gorleben depositories, are plagued with safety and budgetary concerns.⁵ This leaves most of the nuclear waste generated by Germany's 17 nuclear reactors, nine of which are still currently operating (which as of 2011 produced a quarter of Germany's power), sitting indefinitely at interim above ground storage facilities.⁶

Any potential solution to the nuclear waste problem in Germany must address all three sides of the nuclear waste triangle i.e. the political, financial and feasibility sides. The political side must address and adequately satisfying the hyper acute German

public still reeling from the ASSE II nuclear waste setback as well as addressing the needs of all the various stakeholders ranging from businesses reliant upon cheap nuclear power to those concerned with national energy security. The financial and feasibility sides must also be addressed by finding a site that is within a reasonable budget and has the ability to safely store nuclear waste for the next 100,000 years.⁷

POSSIBLE SOLUTIONS:

The Status Quo:

The first proposed solution will be to maintain the status quo. This solution aims to continue contradictory policies of waste repository selection to appease political agendas. This solution will try to slowly push ahead and reopen the exploration process of the Gorleben site as the final depository for storage of heat generating waste, after an acceptable amount of time and resources have been put into surveys aimed at identifying alternative locations and addressing safety concerns.⁸ This solution will likely include several appeasement processes in which the government attempts to improve public opinion and will also likely include the final licensing of the Konrad depository for intermediate non heat emitting waste disposal.⁹

While this solution conforms to the changing political landscape and may appeal to shortsighted political gains, this approach seriously undermines the financial and feasibility aspects of the triangle by imposing needless costs associated with delays and the possible closure of the Gorleben site, which has already cost an estimated 700 billion Euros.¹⁰ This approach also undermines the same two angles of the triangle as it produces higher costs associated with site changes and raises questions

3 Frohlingsdorf, "Abyss of Uncertainty: German's Homemade Nuclear Waste Disaster." 1

4 Micheal, Frohlingsdorf. "Abyss of Uncertainty: German's Homemade Nuclear Waste Disaster." *Spiegel Online*. 21 Feb 2013: 1-3. Print. <<http://www.spiegel.de/international/germany/germany-weighs-options-for-handling-nuclear-waste-in-asse-mine-a-884523-3.html>>.

5 Kuhne "Judicial Progress in Germany's Nuclear Waste Disposal Policy, The Konrad Repository Decisions of 26 March 2007." 9-12

6 "Nuclear Power in Germany." 2013. <<http://www.world-nuclear.org/info/Country-Profiles/Countries-G-N/Germany/>>.

7 "Nuclear Waste Management." *Our Company*. Vattenfall, n.d. Web. <<http://www.vattenfall.com/en/nuclear-waste-management.htm>>.

8 Bettina, Meyer. "AN INVESTIGATION INTO ALL FORMS OF STATE AID FOR ATOMIC ENERGY". English. Berlin: Green Budget Germany, 2010. 44. Print. <<http://www.foes.de/pdf/State Aid for Atomic Energy.pdf>>.

9 Ibid 44

10 Kuhne "Judicial Progress in Germany's Nuclear Waste Disposal Policy, The Konrad Repository Decisions of 26 March 2007." 10

concerning the overall feasibility to select a site that can safely hold nuclear material for the needed period of time.

Walk Before You Run:

This approach is a step back from the status quo and puts an overall freeze on some of the more politically sensitive issues. In this approach emphasis is taken off pushing the immediate completion and operation of the Gorleben and Konrad sites, which is widely protested and has become a divisive political matter in Germany.¹¹ Rather this approach puts the emphasis on research, development and utilizing of interim holding facilities, while the specifics of nuclear storage are being written out.

This approach also emphasizes new technology, some of which has the potential to cut the amount of time that the waste needs to be held from hundreds of thousands of years to just tens of years as recently shown by German researchers.¹² Furthermore this approach puts weight behind that idea that nuclear waste should be retrievable and that disposal practices should include storage in such a way that new technology can be applied to the waste to increase safety and security and to avoid repeating the mistakes of the ASSE II disposal site.

This approach addresses the political side of the triangle by getting away from unpopular storage projects, emphasizing new and safer procedures and highlighting nuclear waste research over disposal. This solution lacks in its ability to provide a clear path forward and would likely be criticized as postponing the problem. Financially this solution is a wash as it provides short term savings in construction and potential long term savings in improved storage but will likely add costs to projects already in motion as well as costs associated with research and development. The feasibility of this, so long as short term storage

continues to be a viable option, is stronger because in waiting to act, technology and information will have improved.

Back to the Drawing Boards:

This solution suggests a total restart of the whole program. This view would push for the immediate freeze of both the Konrad and the Gorleben sites until they could be fully evaluated and compared to other proposed sites. This solution would put emphasis on building better community ties from the ground up and providing a more transparent process of selection and disposal methods.¹³

A back to the drawing boards approach would provide that the best possible location was chosen, and that the communities affected by the storage facility would be adequately compensated and informed of the process. This solution would put more control back in the hands of the German people and would ease fears of hasty and ill-prepared actions.

The limitations of this solution would be that while ordinary German citizens might be in favor of this type of approach, industry leaders, government actors and those watching the costs of nuclear waste disposal would likely be highly opposed to this solution as this would reopen old wounds and would not guarantee an adequate disposal facility.¹⁴ Furthermore the costs associated with completely freezing two projects worth hundreds of billions of dollars would drive the overall costs of waste disposal even higher. The Feasibility side of this solution is not favorable either as the results of a complete re-do would not guarantee that a better facility would be found or that the process would be any smoother the second time around.

Full Steam Ahead:

Another approach that could be taken would be to completely disregard public opinion and power ahead with the opening and full operation of the Konrad depository for intermediate waste and fast track the Gorleben facility into a full-fledged

11 Simon, Diet. "150 towns want nuclear power ended." *Bürgerinitiative Umweltschutz Lüchow-Dannenberg*. n. page. Web. 1 Apr. 2013. <<http://www.bi-luechow-dannenberg.de/chronologisch/aktuell/150-german-towns-want-nuclear-power-ended>>.

12 "German researchers find solution to radioactive waste disposal." Cordis, 2006. Web. <http://cordis.europa.eu/search/index.cfm?fuseaction=news.document&N_RCN=26110>.

13 "DISPOSAL OF RADIOACTIVE WASTE: THE FORMING OF A NEW APPROACH IN GERMANY." *Forum on Stakeholder Confidence (FSC)*. 13 Hamburg: 2004. <http://www.oecd-nea.org/rwm/docs/2005/rwm_fsc2005_4_rev1.pdf>.

14 Ibid 14-16

depository for heat emitting highly toxic waste. This approach, if followed would maximize the short term feasibility and would help with the timely completion of both projects. This would likely be the cheapest option in the short term as an orderly schedule outside of changing political landscapes could be adhered to.

Another added plus to this approach is that the timely completion of a final, fully operational depository would end much of the controversy over the final resting place for nuclear waste, leaving the door open to maintained or even increased nuclear use in Germany as well as the option to expand the facilities to take in international waste at a profit.¹⁵

The economic and feasibility sides of this solution look strong at least in the short term, as the sites currently under construction would be finished quickly and cheaply, potentially providing an opportunity to make a profit from international waste disposal. The weakness of this solution lies in the political side; this solution would very likely be seen as a repeat of the ASSE II site, which was built without adequate oversight and took in international waste at a profit.¹⁶ Thirty years later the ASSE II site is considered one of the biggest environmental scandals in modern German history and any solution that even slightly resembles a repeat of the ASSE II would likely be vehemently opposed by the German people and considered politically impossible.¹⁷

Game Changer:

Still another solution that could be considered would be a redaction of legislation saying that nuclear waste must be stored in Germany.¹⁸ If this law was abolished then a whole new range of options would open up. A change in this law paired with the diversification of the locations and methods used to store nuclear waste could change the whole face of nuclear waste storage in Germany. This would allow nuclear waste producing facilities the ability to continue to operate without having to

worry about domestic final storage solutions. This paired with diversification of intermediate facilities and a simple name change could reduce the need for an 'end all' central storage facility. By changing facilities titles from 'nuclear waste disposal site' to 'nuclear treatment facility', such as what the French government did in the 1980's, the negative connotations of disposal could be replaced by the positive connotations of research which would ultimately allow for continued operation of nuclear waste producing facilities.¹⁹

Simply looking from a feasibility and financial standpoint, this option looks good as it would allow for continued nuclear energy production. Yet when you include the political side of the triangle this solution quickly loses some ground. While the name change would likely sway some public opinion, this option demands the international transport of nuclear waste, an idea that is deeply unpopular with the German public. It would also make Germany reliant upon the depository of another country for nuclear disposal, while likely being seen as not addressing the core issue of disposal.²⁰

RECOMMENDED COURSE OF ACTION:

While all the above mentioned proposals appeal to at least one of the sides of the nuclear triangle, none can adequately address all of the issues in such a way that is responsible, safe and efficient. Thus the only real solution to this dilemma is one that combines the best elements of all the proposed solutions. While the status quo argument is clearly not working what has been achieved and at great cost, should not be sacrificed due to short sighted politics. What should be kept from this strategy is the current shift to the "safety first" thinking demanded by the public in response to recent events.

15 "Nuclear Waste Management." Vattenfall

16 Meyer. "AN INVESTIGATION INTO ALL FORMS OF STATE AID FOR ATOMIC ENERGY". 42

17 Frohlingsdorf, "Abyss of Uncertainty: German's Homemade Nuclear Waste Disaster." 1

18 "Merkel confirms Germany won't export nuclear waste." 1

19 World Nuclear Association. Information Library. *Nuclear Power in France*. London: , 2013. Web. <<http://www.world-nuclear.org/info/Country-Profiles/Countries-A-F/France/#.UYwRvErts3U>>

20 Marie, Maitre. "French nuclear waste train enters Germany." *Reuters*. (2011): n. page. Print. <<http://uk.reuters.com/article/2011/11/25/uk-france-germany-nuclear-idUKTRE7A00ZA20111125>>.


Form the “walk before you run” strategy, a focus on improved technology and disposal methods is paramount with extra emphasis on waste being retrievable. It is very likely in the future that the current standards will change and technology will improve therefore all waste depositories should bear this in mind while storing waste. While most of the “back to the drawing boards” argument is simply impractical and not feasible, certain parts of this argument could be applied to public opinion to show that real change will occur and to make the process as transparent as possible. This might help gain public opinion in ways that are more constructive to the whole process.

While there is currently no public support or political will for a “full steam ahead” type of strategy, the maintaining of progress and efficiency throughout the process should be sought after. Even though exporting nuclear waste, as suggested by the “game changer” policy, is not likely to be on the table any time soon, taking a second look at other suitable depository sites as well as implementing a rebranding campaign similar to the one used in France could be highly effective. This would provide an insurance policy should one of the main sites fail to live up to standards as well as maintaining the image that safety is of the highest concern as well as helping public opinion by emphasizing technological achievement and effective handling rather than simple disposal.

When all the best parts of each solution are taken the result is a reasonable solution that addresses all parts of the triangle. This solution would aim to appease the politics side of the triangle by actively investigating other suitable sites, as well as showing a shift from disposal to actively perusing the most advanced and safety minded options possible, all while maintaining the highest degree of transparency though the use of international organizations and dialog with all invested parties.

While this hybrid solution invariably could not please everyone, the focus should be on a policy in which everyone could live with. This policy, on the financial and feasibility sides of the triangle, should continue exploration of the Gorleben depository and the final licensing and use of the Konrad depository unless safety concerns dictate

otherwise. Further research and development should be aimed at developing technology that would bring down the overall costs of storage as well as technology that would enable access to waste for future possible treatment.

By focusing on the three angles of the nuclear waste triangle it is possible to create a policy that adequately addresses the three main hurdles to comprehensive, safe and long term nuclear waste disposal in Germany. 

APPENDIX A

Map of German Nuclear facilities



Brunnengraber, Achim. *Multi-level Governance perspective on nuclear waste management*. Berlin: Freie University, 2012. 9-22. Print.

ADDITIONAL WORKS CONSULTED

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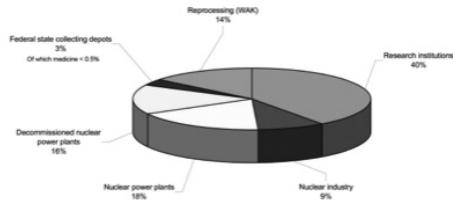
Deutsche Bundesamt. Federal office of Radiation Protection. *Return and return transport of German fuel elements for reprocessing*. 2013. Print. <<http://www.bfs.de/en/bfs>>.

"Mining New Nuclear Solutions." CDM Smith. n.d. n. page. Print. <[http://cdmsmith.com/en-US/Solutions/Facilities/Mining-New-Nuclear-Solutions.asp&xtg](http://cdmsmith.com/en-US/Solutions/Facilities/Mining-New-Nuclear-Solutions.asp&xtg;)>.

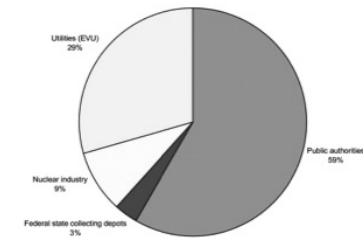
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APPENDIX B

Waste Production by Industry



Waste inventory in proportion to cost bearers



Deutsche Bundesamt. Federal office of Radiation Protection. *Return and return transport of German fuel elements for reprocessing*. 2013. Print. <<http://www.bfs.de/en/bfs>>.



Hungary's Right Wing Extremism and the European Union

– Claire Stevenson

Hungarian politics has recently demonstrated a marked shift to the radical right. The extremist political party Jobbik has become increasingly popular, and advocates anti-Semitic, anti-Roma, anti-market, and anti-European Union policies. These viewpoints directly oppose European democratic and social ideals and erode EU legitimacy, as shown by a recent flag-burning demonstration in front of the EU's Budapest office. Jobbik's appeal is due in large part to Hungary's poor economy; Hungarians are frustrated with their high unemployment and disillusioned with their government's ability to address it. In this white paper, I explain why the extreme right has become so appealing, and offer a number of solutions with economic and political components. My recommended solution involves bolstering Hungary's economy via improvements in the agricultural sector through partnership with the EU and its member states. This would simultaneously bolster Hungary's economy and increase support for the EU as an institution.

