FORECASTING RESILIENCE: A FUTURE-HUNTER APPROACH TO A PROSPEROUS CENTRAL AMERICA

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MESA | THE MEDIA ECOLOGY AND STRATEGIC ANALYSIS GROUP

"When a system is far from equilibrium, small islands of coherence in a sea of chaos have the capacity to lift the system to a higher order."

~Ilya Prigogine

ABOUT MESA

The Media Ecology and Strategic Analysis (MESA) Group is an interdisciplinary group with a broad mission to address the rising need for strategic narrative assessment as a tool for promoting cooperative assistance and creating community power. It is based within the School of Media and Strategic Communications (SMSC) at Oklahoma State University (OSU). For more information on the MESA Group, please visit https://mesagroup.okstate.edu.

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DISCLAIMER

The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the viewpoints of Oklahoma State University or TRADOC.

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ACRONYMS

A4P	Alliance for Prosperity Plan
ARC	American Red Cross
BRI	Belt and Road Initiative
CCP	Chinese Communist Party
CDC	Center for Disease Control and Prevention
CICIES	La Comisión Internacional Contra Impunidad El Salvador
CICIG	La Comisión Internacional Contra Impunidad Guatemala
DACA	Deferred Action for Childhood Arrivals
ECI	Economic Complexity Index
EPA	Environmental Protection Agency
EWA	Engineers Without Borders
GDP	Gross Domestic Product
INL	International Narcotics and Law Enforcement Affairs
IRC	International Red Cross
MACCIH	Support Commission Against Corruption and Impunity in Honduras
NGO	non-governmental organization
NT	Northern Triangle
OAS	Organization of American States
OEC	Observatory of Economic Complexity
OSU	Oklahoma State University
TRADOC	United States Army Training and Doctrine Command
US	United States
USAID	United States Agency for International Development
WASH	The Red Cross Wash, Sanitation and Hygiene intervention

EXECUTIVE SUMMARY

Regional instability in Central America caused by poverty, corruption, climate change, gang violence, and a host of other factors has led to an influx of migrants to the United States in recent years. An outdated US immigration system is unable to keep up with such heavy flows of migrants fleeing increasingly deteriorating conditions, thus finding solutions toward regional resilience is of key importance to the US. This report highlights five areas of importance toward fostering regional resilience: culture, security, economy, technology, and strategic partnerships. Focusing on these five areas, we seek to offer a holistic approach toward creating pockets of stability within the region with minimal investments on the part of the US. The findings suggest working with faith-based, educational, non-profit and local institutions to harness the collectivist tendencies of Central American communities to promote resilience in family units as well as the community as a whole. Police reform is also necessary to combat corruption, improve regional security, and re-instill trust in official systems of governance. Addressing infrastructure issues, particularly sanitation infrastructure, is seen as critical along with promoting targeted educational programs. The challenges facing Central America outlined in the various areas of this report are seen as interconnected, requiring solutions that are multi-pronged and staged over time. We believe these proposed solutions offered here can help to build a more prosperous and resilient Central America.

INTRODUCTION

Sustainability and resiliency are important traits for any region to have, however the sustained effects of globalization have made it increasingly difficult for small towns and rural areas to maintain themselves. The economic drivers of our globalized system overlay complex transnational interconnections that unevenly distribute wealth and power, often leaving nations on the system's periphery of power open to both external and internal exploitation. The expansion of transnational corporations negatively impacts local communities through loss of employment and loss of local culture and traditions (Knox & Mayer, 2013). Additionally, globalization-driven urbanization has led to an exodus of young people to larger cities, forcing smaller communities to rely on an older and shrinking workforce (Knox & Mayer, 2013). The result in rural and developing areas of the world is shrinking economies that are increasingly unable to sustain themselves.

The negative effects of globalization disproportionately affect smaller and developing countries, including countries in Central America. Central America, which consists of Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama, has become the source of mass migration into the United States. In recent years, there has been a particularly heavy flow of migrants seeking asylum from the Northern Triangle (NT) -- El Salvador, Guatemala, and Honduras. The worker-based United States immigration system has had difficulty handling the increase in migration, leading many migrants to forgo legal processes and attempt illegal entry. Those attempting legal entry to the US are often forced to wait in Mexico to be processed while others are sent back to the origin countries from which they fled (Cooley et al., 2021). While the impact of mass migration related to the deterioration of Central America is cited here, it is important to note that such destabilizing migrant flows are becoming increasingly normative globally.

There are many factors catalyzing mass migration globally. However, for Central American migrants specifically, the root causes of migration can be traced to state collapse caused in large part by poverty, corruption, and gang violence (Cooley et al., 2021). In order to ease the flow of migration, the US needs to help build resilient, sustainable, and livable communities in Central America.

While there are large cities and urban areas in Central America, these countries are largely filled with small rural communities. Such communities cannot compete with industrialized nations in the global economy, making localized economies where money and resources stay in the community necessary to provide resilience. By providing guidance on how to build sustainable loop economies, the US can promote regional resilience without investing large amounts of resources needed domestically.

Small communities around the world have been battling the effects of globalization for decades, and many of the lessons these towns and cities have learned can be applied to Central America. Knox and Mayer (2013) have identified four issues that need to be addressed to create long-term resilience in small communities: maintenance, progress, social development, and vision. Communities need to be able to maintain their traditions and culture while fostering a sense of community and belonging. They also need to create systems that can not only measure how much progress is being made, but also hold individuals and organizations accountable for their roles in the community. Additionally, communities need to address poverty and inequality to find ways to ensure everyone's needs are met. This includes addressing issues like infrastructure and technology. Lastly, citizens need to share the vision of their resilient communities, and community leaders need to find ways to educate and mobilize people to work toward those community goals. The key to success is the active engagement and participation of local citizens. Indicators of success include creating a sense of place, especially in regards to history and culture; promoting local products, including local foods and other goods; promoting eco-friendly behaviors and investing in environmentally friendly infrastructure; making long-term investments in the community's social, economic, and environmental infrastructure; and involving local business leaders, community groups, and governments (Knox & Mayer, 2013).

In this report, we offer approaches to combat corruption, gang violence, and poverty in Central American countries that require minimal investments by the US; highlighting five key areas toward building resilient communities: culture, security, economy, technology, and strategic partnerships. The report closes by offering a unified vision for how the US can guide Central American countries toward a more resilient future.

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LITERATURE REVIEW

In this section, we explore the current state of the region. Research shows some of the most pervasive problems in Central America to be violence, corruption, and inequality; these issues affect several different aspects of society. Here we attempt to paint a clear picture of the issues facing Central America so that needed solutions can be identified.

Violence and Culture

Violence rates in the NT are among the highest in the world despite none of the countries being at war (De Jesus & Hernandes, 2019). Gangs are rampant in the region and, in many areas, operate as a sort of de facto government (Ramirez, 2020). Many youths subsequently turn to gangs as one of the only sources of relative stability and safety. This norm, coupled with pervasive and deep-seated corruption, contributes to normalized cultural violence in which extortion, blackmail, and bribery are expected and frequently observed parts of life. The penalty for not accepting gang 'requests' is most often violence against the refuser, their friends, and/or their family. Meanwhile, firearms imported from the US further escalate the brutality and scale of the violence. This has created entire societies where the majority of citizens have little path toward social or economic mobilization and instead have to fight to simply get by.