PART I: OVERVIEW, HISTORY AND DEFINITION OF THE ISSUE

In the past ten years, Hungary has undergone a dangerous shift to the radical right that seems unthinkable from a European Union (EU) member. The far-right Jobbik, the third largest political party in Hungary, advocates anti-Semitic, anti-Roma, and anti-market policies; favors withdrawal from NATO and the EU; supports pre-WWI borders to form a "greater Hungary;" and created the "Magyar Garda," a uniformed paramilitary group that patrols the countryside wearing insignias reminiscent of the Nazi-era Arrow Cross party.¹ These incendiary viewpoints directly contradict European Union social and democratic ideals, and if the influence of Jobbik continues to grow, dire consequences are likely.

Jobbik is by no means a fringe organization; it currently holds approximately 17% of the popular vote, and has representatives in the European

¹ Michael J. Jordan. "The Roots of Hate"
World Policy Journal (2010), 103.

Parliament.² Its demographics are widespread, ranging from poor farmers to young students to university professors; there does not appear to be any major correlation between economic status and support for Jobbik. Jobbik's rise was rapid – in 2002, Hungarian far right parties won so few votes that they were not able to cross the parliamentary threshold.³ The far right's newfound popularity is fueled by a combination of an increasingly worsening economic situation and a growing distrust of the political system. According to a Pew survey, 72% of Hungarians consider themselves "worse off now economically than they were under communism," and three quarters say that corrupt politicians are one of their greatest concerns.⁴ Jobbik, as a new, untainted populist party, appeals to the disillusioned population. In the midst of this crisis, Jobbik is there to "carry out the real change of regime and to rescue Hungarians," in the words of party leader Gábor Vona.⁵

Perhaps the most concerning aspect of Jobbik's rise is the increasing persecution against the Roma population. Jobbik supporters attribute much of Hungary's problems to cigánybunözés, or "gypsy criminality," despite the fact that Roma comprise only 5% of the population.⁶ Following the murders of six Roma in 2008-9, Amnesty International reported that "Hungarian authorities [have] failed to identify and respond effectively to violence against Roma in Hungary."⁷ Persecution against the Roma has become so severe that the issue was taken to the European Court of Human Rights in 2012, in which the Court ruled that Hungarian police officers beat and degraded a Roma woman – a case that was ignored on the local level.⁸

2 Cas Mudde. "Who's Afraid of the European Radical Right?" *Dissent* 58:4 (2011), 7.

3 Pal Tamas (for the Friedrich Ebert Stiftung). "The Radical Right in Hungary: A Threat to Democracy?," published in: *Is Europe on the "Right" Path?* (Bonn. Bonner Universitäts-Buchdruckerei, 2011), 221.

4 "Hungary Dissatisfied with Democracy, but Not Its Ideals," Pew Research Global Attitudes Project.

5 Jordan, 106.

6 Jordan, 102.

7 Amnesty International. *Violent Attacks Against Roma in Hungary: Time to Investigate Racial Motivation*. (pg. 7)

8 European Court of Human Rights. *Case of Borbála Kiss v. Hungary*. (pg. 12).

However, the ruling held little weight, as the EU's legitimacy in Hungary is waning. Seven in ten Hungarians believe the EU has weakened their country's economy – a higher percentage than any other member state.⁹ In January 2012, thousands of protestors made their Eurosceptic positions clear by setting fire to the European Union flag in front of the EU mission to Hungary in Budapest.¹⁰ If the European Union does not instigate policies to quell the growing level of extreme right views, the situation in Hungary will continue to deteriorate.

PART II: POTENTIAL SOLUTIONS

1. Status Quo

According to some analysts, the danger that Jobbik poses has been blown out of proportion, as the party is not "a major part of Parliament under the terms of Hungary's constitutional order due to the fact that the current power distribution in Parliament allows the opposition parties, Jobbik included, very little influence on the development of public matters."¹¹ Budapest-based think tank Political Capital estimates that Hungarian support for radical-right extremism tops out at approximately 20 percent of society, which was also the case in the 1990s in France, Belgium, Austria, and many other European states.¹² And Mudde notes that in recent European history, far-right parties have been unable to maintain support for more than ten to fifteen years; even strong parties such as the VB (Flemish Interest), which garnered 12% of the Belgian vote in the 1990s, "are now fighting to survive as a potent political force" as their popularity dwindles.¹³ It is possible that once Jobbik supporters realize that the party is based on xenophobia and sensationalism rather than actual political progress, they will leave the party. (As Jordan notes, so far Jobbik has been unable to "show that it stands for something—not

9 Pew Research, 2009.

10 A.B. Nagy, T. Boros and Á. Varga (for the Friedrich Ebert Stiftung), *Right-Wing Extremism in Hungary*. (pg. 8).

11 Kornélia Magyar (on behalf of the Magyar Progressive Institute). *The Extreme Right in Hungary After the 2010 Elections*. (pg. 1).

12 Jordan, 110.

13 Mudde.

merely *against* everything.”¹⁴) The process would be helped along if mainstream parties called out Jobbik’s lack of credibility and professionalism.¹⁵ If this were the case, time alone would be a strategy to curtail the far-right movement.

2. Foster Pro-European Sentiments and Restore EU Legitimacy

Instead of looking towards its neighbors and the EU for support as the economic crisis worsens, far-right Hungarians have been looking to their country’s pre-WWI past. Modern Hungarians are still bitter about the “injustice of Trianon,” in which large portions of Hungary were allotted to neighboring states – a bitterness that the far right exploits.¹⁶ Jobbik plans to unite all ethnic Hungarians by “peacefully redrawing the border[s] and recovering these lands,” including parts of Slovakia, Serbia, and Romania.¹⁷ This nationalism is surprisingly prevalent throughout society. Perhaps because of this, Hungary has also recently refused to comply with EU mandates. Since 2004, the European Council has been attempting to compel Hungary to conform to EU economic policies; after many failed attempts, last year the Council officially “considered that Hungary had not taken effective action in response to its recommendation[s].”¹⁸ However, if Hungarians realize that there are many benefits of working with their European partners, this nationalist thinking may dissipate. The government of the Netherlands has started upon this path by creating the “PRIDE-H” program, in which Dutch agricultural experts work directly with local Hungarian authorities in “micro-regions” to improve farmers’ productivity and competitiveness.¹⁹ The partnership has already produced some results, and these efforts should be

continued and expanded to include other European partners.

3. Address Issues within Hungary’s Current Administration

Unfortunately, these extreme policies are not exclusive to Jobbik. Fidesz, the leading center-right party with a two thirds majority in Parliament, recently instigated constitutional changes that are considered anti-democratic by Hungarian watchdog NGOs.²⁰ One of these amendments involves the reduction of the number of members of parliament and the redrawing of electoral districts that almost exclusively benefits Fidesz; NGOs were quick to point out the obvious gerrymandering.²¹ In order for Fidesz to regain its legitimacy, Korkut suggests that it follow the model set forth by Poland’s Civic Platform party, which bears many similarities to Fidesz in its socially conservative policies. Civic Platform “stresses the importance of competitiveness, sound public finances, and low taxes,” concepts that Fidesz should take to heart, considering the government’s ever-increasing, crippling deficit.²²

It is clear that Hungarians are dissatisfied with their current political situation; “turnout at recent parliamentary elections has typically been between 60 and 70 percent,” with about a million people who would like to vote but refuse to do so, as they find none of the candidates satisfactory.²³ Mainstream parties such as Fidesz must reexamine their strategies to ensure that their voter base does not, in its disenchantment, turn to the far right for change.

4. Empower Other Political Parties within Hungary

Jobbik owes its success in part due to its ability to connect with young voters. At the time of the 2010 elections, Jobbik had over four times more fans on social media websites than all other Hungarian

14 Jordan, 110.

15 Nagy, Boros, and Varga, 13.

16 Tamas, 221.

17 Jordan, 110.

18 European Commission. [Recommendation for a Council Decision Establishing that No Effective Action Has Been Taken by Hungary in Response to the Council Recommendation of 7 July 2009.](#) (pg. 2).

19 Collaboration between the Hungarian Institute for Regional Planning and Urbanism (VÁTI) and the Dutch Government Service for Land and Water Management (DLG). [Practice of Integrated Rural Development \(PRIDE-H\): A Guide for Participatory Planning in Hungary.](#) (pg. 8).

20 Patriotism and Progress Public Policy Foundation.

[*Beyond Democracy – The Model of the New Hungarian Parliamentary Electoral System.*](#) (pg. 1).

21 Róbert László (for the Heinrich Böll Stiftung). [Notes on the current phase of electoral reform in Hungary.](#)

22 Umut Korkut. “More Reform, Less Action: Dilemmas of Economic Europeanization in Hungary.” *Problems of Post-Communism*, 57:1 (2010), 25.

23 Péter Kréko (for the think tank Political Capital). [Silent No More: Gordon Bajnai’s Experimental Laboratory.](#)

political parties combined.²⁴ Jobbik engages in grassroots campaigning, ranging from setting up town hall meetings to rebuilding communities after severe flooding, a concept foreign to mainstream parties.²⁵ The sense of community that it has created is vital in attracting voters, as “concerts, events, books and organisations affiliated with political parties appeal to young voters at an emotional rather a rational level.”²⁶

One party that has also had success connecting with these voters is Együtt 2014, or “Together 2014,” a new opposition group that is quickly becoming more popular than Jobbik. As a centrist group with no ties to the old regimes, Együtt 2014 promises to unite all Hungarians, both left and right, by adopting moderate policies, reducing unemployment, and restoring the democratic ideals that Fidesz and Jobbik have eroded.²⁷ Gordon Bajnai, the head of Együtt 2014, is currently the second-most popular politician in Hungary, and is backed by Hungary’s two largest grassroots political organizations: Milla (for freedom of the press) and *Szolidaritás* (a trade union group).²⁸ The party’s support stands at 14% and is growing – since its creation, the proportion of undecided voters has dropped from 46% to 37%.²⁹ Együtt 2014 should therefore be supported as a viable option to decrease far-right support.

5. Officially Ban Extreme Right Groups

It is often the first instinct of a government, wary of the threat the far right poses, to simply ban the offending parties to disallow them from participating in government. However, that is generally not a viable option, especially in the case of central and eastern Europe. This Slovakian interior minister banned the neo-fascist Slovak

Brotherhood, but the ban was overruled by the High Court; the Czech government banned the right-wing extremist Workers Party, but it resurfaced in the 2010 elections; and Fidesz itself made a show of banning the Magyar Garda, though it dissolved only in name, not in existence.³⁰ Unless the Hungarian populace makes a concerted effort to ostracize Jobbik—which it so far has not—a governmental ban of the organization is not a viable option.

6. Improve Hungary’s Economic System/ Agricultural Sector

The greatest draw of Jobbik is its promise to the Hungarian people to improve their economic situation. With unemployment as high as 80% in rural regions, combined with the post-communist disappearance of vital industry, Hungary’s economy is in shambles.³¹ “Poor Hungarians and Roma are chasing the same crumbs [and] Jobbik, at least, makes proud Hungarians feel they deserve better.”³² Instead of blaming the Roma for their economic issues, Hungarians need to examine *why* the rural regions are performing so poorly. Hungarian farmers are still producing traditional crops with traditional methods; this functioned under communism, when everyone was guaranteed a living wage, regardless of which crop they produced. However, as the PRIDE-H program explains, these crops have become nonviable in an open market, and “agricultural producers and rural economies need to develop a much better understanding of the external market and what it is that their area can competitively produce.”³³ The EU also supports rural tourism for development – farmers in the United Kingdom can receive grants from both the national government and the EU to set up tourist facilities on their farms, and “supplementary income from tourism represents, on average, 26% of turnover for the individual farm

24 Melani Barlai (on behalf of Andrásy Universität Budapest). *Jobbik on Web: Right-Wing Extremism in Hungary*. (pg. 9).

25 Jordan, 106.

26 Nagy, Boros, and Varga, 13.

27 Attila Juhász. “The Chances of Together 2014.” *The Budapest Times*, 17 November 2012.

28 Erin Marie Saltman. “‘Together 2014’ movement emerges in Hungary.” University College London School of Slavonic and East European Studies, 27 November 2012.

29 Sandor Peto. “New Political Group in Hungary Grabs Second Place in Polls.” Reuters. November 8, 2012.

30 “How to Tackle the Far Right? Delusions and New Proposals.” Collaboration between the Friedrich Ebert Stiftung and Political Capital. (pg. 5).

31 Jordan, 108.

32 Jordan, 107.

33 PRIDE: A Guide for Participatory Planning in Hungary.

businesses.³⁴ This farm-centered “agritourism”³⁵ would also work well for Hungary. With the assistance of EU partners who have extensive experience in making the agricultural sector more competitive, Hungary could dramatically improve its economic situation.

7. Greater Assistance for (and Public Discourse Regarding) the Roma

In Jobbik’s words, the Magyar Garda has “been a significant help in highlighting the problem of Gypsy/Magyar [ethnic Hungarian] coexistence.”³⁶ Indeed, Jobbik is the only party seriously discussing the role of the Roma in Hungarian society, a topic many Hungarians feel strongly about. Britain was able to skirt extreme right control in the 1990s when Prime Minister Thatcher’s Conservative Party “took the issue of immigration away from the extreme right” by discussing it in the public sphere, instead of dismissing it as hate speech.³⁷ The government of Hungary would be wise to discuss the role of minority groups instead of leaving it to the extreme right, which has even advocated creating Roma internment camps.³⁸ One cover of Jobbik’s magazine *Barikád* depicts a Roma man dressed as a thug with the headline: “*Gypsy Criminality! Over!*”³⁹ (Another cover highlights Jobbik’s anti-Semitism, with a patron saint of Hungary holding a menorah under the caption “Wake Up, Budapest! Is This What You Want?”)⁴⁰

Additionally, Amnesty International recommends that in order to better protect its Roma population, Hungary must “ratify and implement Protocol

No. 12 to the European Convention on Human Rights, which sets out a general prohibition of discrimination,” and create organizations to monitor hate crimes, both at the national level and within Roma communities.⁴¹ An empowered, police-protected Roma community would be better suited to defend themselves against right-wing extremists. The center-left parties in Hungary can support the Roma by stressing “the *shared* class interest of the socioeconomically weak,” as ethnic Hungarians and Roma are in the economic struggle together, not against one another.⁴²

PART III: PREFERRED SOLUTION: COMBINATION OF OPTIONS 2, 4, AND 6:

Improve Hungary’s agricultural sector with European partners, thereby bolstering the economy, increasing support for the EU, and fostering acceptance for the Roma

At its root, Jobbik is a protest movement.⁴³ The only way to curtail the extreme right’s appeal is to solve the main issue Hungarians are protesting about – the dismal economic situation. First, the agricultural sector must be bolstered through the assistance of European partners; this would simultaneously improve Hungary’s overall economic health (thereby reducing Magyar-Roma tensions, as they would no longer be fighting for the same sparse jobs) and improve the public’s perception of the EU. The pro-Europe Együtt 2014 would then perform well in elections, and this new leadership would give Hungarians a change from the same corrupt politicians they have been seeing for years. Throughout Europe’s recent history, far right movements have gained power when the populace becomes highly dissatisfied with the government. Countries such as the Netherlands have not experienced a surge in rightist extremism in part because there was “no decline in the level of overall life satisfaction in the period 1974-94.”⁴⁴ The same cannot be said for Hungary. From 2003-2009, “anti-establishment anger in Hungary that

34 Phelan, Chris, and Richard Shrapley. “Agritourism and the Farmer and Rural Entrepreneur: A UK Analysis.” Paper presented at the NeXT Tourism Entrepreneurship Conference, Wilfrid Laurier University (2010). (pg. 11).

35 Agritourism is defined as “rural enterprises which incorporate both a working farm environment and a commercial tourism component.” Fennell, D.A. and Weaver, D.B. “Vacation farms and ecotourism in Saskatchewan, Canada.” *Journal of Rural Studies* 13:4 (1997), 467-75.

36 “About Jobbik.” Jobbik (Movement for a Better Hungary).

37 Mudde, Cas and Joop van Holsteyn. “The Netherlands: Limited Success of the Extreme Right,” appearing in *The Politics of the Extreme Right: From the Margins to the Mainstream*. (London. A Continuum Imprint, 2000), 161.

38 Magyar, 2.

39 Jordan, 102.

40 Jordan, 102.

41 Amnesty International, 38.


42 Mudde, 11.

43 Jordan, 102.

44 Mudde and van Holsteyn, 159.

'everything and everyone is bad' soared from 12 percent to 46 percent."⁴⁵

The origin of this dissatisfaction is economics. Initiatives such as the abovementioned Dutch-backed PRIDE-H program would be an effective way to simultaneously enhance Hungary's agricultural sector (thereby improving its overall economic health) and boost popular support for the EU. Hungarian farmers possess the will to improve their farms; they simply lack the training and capital to do so. The European Commission admits that Hungary does not have the financial means to implement the EU's 1996 *Act on Regional Development and Physical Planning*; more EU financial support would therefore be beneficial, especially considering that plans like PRIDE-H are not expensive to implement.⁴⁶ Rural regions could also benefit by renovating local landmarks and re-fostering old handicraft production, which would increase tourism and provide income for otherwise unemployed villagers.⁴⁷ Agritourism is a viable option – when Dutch dairies began to lose profitability, farmers focused on increasing rural tourism by creating bird habitats and cleaning up nearby woods and shorelines.⁴⁸ And in Italy, agritourism has assisted poverty-stricken farmers by providing €50,000 to €270,000 in additional income.⁴⁹ (Some success has already been noted in Hungary – a recent rise in agritourism in the rural Baranya County has provided 36% of the total local tax income.⁵⁰) With the EU's assistance, Hungarians would then see their European neighbors as looking out for Hungary's best interests instead of "what's best for the IMF, Brussels, Washington or the World

Bank," as Jobbik MP Marton Gyöngyösi claimed.⁵¹ With a healthier economy, Jobbik's appeal would wane – Hungarians would no longer have a reason to protest. 

45 Jordan, 101.

46 "[Agricultural Situation and Perspectives in the Central and Eastern European Countries: Hungary.](#)" European Commission.

47 Umut Korkut (Glasgow Caledonian University). "[A Critical Review on Rural Development in Hungary: the Cserehát Programme.](#)" (pg. 13).

48 PRIDE-H, 22.

49 Roxanne Clemens. "Keeping Farmers on the Land: Agritourism in the European Union." *Iowa Ag Review* 10:3 (2004), 8.

50 Anestis Fotiadis. "The Role of Tourism in Rural Development through a Comparative Analysis of a Greek and a Hungarian Rural Tourism Area" (doctoral dissertation). University of Pécs Faculty of Business and Economics. (pg. 101).

51 Jordan, 101.



Russia and four of her southern neighbors – Kazakhstan, Armenia, Azerbaijan and Georgia – do not cooperate as closely as they could on migration and border security. As a result, illegal migration and smuggling take place along the borders between these countries. This activity, in turn, colors the Russian perception of people from across these borders, resulting in an image of migrant workers as dangerous and unregulated. Migrant workers in Russia face hostility and increasingly strong legal obstacles that can prevent them from finding legal work. This paper explores how to better regulate migration among these countries for maximum benefit to the countries and the migrants themselves. Though a variety of solutions are discussed, but bilateral agreements between Russia and her neighbors are emphasized as probably most effective and most feasible.

Migration and Border Security Cooperation between Russia and its Southern Neighbors

– Connor DeVries

I. INTRODUCTION

In a time when countries around the world are teaming up to address immigration and border security, the lack of cooperation on these issues between Russia and other former Soviet countries looks increasingly out of place and increasingly harmful - not only for migrants themselves, but also the countries involved. Free movement of labor is a pillar of the European Union, and despite a number of problems, the Europeans have made it work, encountering problems but generally overcoming them. Elsewhere, regional free trade agreements such as NAFTA, CARICOM and ASEAN, while not as sweeping as the EU's removal of labor barriers, generally tend to ease migration restrictions on skilled workers and professionals.¹

The trend between Russia and many of the former Soviet states however, is the reverse. Rather than working together for mutual benefit on migration and border security, Russia and its southern neighbors – Georgia, Armenia, Azerbaijan and Kazakhstan – have pursued separate, often conflicting policies. The result of the current situation is that migrants are increasingly

¹ Philip Martin. "Bilateral Agreements to Manage Low-skilled Labor Migration: Complementarity or Overlap to Trade Agreements?" (2012) page 2. <http://gfmf.org/documents/switzerland/m4md/MartinS1.pdf>

unwelcome by Russian citizens.² Lack of cooperation on the related issue of border security has resulted in a large amount of smuggling along these borders. As a result, migrants, particularly from the Caucasus, are associated with drugs and violence by many Russians,³ and the statistics show this outlook is not entirely uninformed.⁴ The Russian government is pressured to reduce the number of foreigners allowed into the country, thus reducing opportunities for unemployed citizens of neighboring states. With one of the fastest-shrinking populations in the world, Russia needs migrants to counter its growing labor shortage.⁵ Migrant labor also benefits the sending countries, as it reduces unemployment and the remittances of those working in Russia benefit the economy.⁶ The current atmosphere of mistrust and outright hatred inspired in Russia by the current situation jeopardizes both migrants and the benefits they bring to Russia and their sending countries.

II. POSSIBLE SOLUTIONS

Regional EU-style common migration policy

Perhaps the most effective solution to the immigration situation in the region would be the establishment of a multilateral EU-style agreement on labor. Such an agreement would set up a system for regulating immigration to the mutual advantage of the countries involved, and preferably would also include blueprints for a concerted effort against smuggling across the borders of these countries. It would not necessarily include the same

freedom of movement that the EU model does. The goal of any regulation must be to improve the well-being of the migrants and improve the economies of the countries involved. It may be that Russia and her neighbors come up with something that satisfies these requirements but little resembles the EU model. The advantage to having a single system by which to control immigration is that it brings all parties to the same table to discuss what is basically a regional issue and it would prevent contradictory policies from making a mess out of the migration situation, as is now the case there. On the other hand, this also has its disadvantages, as the historical animosity between various actors in the region makes the implementation this kind of agreement unlikely. The migration principles in the EU were only applied to three countries at first and then adopted by other countries afterward. A gradual process like that one seems likely in Central Asia – countries can come together in twos and threes first, and then bring others into the fold later. This might give these countries time to build trust among each other before such an agreement can be reached.

Unilateral reduction in legal migration via quota

One method Russia has turned to in the past is the tightening of labor quotas, reducing the total number of migrants allowed into the country but exempting certain professions deemed by the government to be in high demand. This year's quota, for instance, dropped about 50,000 immigrants to 410,126.⁷ In 2008, the quota for CIS countries was 1.8 million. These measures, popular with ethnic Russians, may prove useful in preventing the accumulation of large numbers of migrants in Moscow, St. Petersburg and Southern Russia. On the other hand, Russia needs the migrants in other regions. This program might relieve strained migration resources in some areas, but it will not by itself allow Russia to keep up with demand for labor. Unfortunately, there is no solid way of assessing the effectiveness of this kind of measure, even though Russia has used it frequently in the past, because the Russians' ability to count immigrants is weak, and experts frequently disagree on the numbers

2 Institute for Migration Research and Intercultural Studies. "Russian Federation." July 2010. Accessed March 14 2013. <http://focus-migration.hwwi.de/Russian-Federation.6337.0.html?&L=1>

3 Ulrike Ziemer. "Minority youth, everyday racism and public spaces in contemporary Russia." *European Journal of Culture Studies*. 14:229 (2011), 231.

4 UNODC. "Opiate flows through Northern Afghanistan and Central Asia: A threat assessment." (pages 89-99) http://www.unodc.org/documents/data-and-analysis/Studies/Afghanistan_northern_route_2012_web.pdf

5 Vladimir Portyakov. "New Aspects of the Immigration Policy of Russia." *Far Eastern Affairs* 36:2 (2008) 113-118

6 Fahad Alturki, Jaime Espinosa-Bowen, and Nadeem Ilahi. "How Russia Affects the Neighborhood: Trade, Financial and Remittance Channels." IMF Working Paper. 2009 pages 6-7.

7 InterNations. "Work Permits for Russia." Accessed March 14, 2013. <http://www.internations.org/russia-expats/guide/working-in-russia-15574/work-permits-for-russia-2>

migrants by hundreds of thousands. A report by the Institute for Migration Research and Intercultural Studies states that reducing foreign labor quotas has generally served to increase illegal immigration and corruption when Russia tried it in the past.⁸

1) Reduction of visa-free travel between CIS countries

One measure often debated in Russia is the abolition of visa-free travel (for 90 days) between Russia and some CIS countries member countries. This may help cut down on illegal labor immigration to an extent by preventing Kazakhs and citizens of other countries from entering Russia legally and then staying beyond the legal 90 days. Implementing this might be difficult. It would be unpopular in Kazakhstan and elsewhere, and the visa-free agreements are reciprocal, meaning that Kazakhstan could start requiring visas for Russians visiting Kazakhstan, which may prove unpopular with Russians.

2) Shifting to 'permanent' labor migration

One possible immigration solution resembles a pilot program the Russian government started in Armenia in 2009.⁹ This would permanently relocate eligible workers from CIS countries to industrial regions in Russia as Russian citizens. By relocating the entire family permanently, Russia gains not just the one worker but probably that family's children as well. The Russian government would choose where in Russia the family settles. This is probably advantageous for both parties. The Russian government can bring labor where it is needed and perhaps avoid concentrations of immigrants, which Russian citizens tend to find uncomfortable.¹⁰ The immigrant also benefits from this arrangement, not only because he is virtually guaranteed work, but also because this program avoids common pitfalls for migrants. For example, most Armenian immigrants wind up in Russia's northern Caucasus, simply because this is the most convenient place they can reach. The

high concentrations of immigrants already here, lower number of industrial jobs than in the Urals and elsewhere in Russia, and the politically and ethnically unstable situation here, make for a more dangerous environment with mixed chances for finding profitable work. A government relocation program, by contrast, would move them to the heavily industrialized regions in the Urals, thereby avoiding this problematic region. Armenia has thus far resisted these kinds of programs on the basis that they steal workers away from Armenia,¹¹ and Russia has responded by arguing that Armenia cannot employ these people anyway, and regardless, there is nothing the Armenians can do about it.

3) Trading permanent migrants for aid/investment

A compromise solution based on this permanent migration would see Russia, instead of simply enticing workers away, providing sending countries with some kind of reciprocal "payment" to compensate for the loss of these workers. Economic assistance from Russia, perhaps in the form of aid money or infrastructure development, might be a given in return for these immigrants. Obviously this would entail some spending on Russia's part, but it is not without precedent. Russia has invested significantly in the economies of the Northern Caucasus in an attempt to stabilize them, building ski resorts, youth centers, stadiums and hotels to provide work for unemployed, resentful youth of the area.¹² By some accounts, Russia spends 10 rubles on a Chechen for every ruble it spends on a Russian.¹³ Time will tell if such a strategy works, but at least it shows that Russia is willing to spend serious money to promote stability in volatile regions. Armenia could be considered a similar case. The Southern Caucasus is volatile, and unrest there could spill over into Russia, where Armenians, Azeris and other groups live nearby each other. Seen in this light, it makes sense that Russia try to bring down unemployment there (some statistics

11 Grigoryan.

12 World Bank. "Russian Federation: Investing in Young People as Peacemakers." Accessed March 17, 2013. <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:23143910~menuPK:141310~pagePK:34370~piPK:34424~theSitePK:4607,00.html>

13 Julia Latinina. "Chechen-Armenian Conflict." *Daily Journal*. Aug. 3, 2010. Accessed March 12, 2013. <http://ej.ru/?a=note&id=10298>

8 Institute for Migration Research and Intercultural Studies.

9 Marianna Grigoryan. "Russian Guest Worker Program Highlights Population Drain." *Eurasia.net*. March 25, 2011. Retrieved March 10, 2013. <http://www.eurasianet.org/node/63157>

10 Mikhail A. Alexseev. "Societal security, the security dilemma, and extreme anti-migrant hostility in Russia." *Journal of Peace Research*. 48:509 (2011) page 509.

put Armenian unemployment as high as 50 percent¹⁴) while maintaining friendly relations with the Armenian government. Trading aid for migrants does both, securing long-term labor for Russia while potentially helping the Armenians put their people back to work in their own country.