Legal repercussions for crime are essentially nonexistent with impunity rates (>95%) among the highest in the world (Eguizábal, 2015). This, coupled with bleak economic opportunities, leads to a culturized acceptance of violence and danger that actively normalizes and perpetuates itself. In societies in which the government has shown very little ability to protect its citizens, particularly women, many citizens turn to violence themselves just to survive. Even those who don't participate in violence generally interact with violence so routinely that it has become normalized into the cultural identity of the society. Two major themes emerge when considering the cognitive effects of widespread violence: notable health impacts and lowered resilience. In this sense, health impacts refer to a missing sense of safety and peace within communities, while lowered resilience refers to a lack of tenacity and a general negative outlook toward the future.

In a region with roughly 30 million people, over 300,000 migrants flee annually (Cheatham, 2021). Despite that, less than 20% of all NT migrants are accepted at the US southern border. Indigenous peoples in the region suffer widespread discrimination within urban areas, often forcing them to migrate further. Because of such transience, the region's education rates of indigenous peoples are even lower than the general population. Among those attempting to migrate, indigenous women without financial stability make up a significantly larger portion than their population share. Indigenous peoples, women,

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and the economically disadvantaged, are subject to considerable discrimination and exploitation and are thus the most likely demographic to flee the area.

A source of optimism for the region, however, is its cultural potential. NT countries, Honduras in particular, are extremely collectivist (Hofstede Insights, 2021). While this cultural inclination has surely facilitated gang membership, it also fundamentally lends itself toward creating strong community groups. At the community level, collectivism is widely observable with large-scale civilian participation in community groups. Notably lacking, however, is extrapolating this collectivism toward a strong national identity and mitigating uncertainty avoidance, which the area also rates highly on. The region also has high power-distance ratings, meaning that the societies are both collectivist and are acceptant of hierarchical social systems.

Preference in democracy as a system of governance has been decreasing in the region for some time (Azpuru et al., 2018). In Guatemala, only about half of all people support a democratic reform and nearly 40% don't even support the abstract concept of democracy. Azpuru et al. (2018) additionally found that less than 15% of people in the country support political parties and about 25% support an executive-level coup. In an area with rampant corruption, rekindling trust in democratic systems is important.

Nearly 60% of Guatemalans do not believe there is adequate freedom in the press and more than two-thirds doubt they have freedom of speech or protection of their human rights (Azpuru et al., 2018). These beliefs are justified as the area has uniformly high scores on the Basic Liberties Deficit Index (Azpuru et al., 2018). As a result, between 30% and 40% of the population in the NT has expressed intent to emigrate in the near future. These rates are especially high among those with economic difficulties, and nearly half of all unemployed people have expressed intent to emigrate.

There is some hope for a democratic reform, however, if corruption can be mitigated and cultural collectivist tendencies appropriately harnessed. The vast majority of citizens in the area are registered to vote and communities within the area are very closely knit. Only about six percent identify with a specific political party, thus ubiquitous biases or unwavering identification with a party does not present a major issue. Institutional trust remains extremely low, with more than half of the population expressing little to no trust that their judicial systems are capable of punishing those responsible for crimes. However, institutional trust rates are much higher in rural areas, an important demographic among which to help build stable pockets of resilience.

Infrastructure and External Investments

Within Central America, holistic-transnational security concerns from the region's destabilization have been at a critical phase for the past five to six years. In 2014, the US experienced a severe surge in immigration from unaccompanied minors; another major surge was experienced throughout 2019 as numerous families fled the region (Ernst et al., 2020). In addition to this, general emigration from Central America has been steadily increasing. In July and August of 2021, over 197,000 and 195,000 immigrants were detained when attempting to cross the US-Mexico border, respectively (Rosenberg & Ulman, 2021). Both of these numbers represent close to 20-year highs. Given the scope of the exodus, the US immigration system is simply not equipped to deal with such staggering levels of immigration. Proposed solutions attempt to incentivize would-be immigrants to stay in their country of origin. In order for such solutions to work however, local citizens have to feel safe enough to believe that staying in their country is a viable option.