4) Bilateral reduction of illegal migration via information sharing

None of the above measures is likely to have much effect unless illegal immigration is reduced, simply because of the sheer number of illegal immigrants from these countries. Kazakhstan and Azerbaijan especially are also transit areas for large numbers of other central Asian peoples, many of them undocumented. Unfortunately, even the Russian army is probably incapable of doing much on its own to halt illegal immigration. However, Russia does not have to go it alone here. Russia and Uzbekistan signed an agreement by which Uzbekistan would introduce a system to track its own migrants in Russia and guarantees of minimum punitive action against those caught trying to emigrate from Uzbekistan illegally, thereby taking some of the workload off Russia.¹⁵ Russia should try to implement this kind of program with its other Southern neighbors. The groundwork for this sort of cooperation has already been laid in the formation of the CIS customs union, which in fact involved a \$112 million investment by Kazakhstan to combat illegal migration into the country.¹⁶ Kazakhstan and Russia have a long history of cooperating in similar ways.¹⁷ These countries might help Russia keep track of their emigrants purely out of a desire to ensure the welfare of their citizens abroad (Uzbekistan's stated reason). Or they may be persuaded by financial incentives or

Russian military expertise to help combat their own illegal immigration problems, which, especially in Kazakhstan's case, are severe.

5) Disconnection migration from the drug trade

As noted in the introduction, migrants and drug-smuggling are linked in the minds of many Russian citizens. Reducing the smuggling operations along Russia's southern border may help combat this perception and make Russians more comfortable with migrants. Russia already cooperates with both Azerbaijan and Kazakhstan on border security, and recent progress on the CIS customs union has brought them into even closer cooperation. These countries already have integrated electronic cargo-tracking systems in place. However, a recent UN study concluded that for the yearly 90 tons of illegal drugs smuggled into Central Asia, 75-80 tons gets through to Russia,¹⁸ and high level Kazakh officials complain that the country's borders are like "sieves."¹⁹ Though information sharing structures are in place, it is time for these three countries to take the next step.²⁰ The IBETS or the ShipRider programs in place along the US-Canada border might be a good model along Kazakhstan's and Azerbaijan's borders, as they already work closely together. This setup would allow the Kazakhs and Azeris to take advantage of Russian expertise and perhaps some of their newer technology, while the Russians would benefit from more direct access to criminal bases, many of which seem to be in Kazakhstan.

The Georgian border – a special case

This kind of cooperation on border security described above might be out of the question between Russia and Georgia, given their governments' mutual animosity, but a good place to start is to build off of the 2011 agreement by which Russia and Georgia agreed to allow a private company, under the supervision of Switzerland, to monitor the three main border crossings between

14 Epress.am. "Unemployment Rate in Armenia Closer to 45-50%." Sept. 29, 2011. Accessed March 4, 2013. <http://www.epress.am/en/2011/09/29/real-unemployment-rate-in-armenia-closer-to-45%E2%80%9350.html>

15 Erkin Ahmadov. "Fighting Illegal Labor Migration in Uzbekistan." Central Asia-Caucasus Institute. Aug. 8, 2007. Accessed March 14, 2013. <http://www.cacianalyst.org/?q=node/4681>

16 Timothy A. Krambs. "Drug Control in Central Asia." 2012. <http://fmso.leavenworth.army.mil/Collaboration/FAO/Drug-Control-Central-Asia.pdf>

17 Roger McDermott. "Kazakhstan 'trusts' Russian Border Guards." The Jamestown Foundation. 5:2 (2008). http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Btt_news%5D=33274

18 UNODC. 14

19 Kazis Toguzbaev, Daily Sindelar. "From Mass Murders to Fatal Crash, Kazakhstan's Border Service in Disarray." Jan. 3, 2013. Accessed March 14, 2013.

20 Department of Homeland Security. "Northern Border Strategy." June 2012. <http://www.dhs.gov/xlibrary/assets/policy/dhs-northern-border-strategy.pdf>

Georgia's breakaway provinces and the border.²¹ This incorporates a system that electronically tracks cargo passing through the border posts and automatically exchanges data between Russian and Georgian customs checkpoints. Unfortunately, these corridors are often avoided by smugglers and illegal immigrants, who take to numerous mountain trails instead. With a third party data-sharing system in place, Georgia and Russia should hold talks on expanding coverage of the system to remote border areas, either using independent third parties as they do now, or by assigning regions to cover. The Georgian government does not want to give the impression of giving up sovereignty over its breakaway provinces along the border, so the first option is probably preferable. Georgians are generally in favor of repairing relations with Russia.²² Working together to expand this third party border coverage could be the first real step by Georgia in that direction. It would also allow them to crack down on criminal elements that operate in Georgia and the breakaway territories. Russia should be willing to work with Georgia because the mountain passes have been a source of guns and other dangerous contraband which has destabilized the Northern Caucasus in the past.^{23 24}

III. RECOMMENDED COURSE OF ACTION

An optimum solution to the region's migration problems is one in which all countries are participating to some extent, though not every possible solution must be carried out. A good overall solution seems to be one in which Russia does not decrease the overall number of immigrants it accepts every year, as current

levels may not even be enough to keep pace with demand, and these jobs help not only the migrants but also, in many cases, the countries to which they send the remittances. However, changing the mechanics of the migration by switching from seasonal and temporary migration toward a more permanent settlement, especially in Armenia's case, is a good idea, as this might help immigrants assimilate into Russian culture better and because the program, if it works as advertised, could move workers directly to where they will have abundant work instead of into saturated corridors converging on Moscow. Reducing the number of seasonal workers may also cut down on the transmission of disease, especially AIDS,²⁵ from one country to another by roving workers. Cracking down on illegal immigration and on drug trafficking should also be a part of the grand solution because a large amount of illegal migration may wash out the effect of good legal migration policy, and drug smuggling taints the image of migrants in the eyes of ethnic Russians, making the region's number one destination for migrants less than welcoming. Fortunately, the biggest offender in both these cases is Kazakhstan.²⁶ With information-sharing systems in place and a long history of cooperating with Russia, Kazakhstan seems to have a good foundation from which to work more actively with Russia to solve these problems.

Lastly, the overall solution should be one that appeals to the governments involved. This seems like a no-brainer, but it can be tempting for a country like Russia to impose its solution on the others. This increases tension in the region and invites reprisal. In summary, a more beneficial migration system can emerge along Russia's southern border, if Russia will cooperate with these countries. Kazakhstan and Azerbaijan have good working relationships with Russia, and seem ready to increase cooperation. Armenia can probably be brought on board if Russia will meet them halfway.

21 Andras Racz. "Russian WTO Accession and the Geneva Agreements." *Transatlantic Academy Paper Series*. Dec. 2011. 1.


22 David Sichinava. "The 2012 Parliamentary Elections in Georgia and Changing Attitudes Toward Russia." *Caucasus Analytical Digest No. 48 (March 3, 2013) pages 9-13*

23 Carlotta Gall and Thomas de Waal. *Chechnya: Calamity in the Caucasus*. New York, NY: New York University Press 1998. 307-308.

24 Michael R. Gordon. "Russian Arms in a pipeline to Chechnya, Georgia says." *New York Times*. Jan. 16 2000. <http://www.nytimes.com/2000/01/16/world/russian-arms-in-a-pipeline-to-chechnya-georgia-says.html>

25 National Center for AIDS Prevention. "HIV/AIDS Epidemic in the Republic of Armenia." Accessed March 11, 2013. http://www.arm aids.am/main/free_code.php?lng=1&parent=3

26 World Bank. *Migration and Remittances Factbook 2011*. April, 2011. Page 5.

Even Georgia has come to the bargaining table with Russia recently (over border security, no less). 

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Migration in Danger: Saving the Red Knot *rufa*

– Patrick Flanigan

The Red Knot rufa (Calidris canutus rufa) is a long-distance migratory shorebird experiencing significant population declines. Despite current efforts to save the subspecies, Red Knot rufas will encounter imminent extinction if new effective solutions are not immediately established to save them. These efforts must combat the main threat to the Red Knot rufa's survival – habitat degradation caused by humans. With habitat that extends along the entire Atlantic coastline from northern Canada to Tierra del Fuego, solutions become a challenge to initiate. However, practical solutions include promoting research and monitoring efforts, raising educational and awareness programs, increasing local level action, strengthening nongovernmental organizational work, improving conservation at Delaware Bay, transitioning towards sustainable development in Latin American countries, increasing government commitment, and strengthening intergovernmental efforts. The preferred, most effective option encompasses a multidimensional approach overseen by a newly-established international organization formed under the United Nations' Environment Programme.

I. INTRODUCTION

Calidris canutus rufa, commonly known as Red Knot *rufa*, is a medium-sized shorebird with one of the longest migratory paths of any bird. In fact, the main population flies the entire Atlantic America's Flyway, from northern Canada, along the Atlantic coastline, to the southernmost tip of South America.¹ This migration route is in essence a survival strategy;² however, this remarkable adaptation may prove to be the bird's downfall in the modern world.

The Red Knot *rufa* is facing increasing threats along its journey.³ Now, along with predation, disease,

1 Lawrence Niles, Humphrey Sitters, et al. *Status of the Red Knot (Calidris canutus rufa) in the Western Hemisphere*. (Pennsylvania: Cooper Ornithological Society, 2008), 1.

2 Parks Canada. "What happened to the red knot *rufa* population?" http://www.pc.gc.ca/apprend-learn/mingan/indexNonFlash_e.asp

3 World Migratory Bird Day. "The Importance of Migratory Birds." http://www.worldmigratorybirdday.org/2012/index.php?option=com_content&view=article&id=18&Itemid=4

competition, dangerous weather, and other natural risks, Red Knot *rufas* encounter pollution, declining prey populations, climate change, and many other human-caused obstacles.⁴ These threats are causing the Red Knot *rufa's* population to significantly decline. Estimates of the Red Knot *rufa* population suggest a 75% drop since 1985,⁵ mostly occurring within the main population group, those wintering in Tierra del Fuego (see Appendix 1).⁶ In recent years scientists have observed steep population drops in the two other groups also thought to be Red Knot *rufas*, those wintering in the southeastern United States and those wintering in northern Brazil (these groups may be another Red Knot subspecies, *Calidris canutus roselaari*, see Appendix 2).⁷ If no solution is found, the subspecies will soon likely become extinct.

Scientists are working diligently to understand the specific reasons for the Red Knot *rufa's* drop in population so that conservation efforts may improve. The current data points to habitat degradation as the leading cause.⁸ Red Knot *rufas*, although spotted throughout the Atlantic America's Flyway, use specific, critical stopover points such as eastern Canada, Delaware Bay, the southeastern United States, northern Brazil, and Tierra del Fuego, as well as surrounding Patagonia coastlines (see Appendix 3). Habitat deterioration is evident in all key areas: in Canada, past and potential future oil spills disturb habitats; along the United States coastline, human development, beach alterations, air and water pollution, overharvesting of prey, and increased gull competition disrupt habitats; in the Caribbean and northern Brazil, potential pollution from oil and mining, urban development, mangrove clearance, and water pumps⁹ damage habitats, as well as hunting for sport and food threaten birds;¹⁰ and Tierra del Fuego and nearby coastline regions,

potential oil pollution, urban waste and pollution, and human development¹¹ disturb habitats. Each of these areas has the additional potential of undergoing drastic alterations as climate change continues to progress. Any solutions to save the Red Knot *rufa* must ensure adequate habitats are preserved for the bird.

As humans, we are forcing the planet into the beginning stages of a mass extinction and it is our responsibility to save whichever species we can to help sustain the fundamental and necessary ecosystem services that life depends on. Thus, an effective solution must be implemented immediately as Red Knot *rufas* are not expected to survive another ten years under current conservation practices.¹² New solutions that increase commitment and improve conservation practices are the only hope now of saving the Red Knot *rufa*.

II. POSSIBLE SOLUTIONS:

Promoting Scientific Research and Monitoring Efforts

There are many scientific obstacles and uncertainties surrounding the Red Knot *rufa*. First, the majority of research is concentrated in North America through educational, conservationist, and government institutions, while research in Latin America is limited due to a lack of resources.¹³ Furthermore, because of the Red Knot *rufa's* long-distance and transnational migration, and the isolated sites they stop at, researchers have difficulty acquiring sufficient data throughout its range. Current uncertainties include the importance of habitats between key stopover points, the subspecies classification of wintering populations in the southeastern United States and

4 Lawrence Niles, Humphrey Sitters, et al., 95-108.

5 Endangered Species Coalition. "Red Knot *Rufa*." <http://www.stopextinction.org/top10/withoutanet/182-red-knot-rufa.html>

6 Lawrence Niles, Humphrey Sitters, et al., 63.

7 *Ibid.*, 133.

8 IUCN Red List of Threatened Species. "Calidris *canutus*." <http://www.iucnredlist.org/details/106003041/0>

9 Lawrence Niles, Humphrey Sitters, et al., 95-99.

10 U.S. Fish and Wildlife Service and U.S. Department of the Interior. Red Knot: *Calidris canutus rufa*. (pg. 29).

11 Lawrence Niles, Humphrey Sitters, et al., 95-99.

12 New Jersey Audubon. "Shorebird/Horseshoe Crab Conservation Campaign Archive." <http://www.njaudubon.org/SectionConservation/ShorebirdHorseshoeCrabConservationCampaign.aspx>

13 Mary Arroyo, Rodolfo Dirzo, Juan Castillas, Francisco Cejas, Carlos Joly. "Biodiversity in Latin America and the Caribbean: An Assessment of Knowledge, Research Scope, and Priority Areas." *Science for a Better Life: Developing Regional Scientific Programs in Priority Areas for Latin America and the Caribbean* 1 (2010), 179.

northern Brazil, why these two populations do not mix with the Tierra del Fuego wintering population and why the Tierra del Fuego wintering population is diminishing the fastest.¹⁴ These problems impede the effectiveness of Red Knot *rufa* conservation.

Increasing scientific programs of the Red Knot *rufa* will heighten the likelihood of establishing more effective management strategies. Scientific programs are especially important in Latin America where current efforts are limited. To be effective, these programs must focus on long-term research and the inclusion and training of local biologists.¹⁵ Latin American biologists today struggle to both access expensive journal publications and to have their work accepted into these journals.¹⁶ Effective programs incorporating local biologists lead to a better understanding of the problems associated with Red Knot *rufas* and the effectiveness of past and current management techniques, as well as options for future decision-makers.¹⁷

Raising Educational and Awareness Programs

Many educational and awareness programs exist today for the Red Knot *rufa*. For instance, Parks Canada provides the country's secondary teachers with a guide for educating students about the Red Knot *rufa* and its conservation.¹⁸ Meanwhile, groups including the New Jersey Audubon,¹⁹ The American

Bird Conservancy,²⁰ The Nature Conservancy,²¹ and The New York Times²² inform the public about the Red Knot *rufa* through online and published media. In addition, on-the-ground programs, such as volunteer shore cleanups²³ and monitoring events,²⁴ in key stopover sites not only provide awareness, but also involve action. Finally, the United Nations' annual World Migratory Bird Day provides global awareness by helping people and organizations organize events worldwide informing people of migratory bird protection, including Red Knot *rufa* conservation.²⁵ These education efforts are both extensive and essential.

Yet, furthering educational and awareness programs could be a valuable tool in improving conservation efforts. These programs lead people to appreciate wildlife and to take action.²⁶ Although this solution is applicable throughout the Red Knot *rufa*'s flyway, it is particularly relevant in Latin America where there is less current action.²⁷ It is important that these educational and awareness programs first understand people's knowledge, attitudes, emotions, and behaviors on the issue, as well as their economic, social, cultural, and political circumstances.²⁸ With this understanding, educational programs can be most effective and

14 Lawrence Niles, Humphrey Sitters, et al., 128-129.

15 Jeffrey Brawn, Scott Robinson, Douglas Stotz, and W. Robinson. "Research Needs for the Conservation of Neotropical Birds." *Avian Conservation: Research and Management*. (Washington D.C. Island Press, 1998), 334-335.

16 Alejandro Grajal and Susan Stenquist. "Research Applications for Bird Conservation in the Neotropics." *Avian Conservation: Research and Management*. (Washington D.C. Island Press, 1998), 339-340.

17 P. Boersma and Julia Parrish. "Threats to Seabirds: Research, Education, and Societal Approaches to Conservation." *Avian Conservation: Research and Management*. (Washington, D.C. Island Press, 1998), 256.

18 Parks Canada. "What Happened to the Red Knot *Rufa* Population?"

19 New Jersey Audubon. "Shorebird/Horseshoe Crab Conservation Campaign Archive."

20 American Bird Conservancy. "Red Knot Wintering Population Drops by More than 5,000, Accelerating Slide to Extinction."

21 The Nature Conservancy. "B95: The Toughest Four Ounces of Life." <http://www.nature.org/ourinitiatives/regions/northamerica/canada/b95-the-toughest-four-ounces-of-life.xml>

22 Glenn Swain. "A Red-Knot Celebrity is Back in Town." <http://green.blogs.nytimes.com/2012/05/29/a-red-knot-celebrity-is-back-in-town/>

23 Delaware Riverkeeper Network. "Red Knot *Rufa* Candidate Species for Endangered Species Protection." <http://www.delawariverkeeper.org/river-action/SuccessItem.aspx?Id=28>

24 State of Delaware. "Delaware Shorebird Project." <http://www.dnrec.delaware.gov/fw/shorebirds/Pages/default.aspx>

25 UNEP/CMS and UNEP/AEWA. "The WMBD 2013 Theme." http://www.worldmigratorybirdday.org/2013/index.php?option=com_content&view=frontpage&Itemid=1

26 P. Boersma and Julia Parrish, 256.

27 Lawrence Niles, Humphrey Sitters, et al., 114.

28 Kathy Lehnardt. "Developing a Conservation Education Program." <http://www.izea.net/education/conservationed.htm>

participative with people and groups to inspire and further Red Knot *rufa* conservation.²⁹

Increasing Local Level Action

Local level action involves individuals, grassroots organizations, communities, and other public groups working in their region to promote Red Knot *rufa* conservation. For instance, Delaware Bay citizens are highly active in supporting healthy habitats and implementing comprehensive monitoring of both Red Knot *rufa* populations³⁰ and their main food source, horseshoe crabs.³¹ Organizations that work with the area's public include The Nature Conservancy,³² the Delaware Riverkeeper Network,³³ the Delaware Shorebird Project,³⁴ and Friends of the Red Knot,³⁵ as well as numerous other groups.³⁶ If this same local commitment is expanded throughout the Atlantic Flyway, there is great hope for the Red Knot *rufa*'s survival.

However, many areas of the Atlantic Flyway do not have local commitment to the Red Knot *rufa*, but they do have the potential of increasing local efforts. Local action throughout the flyway can include preventing waste from entering the ecosystem, rethinking development methods and plans,³⁷ and adapting general conservation strategies. Agenda 21 provides a framework for local groups to incorporate these sustainable methods in an effective manner. Termed Local Agenda 21, this specific guide includes a variety of topics such as ecosystem management, conserving

biological diversity, promoting awareness and education, promoting scientific research, and accessing financial resources and mechanisms.³⁸ Ultimately, these efforts promote suitable habitats for Red Knot *rufas* and act as a bottom-up approach, leading to higher up political action.

Strengthening Nongovernmental Organizational Work

There are a multitude of nongovernmental efforts in place to conserve Red Knot *rufas*. These include BirdLife International, Wetlands International, the Western Hemisphere Shorebird Reserve Network, Partners in Flight, the Global Flyway Network,³⁹ the Important Bird Areas Program, and the International Shorebird Survey and Program for Regional and International Shorebird Monitoring.⁴⁰ Programs such as these facilitate monitoring of Red Knot *rufa* populations and conservation of bird habitat. Meanwhile, other conservation organizations, such as the Nature Conservancy,⁴¹ are involved in protecting habitat that benefit Red Knot *rufas* and small organizations, such as Friends of the Red Knot, provide educational and awareness services at a local level.⁴² No doubt these actions have led to progress in protecting Red Knot *rufas*; nonetheless, the continued decline of Red Knot *rufa* populations signify current nongovernmental efforts have been insufficient.

Nongovernmental organizations do have the potential to more effectively protect Red Knot *rufas* though. First, these organizations can increase collaboration amongst one another. Since many of them have overlapping or complementary agendas and projects, increased cooperation will make their efforts be more efficient and effective. At the same time, nongovernmental organizations can increase collaboration with governments and the public sector to better understand how to be most effective. These steps will help nongovernmental

29 James Danoff-Burg. "Conservation and Education: Inextricably Intertwined." <http://www.izea.net/education/conservationed.htm>

30 Lawrence Niles, Humphrey Sitters, et al., 108-109.

31 University of Delaware. "2012 Horseshoe Crab Census Information." <http://www.ceoe.udel.edu/horseshoecrab/volunteer/delaware.html>

32 The Nature Conservancy. "B95: The Toughest Four Ounces of Life."

33 Delaware Riverkeeper Network. "Red Knot *Rufa* Candidate Species for Endangered Species Protection."

34 State of Delaware. "Delaware Shorebird Project."

35 Friends of the Red Knot. "A Little Bit About Us." <http://mysite.verizon.net/vzeu3rwf/>

36 Lawrence Niles, Humphrey Sitters, et al., 108-109.

37 Paul Ehrlich, David Dobkin, and Darryl Wheye. "Helping to Conserve Birds - Local Level." <http://www.stanford.edu/group/stanfordbirds/text/essays/Conservation-Local.html>

38 United Nations. "Agenda 21." <http://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

39 UNEP & CMS. *A Bird's Eye View on Flyways: A brief tour by the Convention on the Conservation of Migratory Species of Wild Animals, Second edition.* (pgs. 38-39)

40 Lawrence Niles, Humphrey Sitters, et al., 108-109.

41 The Nature Conservancy. "B95: The Toughest Four Ounces of Life."

42 Friends of the Red Knot. "A Little Bit About Us."

organizations improve their overall conservation of Red Knot *rufas*.

Improving Conservation at Delaware Bay

Delaware Bay is a key stopover point for Red Knot *rufas* on their way to the Arctic. More Red Knot *rufas* stop at this specific site than anywhere else along their route. For a short number of weeks, they replenish their fat reserves by feeding on horseshoe crab eggs.⁴³ Horseshoe crabs are most abundant in Delaware Bay and their eggs are easily accessible along the shoreline. Evidently, horseshoe crabs and Delaware Bay are crucial to the Red Knot *rufa*'s survival.

Unfortunately, Red Knot *rufas* are struggling to replenish their fat reserves in Delaware Bay, leading many scientists to blame this area for the bird's population decline. First, increased gull populations in the area have increased competition for horseshoe crab eggs.⁴⁴ Furthermore, humans have overharvested horseshoe crabs for bait, fertilizer, livestock feed and biomedical purposes. In 2000, the Atlantic States Marine Fisheries Commission implemented regulations to prevent further overfishing of the crabs.⁴⁵ Now the crab population is slowly rising;⁴⁶ however, Delaware Bay should follow the State of New Jersey,⁴⁷ suspending horseshoe crab harvests until Red Knot *rufa* populations have significantly risen. This fully supports the Red Knot *rufa*'s diet.

Furthermore, human-caused disturbances to Delaware Bay, such as water pollution and recreation, threaten the ecosystem. About 50,000 acres are protected in the area⁴⁸ but they are not immune to disturbances. Delaware Bay is the second-largest petro-chemical shipping lane in

the United States and contains highly dense urban areas further up the Delaware River.⁴⁹ By taking increased measures to prevent damages to the bay, humans ensure Red Knot *rufa* habitat.

Transitioning Towards Sustainable Development in Latin America

Developing countries in Latin America encounter hardships in protecting species like the Red Knot *rufa*. These countries lack frameworks and resources that are well established in Canada and the United States. Developing countries also must tackle issues such as population growth, poverty, poor health, technological advancement, and education, as well as overall social and economic conditions. As Latin American countries focus on these matters, the environment is often exploited. Developing countries must foster sustainability to save Red Knot *rufas*.

With the help of developed countries such as Canada and the United States, Latin American countries can increase their sustainable development and, ultimately, their protection of the Red Knot *rufa*. First and foremost, this includes integrating local people into conservation efforts to better ensure success of the conservation goals.⁵⁰ This is critical because sustainable development is as much a social, economic, and political problem as it is a biological one and there must be benefits to both humans and the environment for it to succeed. Practical steps for developing countries within the Red Knot *rufa* flyway include promoting ecotourism, encouraging scientific research, and protecting areas that allow limited human recreational and economic use. Local conservation efforts and mindsets must be fully supported and used as a tool to improve conservation efforts.⁵¹ As Latin American countries adopt more sustainable measures, they can look to Agenda 21,⁵² as well as other developing countries that are environmental

43 Brian Harrington. *The Flight of the Red Knot*, 70-78.

44 Lawrence Niles, Humphrey Sitters, et al., 107-108.

45 Delaware Nature Society. "Horseshoe Crab and Red Knot Protection." http://02b93fb. netsolhost.com/adv_redknot.html

46 Wetlands Institute. "Delaware Bay Horseshoe Crab Census." <http://wetlandsinstitute.org/conservation/horseshoe-crab-conservation/delaware-bay-horseshoe-crab-census/>

47 Delaware Nature Society. "Horseshoe Crab and Red Knot Protection."

48 Daniel Lebbin, Michael Parr, and George Fenwick. *The American Bird Conservancy Guide to Bird Conservation*. (Chicago. The University of Chicago Press, 2010), 253.

49 Brian Harrington. *The Flight of the Red Knot*, 152-162.

50 Arian Spiteri and Sanjay Nepal. "Incentive-Based Conservation Programs in Developing Countries: A Review of Some Key Issues and Suggestions for Improvements." *Forum* 37: 1 (2006), 1-2.

51 Bernard Peyton. "Conservation in the Developing World: Ideas on How to Proceed." *Bears: Their Biology and Management* 9:1 (1994), 115, 119-120, 124-125.

52 United Nations. "Agenda 21."

leaders, such as Costa Rica⁵³ and Bhutan,⁵⁴ for insights and ideas.

Increasing Government Commitment

Some government efforts are already established that focus on the Red Knot *rufa*. For instance, Canada has listed the bird as an endangered species in the Ontario Province, and Parks Canada promotes research on the bird.⁵⁵ The United States government has listed the Red Knot *rufa* as a candidate for endangered species listing.⁵⁶ Similar to Canada, government agencies within the United States support research on the bird and the United States has numerous government programs, such as the Migratory Bird Treaty Act, the Endangered Species Act, the Magnuson Fishery Conservation and Management Act, the Fish and Wildlife Conservation Act,⁵⁷ and the Neotropical Migratory Bird Conservation Act that directly and indirectly support bird conservation.⁵⁸ Both Canada and the United States also offer protected habitats such as fish and wildlife reserves that Red Knot *rufas* benefit from. Central and South America, however, are less focused on the Red Knot *rufa* and countries mostly offer protected areas.⁵⁹ The commitment to Red Knot *rufas* is highly uneven between Canada, the United States, and Latin America.

To further national commitment to the Red Knot *rufa*, governments must initiate stricter programs.

53 UNDP. "Connecting poverty eradication and environmental sustainability is the 'make or break' for our future." <http://www.undp.org/content/undp/en/home/presscenter/pressreleases/2013/03/18/connecting-poverty-eradication-and-environmental-sustainability-is-the-make-or-break-for-our-future/>

54 UNDP. "Bhutan, in pursuit of sustainable development." <http://www.undp.org/content/undp/en/home/presscenter/articles/2012/09/12/bhutan-s-gross-national-happiness.html>

55 Canada Ministry of Natural Resources. Red Knot *rufa* subspecies (*calidris canutus rufa*). "http://webcache.googleusercontent.com/search?q=cache:cOdDrTcZGa8J:www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@species/documents/document/stdprod_082229.pdf+&hl=en&gl=us

56 U.S. Fish & Wildlife Service. "Red Knot (*Calidris canutus ssp. rufa*)." <http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DM>

57 P. Boersma and Julia Parrish, 251.

58 U.S. Fish & Wildlife Service. "FWS Invests \$3.5 Million to Conserve Declining Warblers, Sandpipers and other Migratory Birds." <http://www.fws.gov/home/newsroom/nmbcNR.html>

59 Lawrence Niles, Humphrey Sitters, et al., 114-121.

North American nations must fully recognize the bird's status and maintain research endeavors. Latin American countries will also need to recognize the status of the Red Knot *rufa*, ensure effective habitat protection, and promote scientific research. The United Nations' Agenda 21 should guide government leaders in conservation efforts.⁶⁰ Unfortunately, this solution comes with challenges as many Latin American countries have limited resources.