Central America, and the NT in particular, has been detrimentally affected by

continually high levels of gang violence for the past 40 years, based on the criminal organizations that were created from military forces after their various civil wars (Cheatham, 2021). Throughout the region, gangs such as MS-13 and Barrio 18 utilize extortion, robbery, rape, and murder as means of establishing and maintaining control (Ernst et al., 2020). Narco-traffickers heavily use these countries as part of their drug trafficking routes and manufacture narcotics in these countries as well, despite heavy US interference bolstered partially by the efforts of local governments (Ernst et al., 2020).

In 2018, Honduras had an estimated homicide rate of 40 people per 100,000 (Ernst et al., 2020). In all three NT countries-- Guatemala, Honduras, and El Salvador--, femicide rates are startlingly high. Femicide is the targeted killing of women because of their gender. In El Salvador, there are 6.8 women killed per 100,000, 5.1 for Honduras, and 2 for Guatemala (Ernst et al., 2020). Domestic violence is normalized in the NT and structurally reinforced by police and justice systems who consider domestic violence a family matter. Many judges fail to prosecute for femicide. Of the 3,000 women murdered between 2012-2019, only 258 (8.6%) cases were ever prosecuted as femicides (Zanzinger & Liu, 2021). In instances of femicide suicide -where men drive women to suicide based on targeted gender violence-, only 60 cases have been investigated, and only one case has resulted in charges (Nugent, 2019). Femicide damages family units as well as the larger societal fabric. An intact family unit has been shown to have a mitigating effect on youth joining gangs (Cardeli et al., 2019). Due to abuse, though, women frequently flee from their homes to seek refuge and asylum in the US. Unfortunately, this puts them at risk of sexual violence while on the escape route. One third of all women who migrate to the US from the NT experience sexual violence of some kind (Cooley et al., 2021). Sexual abuse writ-large is yet another endemic societal issue, with many gang

members joining to exact revenge upon, and wield power over, their abusers.

Gang membership is often introduced as a pathway at a young age, typically through other males in the family or school environment. As a consequence, adolescents are taught to express their toughness through violence (Cardeli et al., 2019).

In El Salvador, there were approximately 550,000 people affiliated with gangs, including an estimated 50,000 active gang members, out of a population of 6.266 million, or 8.7% of the population (Rahman & Vukovic, 2018). These numbers have grown since 2013 (Rahman & Vukovic, 2018). Many migrants cite extremely high levels of violence or being threatened with violence as a significant factor in emigration from the NT. In particular, families frequently leave the country when faced with an ultimatum from a gang for their kids to either join the gang or face violent consequences (Cooley et al., 2021). Other youth willingly join gangs, either to seek power and dominance, revenge against sexual abusers, or even find a social network (Cardeli et al, 2019). Many who join gangs have family members who are already within the organization. The high levels of indiscriminate violence, rape, extortion, racketeering, bribery, and coercion have created a public with extremely hostile views towards gangs (Rahman & Vukovic, 2018). This public hostility makes it very difficult for the various governments to enter open negotiations with the various gangs due to a perceived lack of justice. It is certain that when one of the NT governments has been in negotiations with gangs, public backlash is often as swift as it is vicious (Rahman & Vukovic, 2018). However, when ceasefires are created and abided by, such as the gang truce negotiated in El Salvador in 2012, the murder rate plunged by more than half (Rahman & Vukovic, 2018).

In addition to the high levels of violence from gangs, many citizens feel unsafe dealing with their own government's police forces. Due to the "mano dura" policies which dealt in mass

arrests of people with even loose affiliations to gangs (Lightizer, 2019), many innocent teens have been profiled incorrectly and subjected to harsh treatment and arrest by government police (Ernst et al., 2020). Thus, there are engendered feelings of resentment and discrimination throughout the population toward their governments. Additionally, government forces have utilized excessive force, taken bribes, and have appeared to be wholly ineffective against gangs (Ernst et al., 2020). Governments are hindered in their ability to effectively fight against the gangs, who encourage corruption, as local law enforcement is often paid directly by criminal organizations. Corruption- both within the police and the government as a whole- amplifies the lack of trust that the people have in the government; endangering the viability of social contracts with the state. The graft, bribery, and unfavorable economic policies do much to incentivize emigration, as there are few jobs available, earning little money and zero upward economic mobility, while government officials grow wealthy at their expense.