Strengthening Intergovernmental Efforts

To be effective in protecting Red Knot *rufas*, governments must collaborate. Current collaboration actions include the Convention on the Conservation of Migratory Species of Wild Animals (also known as the Bonn Convention or Convention on Migratory Species), the Convention on Wetlands of International Importance: the Ramsar Convention, the Migratory Bird Treaty Act, the Western Hemisphere Migratory Species Initiative, the Waterbird Conservation for the Americas, the Conservation of Arctic Flora and Fauna,⁶¹ the United Nations' Convention on Biological Diversity, and the United Nations Environment Programme (which contains various sublevel organizations). Other, more indirect actions include the International Convention for the Prevention of Pollution from Ships, the Convention on Conservation of Antarctic Marine Living Resources, and the Convention on International Trade in Endangered Species of Wild Flora and Fauna.⁶² These efforts are broad though and neither guarantee full commitment to Red Knot *rufas* nor full participation of all countries.

To save Red Knot *rufas* from extinction, an international organization is required that specifically addresses the needs of the Red Knot *rufa*. This organization may stand alone, but it would be more feasible as a subcommittee under a current institution such as the United Nations Environment Programme. This newly-founded organization, consisting of government

60 United Nations. "Agenda 21."

61 UNEP & CMS. (pgs. 38-39).

62 P. Boersma and Julia Parrish. "Threats to Seabirds: Research, Education, and Societal Approaches to Conservation." *Avian Conservation: Research and Management*. (Washington, D.C. Island Press, 1998), 252.

representatives throughout the Red Knot *rufa's* flyway, will lead to fundamental political action and collaboration under the influence of Agenda 21 and other intergovernmental treaties.⁶³

RECOMMENDED COURSE OF ACTION:


Since the decline in Red Knot *rufas* is complex and needs further understanding, the recommended solution incorporates a multitude of strategies. These strategies include enhanced public education and awareness, increased scientific research and monitoring and improved habitat protection through raised governmental and nongovernmental commitment. These strategies should be directed by an overarching international committee established under the United Nations Environment Programme that brings together government and nongovernment participation. This international organization will lead to maximum efficiency and cooperation among stakeholders that will foster immediate action to protect the Red Knot *rufa*.

Currently, an international organization focusing on Red Knot *rufas* is nonexistent. Although there are a multitude of intergovernmental and nongovernmental actions that benefit the Red Knot *rufa*, these efforts currently do not provide the necessary in-depth focus and commitment to the bird that is necessary. As a result, the establishment of a new international organization that combines necessary governments and NGOs would produce more effective protection of the Red Knot *rufa* throughout its entire range.

At the basis of its work, the organization must involve public awareness and education. By increasing awareness, individuals, communities, regions, and governments within the Atlantic America's Flyway will better understand the Red Knot *rufa* situation and become more likely to act in favor of the migratory bird. Resulting actions at the local and community level may involve volunteering to monitor bird populations, cleaning up litter along coastlines, or other conservation efforts. Awareness and education also has the benefit of preparing regional and national level governments to adopt effective and necessary

management strategies to aid Red Knot *rufa* populations. This bottom-up approach provides a foundation for which all other work can be based off of.

Secondly, the international organization must promote research and monitoring of Red Knot *rufas*. Scientists and researchers have had difficulty up to now studying the bird due to its transnational migration. However, an international organization may overcome this challenge by becoming a center for the merging of data and ideas. The information compiled can then be quickly disseminated, helping conservation officials quickly in the decision-making process.

Lastly, the international organization will manage increased government and NGO commitment. Governments must be aware of and recognize the Red Knot *rufa's* threat of extinction. By doing so, they can develop steps to mitigate the continued population decline within their own borders and help other countries do the same. Working in close collaboration with government agencies, the international organization must help NGO's be better directed and informed to help complement and participate with both government efforts and with each other. With this framework in place, management of hotspots throughout the Red Knot *rufa's* range may be more effective, which will ultimately enhance the Red Knot *rufa's* hope for survival. 

63 United Nations. "Agenda 21."

APPENDICES

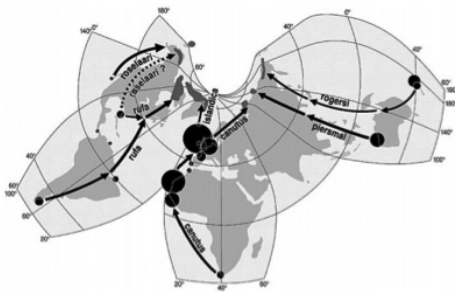
Appendix 1. Red Knot population estimates in North and South America. More recent data suggests significant declines in Maranhão and Florida populations, as well as the Tierra del Fuego population.⁶⁴

Location	Population	Recent trend	Date	Subspecies	Source
Tierra del Fuego	17,653	major decline	Jan 2005	<i>rufa</i>	S. I. G. Morrison (unpubl. data) R. K. Ross (pers. comm.)
Maranhão, northern Brazil	7,575	slight decline	Feb 2005	uncertain	Baker et al. (2007a)
Florida	7,500	not known	2004–2005	uncertain	B. A. Harrington (unpubl. data)
California, Mexico and possibly farther south	9,035*	not known	Winter 1985–1995*	<i>rufelaari</i>	Page et al. (1999)
Texas coast	3,000	probable decline	1985–1996 (Jan 2003)*	uncertain	Skagen et al. (1999)
Total	44,763				

*The figure of 9,035 represents the maximum spring count along the main U.S. Pacific coast during 1986–1995 and probably includes both migrant and wintering birds. Winter counts above produced 4,423 in the United States 1986–1995 (Page et al. 1999) and 1,082 in Baja California (Page et al. 1997). Presumably, the remaining 3,500 winter elsewhere in Mexico or farther south.

*Page et al. suggest that the Texas coast wintering population may now be as little as 300, but there has been no recent census.

Appendix 2. Global distribution of Red Knot (*Calidris canutus*) subspecies. Circle size illustrates population numbers and are located over main wintering sites. Shaded areas of dark grey signify breeding range.⁶⁵



Appendix 3. Critical Red Knot *rufa* habitat areas throughout migration.⁶⁶



ADDITIONAL WORKS CONSULTED

- Faaborg, John. *Saving Migrant Birds*. (Austin: University of Texas Press, 2002), 35–182.
- Garland, Shelley, and Peter Thomas. "Recovery Plan for Red Knot, *rufa* subspecies (*Calidris canutus rufa*), in Newfoundland and Labrador." 2009.
- Swain, Glenn. "A Red-Knot Celebrity Is Back in Town." *The New York Times*. (2012).
- Martin, Tara, Chades, Iadine, et. al. "Optimal Conservation of Migratory Species." *PLOS One*. (2007).

64 Lawrence Niles, Humphrey Sitters, et. al., 56, 133.

65 Lawrence Niles, Humphrey Sitters, et. al., 6.

66 Lawrence Niles, Humphrey Sitters, et. al., 23.



Strengthening Environmental Protection in the Southern Ecuadorian Andes

– Nicole Henderson

Ecuador is one of the most biodiverse countries in the world and is home to unique ecosystems, like the páramo—yet it also suffers from the highest deforestation rate in South America. Ecuador finds itself in a precarious place as it depends almost exclusively on its natural resources, yet continues to overexploit them, especially in the pursuit for oil. While lucrative in the short term, in the long term this will not foster real growth if Ecuador doesn't take the certain prescribed steps, explained in this white paper. Overall, these solutions emphasize sustainable use, community involvement, local knowledge and the empowerment that comes from these. These have shown to stimulate real change and let people who are intimate with the landscape make decisions about it.

INTRODUCTION

With the pressing concerns of climate change, sustainable development and globalization, ecosystems command more attention in terms of understanding how they operate, interact with humans and how they should be managed. Failure to consider these factors can lead to their degradation and ineffective use.¹ While some management policies emphasize 100% protected (national parks) or 100% unprotected, very few consider both the ecological and human needs within a landscape, and the “blueprint” approach to management is no longer appropriate.² Most research now suggests that we need to look at underlying processes and the various scales at which they operate.³ With regards to the Southern Ecuadorian Andes (SECA),⁴ new approaches to

1 Butler, Caroline and Charles R. Menzies. “Introduction: Understanding Ecological Knowledge.” *Traditional Ecological Knowledge and Natural Resource Management*. Ed. Charles R. Menzies. 1st ed. Lincoln: University of Nebraska, 2006. 1-17. Print.

2 Berkes, Fikret. “Going Beyond Panaceas Special Feature: Community-based Conservation in a Globalized World.” *Proceedings of the National Academy of Sciences* 104.39 (2007): 15188-5193. Web. 13 Feb. 2013.

3 Zimmerer, Karl S., and Kenneth R. Young. “Conclusion: Biological Conservation in Developing Countries.” *Nature's Geography: New Lessons for Conservation in Developing Countries*. 1st ed. Madison, WI: University of Wisconsin, 1998. 327-44. Print.

4 See Figure 1 in Appendices section for map of SECA.

environmental management can build ecological and human capacity. This white paper seeks to spell out what these approaches consist of and how they benefit the SECA.

First, it is important to have a geographic context for the SECA. The SECA is made up of five provinces: Cañar, Azuay, El Oro, Loja and Zamora-Chinchipec⁵, which comprise an area of over 50,000km². The area features several unique ecosystems ranging from wetlands to the páramo.⁶ The primary problems faced by the SECA include serious soil erosion, agricultural land conversion, changing water flows and increased human presence in the landscape.^{7,8} The SECA hosts several national parks and other nature reserves, with Podocarpus National Park being the predominant protected area.⁹ However, remote sensing in the area reveals much deforestation within park boundaries, suggesting that in addition to the aforementioned problems, traditional “solutions” do not work.

Deep social stratification between *indios* and non-*indios* marks the area—with many *indios* plagued by poverty, illiteracy and low participation in local institutions with limited social mobility.¹⁰ Additionally, there are many different groups that make up the *indios* overall, with different economic, social and cultural claims upon the land—many of them undocumented or only understood amongst

group members.¹¹ Regardless, the livelihoods of all groups are increasingly based on their integration into the larger society and its market systems, which changes human-environment interaction patterns and makes management even more complicated.¹² Very few maps and documents outlining current management actors, organizations and policies for the region exist, meaning that they never existed to begin with or are simply ineffective.

As all these factors converge on the landscape, the SECA clearly needs a new approach to management. This does not immediately entail land protection or a specific policy proposal, but rather a more integrated and informed approach so that the SECA's ecological and social contexts guide suitable plans that benefit them, instead of continuing to marginalize and degrade them.¹³

POSSIBLE SOLUTIONS

Approach #1: Community Based Natural Resource Management (CBNRM)¹⁴

CBNRM is a general approach, but its application is not. It is site-specific with caveats for success that should be evaluated before proposing CBNRM.^{15, 16, 17} Governing the vast, diverse SECA this way overall is ill-advised, but within it exist many opportunities. At a national level, Ecuador

5 White, Stuart, and Fausto Maldonado. “The Use and Conservation of Natural Resources in the Andes of Southern Ecuador.” *Mountain Research and Development* 11.1 (1991): 37-55. JSTOR. Web. 13 Feb. 2013.

6 White and Maldonado, 38-40

7 Ibid, 38

8 Pérez, Francisco L. “Human Impact on the High Páramo Landscape of the Venezuelan Andes.” *Nature's Geography: New Lessons for Conservation in Developing Countries*. Ed. Karl S. Zimmerer and Kenneth R. Young. 1st ed. Madison, WI: University of Wisconsin, 1998. 147-83. Print.

9 Zimmerer and Young, 102

10 Casagrande, Joseph B. “Strategies for Survival: The Indians of Highland Ecuador.” *Cultural Transformations and Ethnicity in Modern Ecuador*. Ed. Norman E. Whitten. 1st ed. Urbana: University of Illinois, 1981. 260-77. Print.

11 Iñiguez Gallardo, María Verónica, Sandra Pinel, Kelly Wendland, Jessica Helsley, Jaz Ammon, and Fausto Vinicio López Rodríguez. “Collaborative Community-based Watershed Governance in a Transboundary Wetland System in the Ecuadorian Andes: Opportunities and Challenges at a Proposed Ramsar Site.” 2012. 1-16. MS. University of Idaho, Universidad Técnica Particular De Loja, Moscow, ID; Loja, Ecuador.

12 Casagrande, 262

13 See Appendix 1

14 See Appendix 2

15 Koontz, Tomas M., and Craig W. Thomas. “What Do We Know and Need to Know about the Environmental Outcomes of Collaborative Management?” *Public Administration Review* 66.1 (2006): 111-21. Web. 13 Feb. 2013.

16 These caveats include: small group size, defined users and boundaries, clear monitoring and enforcement measures, users are physically/culturally close to resource, group homogeneity, fairness in benefit allocation, external aid to help fund efforts, per Agrawal (cited below).

17 Agrawal, Arun. “Common Property Institutions and Sustainable Governance of Resources.” *World Development* 29.10 (2001): 1649-672. Elsevier. Web. 7 Mar. 2013.

has several ministries and agencies whose duties pertain to the environment¹⁸, but is now moving towards more decentralization.¹⁹ CBNRM fosters this shift and allows stakeholders to get involved via simple consultation all the way up to governance itself.²⁰ It operates best when the community coordinates across local, regional, national and international levels and with NGOs, institutions, technical resources/researchers, etc.²¹ Case studies have found that creating at least 10-15 partnerships between the aforementioned groups yields the most success.²² While CBNRM emphasizes effective environmental management, it also yields more social empowerment, with different stakeholders participating and taking pride in the outcomes.²³ Additionally, people formerly excluded from decision-making can bring new knowledge to light, giving a more complete picture of the landscape and offer creativity in problem-solving.²⁴ More SECA residents are poised to do this through the creation of *comunas*.²⁵ Because they are not dependent upon elections or profits, but their own time, land and money, they are actually concerned with effectiveness and fairness—though they must still cope with competing land claims and conflict.^{26, 27} CBNRM would allow SECA communities to take action and protect/manage the ecosystems upon which they rely.²⁸

Approach #2: Rethinking economic strategies

A 2008 revision in Ecuador's constitution gave nature a right, in addition to positing more progressive environmental aims.²⁹ It came as a response to the degradation encountered as a result of intensive resource extraction by MNCs.³⁰ Yet half of Ecuador's GDP comes from oil. Despite huge profits, poverty, degradation and debt have gotten worse, meaning that this "success" comes at the expense of people and ecosystems.³¹ A needed revision could come in several forms. In 2007, Ecuador asked foreign donors to contribute \$3.6B to protect Yasuní National Park, but by 2013, it lacked sufficient financing and talks with China to sell the oil plots have begun.^{32, 33} Before selling the lands, however, Ecuador should enact provisions requiring investment in sustainable practices/industries, and require the funneling of continued funding to keep Yasuní intact, meaning the 2007 plan had some validity.³⁴ Ecuador has promising prospects for sustainable industry in organics, forestry, solar/hydro/renewable energy generation and ecotourism.³⁵ This diversification prevents such heavy reliance on the short-term, hazardous oil industry. Calculating this damage with demonstrated "growth" shifts the balance sheets

18 "Tu Gobierno." *Ministerio Del Ambiente*. Gobierno Nacional De La Republica Del Ecuador, 2013. Web. 15 Mar. 2013. <<http://www.ambiente.gob.ec/>>.