The result is a vicious feedback loop where a poor economy, caused at least in part by corrupt officials, forces low-skill migrants out of the country while extreme gang-violence forces numerous others to flee as well. These families are targeted by cartels and other gangs on the migration route (Cooley et al., 2021), presenting a very real risk of radicalizing survivors to join gangs in order to enact vengeance (Cardeli et al., 2019). This encourages gang violence to continue, and the government reacts by using military force against the gangs. Rising conflict increases the costs for both the government and gangs, forcing higher taxes and heavier extortion. This further burdens individuals' ability to pay, making it more likely they will encounter violence.

With these issues in mind, governments have attempted some structural corrections. El Salvador fired 40% of its entire police force and began increased training for the remainder of its police force (Cheatham, 2021). All three NT governments have initiated actions intended to curb corruption; Guatemala led the way by creating La Comisión Internacional Contra Impunidad Guatemala (CICIG) in 2006, with the help of the United Nations (Schnieder, 2019). Later, Honduras created the Support Commission Against Corruption and Impunity in Honduras (MACCIH) in 2016 with the support of the Organization of American States (OAS) (Ernst et al., 2020). It resulted in over 360 politicians, including the standing president, being implicated in embezzlement (Ernst et al., 2020). El Salvador initially did not establish a commission, but its attorney general, Doulgas Meléndez, led an aggressive anti-corruption campaign that resulted in over 300 convictions (Ernst et al., 2020). In El Salvador, La Comisión Internacional Contra Impunidad El Salvador (CICIES) was established in 2019 with the backing of the OAS (Ernst et al., 2020). This was after Meléndez was removed in 2018 when a successful tenure resulted in numerous high-level prosecutions. Both Guatemala and Honduras saw a number of high-profile corruption cases successfully prosecuted and the defendants convicted, including one former Honduran president, while Meléndez convicted three former Salvadoran presidents (Ernst et al., 2020).

However, these successful measures were notably rolled back. As noted, El Salvador's Meléndez was removed in 2018; it has been suggested that he was too effective at his job, and many prosecutors felt threatened by the numerous corruption cases (Ernst et al., 2020). In 2019, Guatemalan President Jimmy Morales ended the CICIG mandate despite heavy pressure from the US ambassador and his own public (Ernst et al., 2020). The simple reality is that many leaders in Central America benefit more personally from maintaining the status quo than improving the economy and are frequently a major facilitator of corruption. At least four NT presidents and other close relatives have been implicated or convicted of narco-crimes or corruption.

Beyond internal structural issues causing an erosion of trust in national government, Chinese interference in the region has also increased. Per Xi Jinping's Belt and Road Initiative (BRI), the Chinese Communist Party (CCP) has proven itself more than willing to give funds to NT governments to help build infrastructure (Ernst et al., 2020). The CCP offers these grants and loans with zero strings attached (Ernst et al., 2020), an extremely attractive political and economic resource for these countries given the US frequently attaches a number of requirements when providing foreign aid to the NT. These requirements often incorporate anti-corruption and human rights advocacy, something NT governments are not incentivized to address for the reasons discussed above.

If the CCP is able to supplant the US as the primary provider of foreign aid to the NT, in violation of the Monroe Doctrine, the implications and down-stream effects could be immense. Central American countries could be encouraged to continue poor governance practices, while incurring the risk of debt trap as a result of BRI loans. It is likely that the Chinese would encourage continued authoritarianism at the expense of the fragile democracies regionally. There is also concern that the CCP could attempt to sell security and population monitoring technology to these governments to enhance authoritarian rule (Mozur & Chan, 2019). The possibility of NT governments utilizing these to control gang violence at the expense of human rights and freedom is a troubling prospect. Aside from President Bukele in El Salvador running riot over the government restrictions, other leaders in Central America, like Daniel Ortega in Nicaragua, already utilize police brutality and military force to crush dissent, arrest the opposition, and target journalists and doctors who question government narratives and participate in or cover protests ("World Report", 2021). CCP technology would likely allow further violations to propagate. Another concern is that NT governments may utilize this

technology against indigenous populations, as the Chinese already use it to monitor and target minorities such as the Uyghurs (Rollet, 2019) and already export it to the region (Rollet, 2018).

The CCP has little incentive to force NT governments to change their social structure, so it is not likely that corruption and graft issues would be solved by BRI investments, leaving lower income families impoverished and continued economic migration to the US. The BRI would provide few jobs to the NT due to frequent outsourcing to Chinese companies. Such outsourcing occurs frequently in Africa, and it would be highly unusual if the infrastructure projects were locally sourced. Furthermore, the unsolved issue of corruption may amplify perceptions of illegitimate governance within the local population. If authoritarianism, corruption, and violence remain unchecked, there is a distinct possibility that the violence could escalate or even lead back into civil wars as citizens attempt to reform their country amid destabilizing conditions.

Elite Serving and Shadow Economies

The weak economic state in Central America is a byproduct of regional security and stability issues combined with a lack of opportunity (Savoy, 2021). These issues translate into significant levels of economic insecurity and inequality. Regional instability has hindered recovery and created further barriers that need to be overcome to create economic stability (Savoy, 2021). Additionally, the region's combination of strong elites and weak institutions perpetuates economic instability. Strong economies require strong and inclusive political institutions with agreed upon divisions of power, but these institutions are sorely lacking in Central America (Bull, 2014). Instead, corrupt and inefficient governments which largely exclude indigenous peoples are common (Global Americans, 2017). "When

institutions place few constraints on the exercise of power by the elite, resources are extracted from society rather than employed productively" (Bull, 2014, p. 118). While many researchers agree that wealth and political inequality between elites and regular citizens feeds into the weak economies and institutions in the region, it is difficult to study elites, their networks, and what resources they command because they have the power to hinder people's research (Bull, 2014). Nevertheless, it is clear that the unequal distribution of wealth, resources, and political power needs to be addressed to build stronger economies in the region.

If there were a metric to contrast the complexity of a country's economic exports that is also useful to economists on a variety of levels, it would be the Economic Complexity Index scores, or ECI. For the economic analysis of regions and their economies, ECI is useful in multiple regards. First, ECI has a strong correlation with per-capita Gross Domestic Product, or GDP, a measure used by economists for gauging prosperity of nations where more developed and industrialized countries tend to have higher per capita GDPs. Second, higher ECI countries tend to be richer and more technologically sophisticated, while countries with lower scores tend to be poorer and less technologically sophisticated (Mealy et al., 2019).

> "*The complexity of a country's exports is found to highly predict current income levels, or where complexity exceeds expectations for a country's income level, the country is predicted to experience more rapid growth in the future. ECI therefore provides a useful measure of economic development*" (Center for, n.d., para. 1).

The 2019 OEC World Economic data shows the main product exports of El Salvador, Guatemala, and Honduras to consist of foodstuffs, vegetable products, and textiles as main exports (The Observatory, n.d.). Their 2019 ECI scores consist of .017, -.24 and -.48, respectively (The Observatory, n.d.). This reveals that the economy is not only narrowly

focused, but it is more prone to shocks in comparison to complex economies that have greater export diversification. Thus, low ECI countries have trade volatility (Breitenbach, 2021). However, this is not to say that a low ECI score is always problematic; there are a few outliers that happen to have well-off economies but are also large exporters of low complexity goods. As an example, Australia ranks below El Salvador with a score of -.19 in 2019 due to massive amounts of raw material exports (The Observatory, n.d). Nonetheless, ECI helps depict a reasonable sense of the resilience and performance in the majority of cases and clearly highlights areas for improvement in the case of Central America.