19 Iñiguez Gallardo et al., 4

20 Costa Rica. Ramsar. Guidelines for Establishing and Strengthening Local Communities' and Indigenous People's Participation in the Management of Wetlands. 7th sess. Res. VII.8. Ramsar, 1999. Web. 7 Mar. 2013. <http://www.ramsar.org/pdf/res/key_res_vii.08e.pdf>.

21 Berkes, 15188, 90

22 Ibid, 15190

23 Koontz and Thomas, 113

24 Van Den Hove, Sybille. "Participatory Approaches to Environmental Policy-making: The European Commission Climate Policy Process as a Case Study." *Ecological Economics* 33.3 (2000): 457-72. *El Sevier*. Web. 7 Mar. 2013.

25 Iñiguez Gallardo et al., 9

26 Van Den Hove, 464

27 Iñiguez Gallardo et al., 10

28 Ibid, 13

29 Kendall, Clare. "A New Law of Nature." *The Guardian*. Guardian News and Media, 23 Sept. 2008. Web. 20 Mar. 2013. <<http://www.guardian.co.uk/environment/2008/sep/24/ecuador.conservation>>.

30 Kendall

31 Behrer, Patrick. "Ecuador's Conservation Innovation." Web log post. *Sense & Sustainability*. N.p., 21 Nov. 2011. Web. 20 Mar. 2013. <<http://www.senseandsustainability.net/2011/11/21/ecuadors-conservation-innovation/>>.

32 "Ecuador Experiments with Environmental Protection Scheme." *International Centre for Trade and Sustainable Development*. ICTSD, 6 Aug. 2010. Web. 20 Mar. 2013. <<http://ictsd.org/i/news/biores/86664/>>.

33 Kaiman, Jonathan. "Ecuador Auctions off Amazon to Chinese Oil Firms." *The Guardian*. Guardian News and Media, 26 Mar. 2013. Web. 28 Mar. 2013. <<http://www.guardian.co.uk/world/2013/mar/26/ecuador-chinese-oil-bids-amazon>>.

34 Mecham, Jefferson. "Causes and Consequences of Deforestation in Ecuador." *Conservation Projects: Ecuador*. The Rainforest Information Centre, May 2001. Web. 20 Mar. 2013. <<http://www.rainforestinfo.org.au/projects/jefferson.htm>>.

35 Mecham

to actually come out negative.³⁶ Other analyses have proposed to cut subsidies for activities that favor intensive or ill-suited landscape usage, instead favoring developments more considerate of landscapes.³⁷ Unfortunately, these solutions require gradual shifts that require more time and greater investment, which often lose out to short-term profits, despite these being damaging and unsustainable, which could lead to worse economic turmoil.

Approach #3: Strengthening Ramsar³⁸ commitments

The Ramsar Convention is an international agreement whose focus centers on wetland protection and management.³⁹ Ecuador has 18 Ramsar sites, with three new sites in the SECA added in 2012, but its commitment to the convention could still use improvement.^{40, 41} Ramsar represents a desirable option for many reasons. First, it seeks to protect wetlands while still finding venues for sustainable development via its wise use approach.⁴² It does this by promoting involvement and coordination across many levels through many organizations.^{43, 44} Further, it facilitates assessment and analysis of wetlands by specialist teams, in addition to working with local sources to produce comprehensive ecosystem reports that give a more accurate picture of protection and

degradation.⁴⁵ Ramsar is also partnered with many prominent international environmental protection organizations and conventions that range from species protection to development strategies.⁴⁶ This allows greater access to funding, personnel and information. While Ecuador has reported an overall improvement of its wetlands, it has noted a lack of: site-specific management plans, considerations of local values/needs and solid funding mechanisms.⁴⁷ This could suggest the ineffectiveness of Ramsar, but a closer look at Ecuador's country report reveals that its application of the convention has holes. Strengthening this relationship, however, can lead to increased efficacy of the convention's principles which fall in line with Ecuador's goals and needs, and align almost perfectly with the proposed approaches.⁴⁸

Approach #4: Utilizing Traditional Ecological Knowledge (TEK)⁴⁹

Much underutilized knowledge exists to assess and explain these specific ecological and social contexts. Externally formulated and rarely site-specific, current management tends to overemphasize the market and underestimate indigenous groups.⁵⁰ Seen by some as a "back to the future" approach, TEK lends a useful ideology that can capitalize upon one of the most valuable resources of the SECA: its indigenous knowledge.^{51, 52} While not all groups want to share this information with outsiders, many have gotten vocal about protection of resources and clarifying their identity in the process.⁵³ While it is not a panacea, TEK provides valuable questions and answers about ecosystems

36 *Ecosystems and Human Well-being: Synthesis*. Rep. The Millennium Ecosystem Assessment, 2005. 1-137. Web. 02 Mar. 2013. <<http://www.unep.org/maweb/documents/document.356.aspx.pdf>>.

37 Ibid, 93

38 See Appendix 3

39 "The Ramsar Convention and Its Mission." Ramsar Convention. Ramsar Convention, n.d. Web. 15 Mar. 2013. <http://www.ramsar.org/cda/en/ramsar-about-mission/main/ramsar/1-36-53_4000_0_>.

40 "Four New Ramsar Sites in Ecuador." *Ramsar Convention*. Ramsar Convention, 28 Jan. 2013. Web. 20 Mar. 2013.

41 *Informe Nacional Sobre La Aplicación De La Convención De Ramsar Sobre Los Humedales*. Rep. Ramsar Convention, 2012. 1-36. Web. 26 Mar. 2013.

42 Bowman, Michael. "The Ramsar Convention on Wetlands: Has It Made a Difference?" *Yearbook of International Cooperation on Environment and Development* 10 (2003): 61-68. 2003. Web. 7 Mar. 2013. <http://www.ramsar.org/pdf/key_low_bowman2.pdf>.

43 Ibid, 62

44 Res. VII.8

45 Bowman, 66

46 For example, the UN and many of its committees and conventions, IUCN, CBD, CSM, WWF. "How Does Ramsar Collaborate with Other MEAs?" *Ramsar Convention*. Ramsar Convention, 08 Oct. 2009. Web. 15 Mar. 2013.

47 Informe nacional, 8, 18, 29

48 Res. VII.8

49 See Appendix 4

50 Butler and Menzies, 2

51 MA, 24

52 See Appendix 6

53 "State of the World's Minorities and Indigenous Peoples 2012 - Ecuador." *UNHCR Refworld*. Minority Rights Group International, 28 June 2012. Web. 28 Mar. 2013. <<http://www.unhcr.org/refworld/country,,,ECU,4562d94e2,4fedb401a,0.html>>.

in addition to naturally demonstrating empirically effective management structures.⁵⁴ This localized knowledge combined with existing information yields a more complete picture in addition to the social empowerment given to spurned indigenous groups who have been continually pushed off the lands that they know best. Additionally, it can be a valuable part of CBNRM.⁵⁵

Approach #5: Participatory uses of Geographic Information Systems (GIS)⁵⁶

On the newer end of the knowledge spectrum exists GIS. GIS is useful for the SECA in two ways: it can map unseen spatial *and* social phenomena and include the people living in these contexts in the mapping process (“participatory GIS”).^{57, 58, 59} Though GIS usage in developing countries is still minimal, enhancing GIS capacity provides better representations of a landscape via mapping, data storage and analysis (which are immediately useful),⁶⁰ in addition to providing educational, employment and technical opportunities for a wide range of potential users in a growing field.⁶¹ While initial investments and detailed remote sensing data are expensive, these costs are continually lowering even as the technology advances.⁶² Portraits of these spatial patterns can lead to more informed decisions and a better understanding of what’s really occurring.⁶³ Yet to maintain its

efficacy, GIS must also give “explicit requirements for transparency and participation” to maintain a spatial context and connection, which can be facilitated by NGOs and CBOs.⁶⁴ Otherwise it can serve as a tool to legitimate governmental decisions that did not include any input from community members.⁶⁵ When utilized effectively, GIS has limitless applications in: planning, social mapping, education/literacy, empowerment/rights, resource management, threat monitoring, data storage/analysis to name a few.⁶⁶ Including locals is key to achieve these benefits by including their values and contexts with the data, leading to a more complete picture of the landscape they seek to protect in the most effective manner.

RECOMMENDED COURSE OF ACTION

Ecuador is in an increasingly precarious position with respect to its economy and its environment—as though it hopes to pursue both with the other remaining unchanged. While this paper provides recommendations to preserve the latter, acknowledging the difficulty in doing this without also providing viable economic alternatives remains, because oil fuels the economy. However, by continuing to emphasize the economy and valuing ecosystem services only monetarily, Ecuador’s quality of life will dwindle, causing more social, political and economic turmoil—occurring now as indigenous groups violently protest and decry the national government’s decision to sell plots of their valued land for oil.⁶⁷

This is one reason for proposing the Ramsar framework, as it harmonizes the five approaches, while providing mechanisms to achieve them. It very much acknowledges the importance of more community led initiatives, especially when they can incorporate TEK to create a more accurate “version” of the landscape, both of these concepts spelled out in resolutions. Ecuador can start by actually taking these resolutions into law and requesting a Ramsar assisted ecosystem

54 Butler and Menzies, 6

55 White and Maldonado, 22

56 See Appendix 5

57 Livengood, Avery, and Keya Kunte. “Enabling Participatory Planning with GIS.” *Environment and Urbanization* 24.1 (2012): 77-97. SAGE. Web. 19 Mar. 2013.

58 *Stakeholder Engagement Strategies for Participatory Mapping*. Rep. NOAA, 2009. Web. 19 Mar. 2013. <http://www.csc.noaa.gov/digitalcoast/_pdf/participatory-mapping.pdf>.

59 Chambers, Robert. “Whose Space? Mapping, Power and Ethics.” *Revolutions in Development Inquiry*. 1st ed. London: Earthscan, 2008. 133-50. Print.

60 Echavarría, Fernando R. “Monitoring Forests in the Andes Using Remote Sensing: An Example from Southern Ecuador.” *Nature’s Geography: New Lessons for Conservation in Developing Countries*. Madison, WI: University of Wisconsin, 1998. 100-20. Print.

61 Chambers, 134

62 Talen, Emily. “Bottom-Up GIS.” *Journal of the American Planning Association* 66.3 (2000): 279-94. *ArticleFirst*. Web. 19 Mar. 2013.

63 Echavarría, 115


64 Livengood and Kunte, 84

65 *Ibid*, 82

66 Chambers, 137-8

67 Kaiman

assessment in its most recently approved SECA sites. Assigned Ramsar personnel will also contract local stakeholders to not only assess the landscape scientifically, but socially. This allows TEK to have a role and gives communities immediate access to information that pertains to them. Use of GIS to analyze and map can then lead to the drafting and presentation of their own management strategies based on current landscape conditions. From here, the national government can foster the facilitation of national agencies with local communities and NGOs. This represents a best case scenario and incorporates pieces from all the approaches that will lead Ecuador in a new direction.

While none of the approaches represent immediate fixes, applied over time, they allow Ecuador to gradually move away from its dependence on exhaustive industries like oil, while empowering communities and investing in more sustainable industries—both of which show marked gains for environmental protection. This protection is vital if Ecuador is to maintain the ecological and cultural legacies that serve as the cruxes of its national identity and global importance. 

APPENDICES

Figure 1:⁶⁸



The Southern Ecuadorian Andes region is generally comprised of the circled provinces: Cañar, Azuay, El Oro (partially), Loja and Zamora-Chinipe. However, it should be noted that ecosystems do not follow political boundaries, so this is a simplification.

APPENDIX 1: THE MILLENNIUM ECOSYSTEM ASSESSMENT (MA)

The MA came about as a response to the UN calling for an assessment of the world's ecosystems that brought together 1300 researchers from almost 100 countries between the years 2001-2005 to deliver various documents and reports/syntheses explaining consequences, drivers of and responses to ecosystem change.⁶⁹ In the construction of this paper, it proved to be an invaluable framework for determining the most viable solutions in general, which were then researched with respect to specific Ecuadorian contexts—even though it is not frequently cited.

⁶⁸ Map from, <http://adventures.worldnomads.com/destination/63/itinerary/192/Ecuador/Southern-Ecuador.aspx>

⁶⁹ "Overview of the Millennium Ecosystem Assessment." *Millennium Ecosystem Assessment*. United Nations Environmental Programme, 2005. Web. 20 Mar. 2013. <<http://www.unep.org/maweb/en/About.aspx>>.

APPENDIX 2: COMMUNITY BASED NATURAL RESOURCES MANAGEMENT (CBNRM)

CBNRM emerged as a response to conventional management which generally leaves control with the central government or resource industry.⁷⁰ These are faulty as overexploitation and poverty persist. CBNRM calls upon numerous stakeholders in a community to come together to forge better management strategies and institutions.⁷¹ This leads to, “more collective, holistic and long-term thinking” which embodies the concepts of sustainability, fairness and empowerment, making it socially and ecologically effective.⁷² While it is not a panacea and subject to its own set of critiques, it represents an underexplored alternative to failing national and industry-based strategies.

APPENDIX 3: THE RAMSAR CONVENTION

The Ramsar Convention was signed in Ramsar, Iran in 1971 for the main purpose of protecting wetlands. It now currently boasts 165 members with more than 2100 sites worldwide.⁷³ It operates on three pillars: designation of suitable wetlands for Wetlands of International Importance list; “wise use” of all wetlands through planning, policy, management, education, etc.; cooperation of all parties in transboundary wetland situations.⁷⁴ Its “wise use” concept entails the conservation of ecosystems, while also considering principles of sustainable development.⁷⁵ It works with many other international organizations and has a Conference of Contracting Parties (COP) every three years to assess effectiveness and share new

70 Agrawal, Arun and C. Gibson. “Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation.” *World Development* 27.4 (1999): 629-49. Elsevier. Web. 2 Feb. 2013.