In addition to a lack of export market diversification, which makes economies more vulnerable to shocks, and the unhealthy combination of strong elites and weak institutions, the economies of Central America also have to compete with shadow economies.

Societal Functions of the Shadow Economy

A 2016 Latinobarometro Survey asked if individuals were more concerned about crime and corruption rather than employment and economic challenges (Plotnikov, 2020). Most Salvadorans, Guatemalans, and Hondurans held a greater concern for crime and corruption as opposed to economic challenges. While the indirect costs of crime are nearly incalculable to society, some of the direct costs in relation to damages and expenditures are more measurable. According to estimates

> "…*the percentage of crime-related public spending in the region is almost twice the average for developed countries, demonstrating the priority that governments assign to providing citizen security in Latin America and the Caribbean*" (Jaitman et al., 2017).

Regarding the function of crime within society, there are essentially two forms of economies: a legitimate *formal economy,* which factors into GDP and is measured using wages,

unemployment, etc…; and a *shadow economy*, which is the unreported "off-the-books" way individuals earn income (Rocque et al., 2019). In relation to crime and as asserted by the works of Becker (1968), the universal assumption within economics is that individuals are rational beings driven by needs that they fulfill. A criminal act is preferable if the expected benefits outweigh the expected costs, including costs of punishment and opportunity costs of foregoing the legal employment alternatives (Becker, 1968). A shadow economy therefore has a function in society to provide sufficient resources when the traditional formal economy fails to address individual needs (Rocque et al, 2019). Notable in Central America is the concept of a failing economy. As droves of people have trekked north in search of economic opportunity, remittances sent back home now account for 20% of El Salvador's and Honduras' GDPs and 14% of Guatemala's GDP (Cova, 2020). Meanwhile, in the early 2000s, shadow economies were estimated to account for 38.7% of developing countries' GDPs and 40.1% of transitioning countries' GDPs (Schneider, 2006).

While these illicit economies do not officially influence a country's GDP, nor are they counted in a country's ECI, shadow economies can have direct effects on formal economies. For example, tourism as an industry encompasses many different businesses, and it has the potential to make big impacts on countries' economies. Many countries around the world benefit from booming tourism industries, and many others hope to build theirs by improving their *destination competitiveness*. Destination competitiveness refers to a country's ability to attract and satisfy potential tourists, and it is influenced by how a country's various enterprises perform (Kubickova & Smith, 2019). In the developing countries of Central America, destination competitiveness can be directly influenced by shadow economies and governmental corruption.

Within the tourism industry, the hotel industry has the biggest influence on how

quickly tourism grows (Kubickova & Smith, 2019). Hotel performance depends on economic growth and stability in the region as well as development, and all these factors are affected by governmental corruption in Central American countries. Kubickova and Smith (2019) studied the relationship between destination competitiveness, hotel performance, and national corruption and found that these factors are all positively correlated. As national corruption increases, so does a country's destination competitiveness and hotel performance. Their findings go against the commonly held belief that corruption deters tourism development. One possible explanation for this is that businesses seeking to develop hotels can rely on bribing corrupt government officials to streamline a process that would otherwise be lengthy and difficult (Kubickova & Smith, 2019). In general, governments in developing countries are inefficient, which forces businesses to rely on corruption to navigate the bureaucratic process more easily. Research shows that shadow economies tend to increase corruption within low income countries like those of Central America (Schneider, 2006).