71 Berkes, 15189

72 Van Den Hove, 458

73 Ramsar Convention

74 “What Are the “three Pillars” of the Convention?” *Ramsar Convention*. Ramsar Convention, 08 Oct. 2009. Web. 15 Mar. 2013. <http://www.ramsar.org/cda/en/ramsar-about-faqs-what-are-three/main/ramsar/1-36-37%5E7722_4000_0_>.

75 The Ramsar Convention and Its Mission

ideas and information regarding conservation of wetlands.

APPENDIX 4: TRADITIONAL ECOLOGICAL KNOWLEDGE (TEK)

TEK represents the handed down knowledge and beliefs that indigenous peoples hold of their environments.⁷⁶ This knowledge is seen as more long-term, dynamic, historical, local, embedded, moral and spiritual—meaning that it incorporates not just ecological values, but cultural and social ones too.⁷⁷ TEK can and should be evaluated on its own, but can also be incorporated into or changed by contemporary scientific knowledge and values—meaning that it doesn’t automatically possess sustainable values.⁷⁸ By continuing to not account for these groups and their values or considering them as “lesser”, this risks irreversible change and maybe even permanent loss. Many researchers and organizations now say this information can provide key missing links to aid in policymaking, protection and problem-solving, making its preservation and documentation all the more important.⁷⁹

APPENDIX 5: GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Geographic Information Systems utilize various technological and electronic data to create intricate, layered maps which are useful not just for projection, but capable of analysis and modeling as well. While still underutilized and lacking highly trained personnel required to make sense of data and its projection, it represents an up and coming field in many key disciplines as it allows new variables to be seen and therefore taken into consideration, where they were excluded before. GIS utilizes high-resolution satellite images for landscape analysis that is nearly impossible through any other means. However, because of its high tech nature and need for trained users, its use is still limited in developing countries.

76 Butler and Menzies, 6

77 Ibid, 7

78 Agrawal and Gibson, 633

79 van den Hove, 462

APPENDIX 6: INDIGENOUS GROUPS OF ECUADOR⁸⁰

I do not intend to provide a comprehensive list—merely to note the importance of Ecuador's indigenous groups/movements, which have had a large presence and powerful political aims, especially since the 1990s into the 21st century. In addition to fighting for better treatment and more visibility, they call for more responsible measures to care for the environment, upon which they have relied for thousands of years. This presents itself as a unique situation that must be considered in Ecuadorian environmental policy.

ADDITIONAL WORKS CONSULTED

- Bauer, Kenneth. "On the Politics and Possibilities of Participatory Mapping and GIS: Using Spatial Technologies to Study Common Property and Land Use Change among Pastoralists in Central Tibet." *Cultural Geographies* 16.2 (2009): 229-52. SAGE. Web. 18 Mar. 2013.
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- "Ecuador." *The World Factbook*. Central Intelligence Agency, Mar. 2013. Web.
- <<https://www.cia.gov/library/publications/the-world-factbook/>>.
- Gruber, James S. "Key Principles of Community-Based Natural Resource Management: A Synthesis and Interpretation of Identified Effective Approaches for Managing the Commons." *Environmental Management* 45 (2010): 52-66. Springer. Web. 13 Feb. 2013.

80 Clark, A. Kim, and Marc Becker. "Indigenous peoples and state formation in modern Ecuador." *Highland Indians and the State in Modern Ecuador* (2007): 1-21.



Interview with Ambassador Richard LeBaron

Interview with Ambassador Richard LeBaron, the 2013 Visiting Distinguished Practitioner of International Affairs. Questions were posed for and on behalf of the Martin Institute by Kaylee Kosareff and Jim Martinez. The interview took place during the last week of January.

What regional policy choices should the US focus on to remain being the ultimate power?

The US has interests all over the globe and so we can't discard any of those interests. We can't withdraw from Latin America. We can't withdraw from Europe. But clearly the emphasis in the next 30 years or so is going to have to be on China because China is growing the most rapidly. It's going to be the only country that will compare in size and economic power with the United States in the coming 30 years. And we are going to have to focus on China primarily because we risk confrontation with China if we don't manage our relations with it well and wisely. So, we need to work and the Chinese need to work on making sure that we compete in some ways and competition is fine economically and even culturally and politically and in some ways competing for influence but the main basis of our relationship should be cooperative and working with China to address problems around the world. So, working on how we foster as relationship with China emphasizes cooperation. I think that should be our biggest focus. Europe is weak right now economically and it seems to be in a period of self-doubt about the

European project, about European integration and the value of it. I think European integration has served Europe and the United States very well over the last several decades since the Second World War. And we have to keep in mind that the basis of that integration in Europe was to avoid the horrible conflicts of the 20th century between Germany and the other major powers in Europe which had disastrous consequences. And so we need to not undervalue how strategic the European project is and I think if I were President, I would be urging my friends in Britain to not pursue this business of withdrawing from the Europe but pursue a policy that strengthens the European Project in any way they can. So I think that it's been important and I think this recession, this problem in Europe right now is a deep one and it's a troubling one but we have a long-range interest and a long-term interest in a strong, united Europe.

What influence could the US utilize more efficiently by being a member of organizations such as the UN, NATO, OAS?

I think the US is of two minds on these issues on the membership in these international organizations. A lot of Americans think they're a waste of time. They're just big operations where the US can be criticized or is drawn in because it makes contributions to these organizations and bears the brunt of the expenses but in fact, it's in our national interest to be part of all of these organizations, [including] the UN. A lot of the work the UN does serves our interests directly in dealing with refugees around the world, in dealing with peacekeeping missions and hot spots around the world. I've seen these peacekeepers in action in the Golan, for example, where there's tension now, or in the Sinai through their multi-national force there. So I think we need to keep in mind that we do have a strong interest in multi-lateral organizations and not be seduced by the idea that we can do it on our own. There's no reason that we should take on all the responsibility ourselves and we need to urge other partners especially in NATO, for example, to take up their burdens more actively. But, in my view, it's not an option whether the US belongs to these organizations. The option is how actively we lead and participate when we do belong to them.

The amount of foreign aid the US gives to other states is often a controversial topic. Should aid be tied to the stature in the international community?

Well, I think that a lot of people in the United States think that our foreign aid budget is enormous, that we give a lot of money to foreigners, and foreign organizations, and people who might not believe in the same things we do. The fact is our foreign aid budget is quite small, less than 1% of our federal budget. That's still a considerable amount of money but I think it's less than most people think. People also complain that we don't seem to get credit for this aid and that's true sometimes. I was in Egypt; we have a large aid program there. But Egyptians are not eager to admit that their telecommunications or their sewer systems or their water systems were built with American money. But I think aid, you know, we give aid not out of the goodness of our hearts usually. A lot of the aid that we give is based on political considerations in any case. So we give in our own national interest and a lot of aid comes back to the United States in the form of contracts for American consulting firms and a lot of our agricultural aid, for example, supports farmers around the United States so it's not simply giving money away to foreigners. A lot of that aid supports people in this country.

What insight to US policy on the Palestine situation can you offer from your experience as Deputy Chief of Mission in Tel Aviv, Israel?

Well, I think the problem is a lack of confidence between the Palestinians and the Israelis. There's a lack of belief on both sides that a solution can be achieved and will be a good solution. The Israelis were somewhat scared by the fact that they evacuated all their settlements from Gaza but then the conflict continued. Rockets kept coming from Gaza into Israel. They're not eager to do the same with the West Bank. But I think that most Israelis understand that the basis of their security lies in a two state solution, a genuine two state solution, where Israelis and Palestinians live in peace and prosperity side by side and I don't think that's at all impossible. I've seen countries such as Jordan and Israel sign peace treaties. The Egyptian-Israeli peace treaty is in force and is not in doubt right now. Although people are discouraged right now, there is no reason to think that peace between Israelis and Palestinians is not achievable. Most people know the general outlines of a solution. Now, we need the right conjunction of political leaders and political vision in order to carry out that plan. Also there's a need, because of our close relationship with

both the Israelis and the Arab States, the United States inevitably is going to have to be actively involved in supporting and facilitating peace in the Middle East.

During your term as the coordinator for the Center for Strategic Counterterrorism Communications in the US State Department you assembled teams of native speakers in Arabic, Urdu and Somali speakers. Do you see countering extremist messages as a sound manner to promote US policies in the Middle East?

Our counter terrorism policy has a lot of different instruments and you can think of it as everything from the use of military force to the use of drones for example to kill terrorist down to the efforts that we had here which were an attempt to influence the initial supply of terrorists. The target audience that we were trying to influence were those groups of young men mostly who were tempted to go from an extremist idea to extremist action and we attempted to focus on them very carefully, understand what motive them and try to create doubt in their minds about taking that next step towards violence and I think that, in the end, we want to reduce the number of recruits so that we don't have to be involved in military conflicts and use of force because use of force inevitably has unintended consequences. The drone program has civilian casualties. US forces in the Middle East draw criticism so that the less terrorists who join terrorist organizations the better. So that was the attempt of this particular project that I directed.

During your term at the US Embassy in London you administered, among many projects, efforts to resolve the financial crisis. What do you think are the key economic policies the US needs to enact to remain competitive with the rising break in nations?

This is a multi-faceted question and there's no one solution. Most people would agree that we do need to get control of our budget deficit just so that we are able to manage our affairs more rationally and we don't have this overhang of the deficit that would haunt our economy for many years to come. In dealing with the Britain nations, their rise is in our interest. These are huge consuming nations and if you go to Disney Land these days you better be able to speak Portuguese because half the people there are from Brazil and Disney World in Orlando! And that's good! We want those tourist dollars coming in and in Miami, all the shops are filled with people buying things who travel there from Latin America. So this

close integration with these immersing economies is a good thing. I think one of the things we have to demand is that they act like grown up players in the economy, that they respect intellectual property, that they don't engage in dumping of their exports, that they don't engage in heavily subsidizing some of their companies and so forth. If they're going to be first class players they're going to have to play by first class rules. But that said, the rise of middle classes in these countries is net positive in my view for the world economy and for the stability of the world.

With the war ending if Afghanistan, how do you predict the resources and personnel of the US armed forces will be reallocated in the coming years?

This is a huge debate that is only beginning to happen in Washington now and I think it's a good debate because we haven't really had a decline in defense spending in some time. So we're forced now to make some real decisions and I think the worst thing we can do is just do what some of these proposals are doing across the board cuts for every program. We have to make choices. We have to have priorities. If everything is equally important then nothing is important. So I think in the end people will agree we need to spend more on cyber security and I think there's a movement to support that more but that also implies that you spend less on something else and so we're going to have to really have that debate rather than have a silly partisan debate about who is strong on defense and who is not. If we don't have priorities and we don't focus our defense dollars then we don't have a strong defense; we just have a bloated defense so I think cyber will certainly get a lot of emphasis. Special operations will continue to get a lot of emphasis given that the use of those assets during Afghanistan and Iraq and how they made such a huge difference. And I think some of the areas that will suffer will be traditional army units and there will be a slowdown in production of some navy assets but what I hope is that we'll have a real discussion about how we shape our armed forces through the coming century.

Given the recent attack on the US embassy in Libya, what safety initiatives should the US pursue in protecting diplomatic personnel?


Well, I think the lesson that we learned in Libya is that we need to really pay much more attention to these dicey circumstances where the host government is unable to provide the kind of protection that you would expect. I served in London where the British were very capable

of providing both protection for the embassy as well as intelligence about threats and there was a constant dialogue, a constant discussion of how we could refine our security arrangements. In Libya, you had sort of the exact opposite. You had confusion about who was in charge. You had lack of capability of security services and very spotty intelligence about the formation and the intentions of the extremist groups. So you had a formula there that required us to be more careful than we were. Now keep in mind that Chris Stevens, Ambassador Stevens, had been there even before Kadafi was out. He had been in Benghazi as the US representative so he was used to a situation of uncertainty and danger so it wasn't as if he had not been managing his risk before. I think we just didn't do enough to connect the dots and sometimes you can't do enough. But then you have to have a real consideration of whether we should have personnel at these places where our visibility and to the intentions of extremist groups is not high.

How should the US promote or dismiss domestic policies in relation to foreign policies?

I think it's very difficult to separate domestic from foreign policy especially in terms of the long term strength of our foreign policy. I'm a great believer that a resilient, strong United States is where people are succeeding economically in the United States, where people are getting educated and have good educations contributes to a strong foreign policy. That people respect the United States because it's a land of opportunity and achievement and innovation and risk taking. So it worries me when I see things like this high level of high school drop outs in the United States, when I see the cost of education in the United States for university students, when I see a lot of people out of work and out of work for a long time. You can't emphasize enough how important it is to have a good job with a good wage. That's a basic part of social contract in my view. So I think the United States will only be stronger if our domestic policies are strong and our population is succeeding. And I think the lack of confidence about the economy, the lack of confidence about the future will tend to send a signal to politicians to pull away from external involvement, from foreign policy involvement. And what we need to do really is, like the president said, we need to focus on national building at home in order to be a strong example and a strong leader worldwide. I just can't emphasize that enough; how strongly I believe that the strength of the United States at home will be reflected in its abilities to be a leader.

As you've mentioned, US-China relations is the most crucial single factor that will shape the international system. What are some of the challenges that arise from such inter-dependent yet competitive economies working together?

The main thing is that, when you have economies that are interdependent, you have to rely on a system of rules. And the rules have to be agreed, they have to be implemented, they have to be followed not only in letter but in the way people do business. You have to have confidence in the system. That is why this banking crisis in the last several years was such a huge problem. People lost confidence. They thought the banks were going down and that the banks themselves didn't even understand what their assets were. That's a huge problem if it spreads across the globe. It's a huge challenge to get that under control. So for the system to work with big economies functioning to support a huge middle class we have to really work on our system of rules and we have to make sure that there are incentives for following those rules. I think we also need to make sure that we don't leave behind the poorest countries. There will be a tendency to focus on big economies like Brazil, India or China but I think places like Africa and Latin America, or parts of Latin America, have huge capabilities, huge demands as well and we can't just rely on the so-called bricks to stimulate the entire global economy. 

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