Despite the negative connotations which might normally be associated with shadow economies, they are not always rejected by society. Criminal organizations and shadow economies exist all over the world, but narcotics traffickers specifically are especially prevalent in Central America. These traffickers normally find themselves at odds with governments and law enforcement but are not always unwelcomed in communities. This is especially true in rural and marginalized communities (Blume, 2021). In a study looking at rural coastal communities in Costa Rica, Nicaragua, and Honduras, Blume (2021) found that there was significant community support for illicit economies because the traffickers were able to help the communities more than the states. Blume (2021) additionally found that traffickers who were from the community limited their violence within the community and invested economically in the community in ways

encouraging of community support. When community support for the traffickers waned, traffickers took steps to limit non-trafficking related crimes to avoid unwanted attention from the government. Blume (2021) also found that counter-narcotics policies are counter-productive in these areas and can actually increase community support for traffickers.

> "*It should be unsurprising that certain marginalized communities support drug-traffickers who offer tangible benefits instead of counter-narcotics forces who seem to increase conflict and suppress economic activity without providing viable alternatives*" (Blume, 2021, p.1).

Therefore, to reduce narco-related crime in the region, governments need to invest in more than just law enforcement.

What Has Been Done?

In general, the problems faced in Central America will require thoughtful, long-term commitments to help resolve the underlying issues (Runde et al., 2021). Fortunately, some levels of industrial and service based economic development have proven to be successful in the region. According to a 2019 McKinsey Company report, there were multiple case studies of successful developments in the Latin American region (Cadena, 2019). Costa Rica serves as an example of success where it has developed a fast-growing medical device manufacturing sector. Nicaragua is capitalizing on manufacturing and human capital through competitive labor costs and attractive legal frameworks. Honduras is a leading exporter of apparels to the US. What all these examples share in success is the development of certain regional sectors, realizing their impact, and boosting them to incite foreign investment, trade, and education (Cadena, 2019). It is asserted in the report that capitalizing on these regional successes could boost the non-commodity exports by $140 billion by 2030 in

Latin America and the Caribbean regions (Cadena, 2019).

Another success story comes from Guatemala. Guatemala City has a large low-income population, and the poorest area in the city is located right next to the landfill. The impoverished families in this area often scavenge the landfill for discarded food, household goods, or other items they might redeem for some value, and many are not employed for wages (Kumble, 2019). To address the immense poverty in this area and build a circular economy, Kumble (2019) worked with graduate students at the University of Massachusetts-Amherst Department of Landscape Architecture and Regional Planning to create a municipal composting facility that employed local youth to compost the green waste from the landfill for use in parks, planting beds, and other areas around the city. By working with the already established and locally based organization Vida Joven, the students successfully opened AbonOrganíCo. The non-profit company employed only secondary schoolers on a part-time basis, helping to reduce the levels of poverty experienced by these students while also promoting education. The project was successful and sustainable, but one of its more remarkable aspects was that it only took eight graduate students three months to complete the project with no external funding (Kumble, 2019). The project's success highlights the viability of projects which work with local institutions to teach people technical skills that can help them find employment.

Sanitation and Water

Along with the issues mentioned above, several countries in Central America are in desperate need of basic necessities - sanitation and clean water as a fundamental human right. The United States Environmental Protection Agency (or EPA) stated that clean water is crucial to build and maintain a healthy community. Economies are also heavily dependent on clean water and sanitation,

especially in Central America, where tourism and agriculture are two of the main industries. Climate change, natural disasters, and pollution have always had serious repercussions to the water systems in the region (Prashad, 2020). The World Bank (2021) stated that consuming unclean water can result in diseases spreading; poor sanitation and hygiene are responsible for a large portion of the sickness and death in developing countries. Thus, improvements for sustainable water and sanitation technology are important for Central America to thrive.

When a hurricane struck Central America in 1988, the instrafructure was damaged and it left many Central American countries without water and sanitation. Then, the wash, sanitation and hygiene (WASH) intervention was initiated by the American Red Cross (ARC) and US Centers for Disease Control and Prevention (CDC). The ARC's goal was to have a sustainable water system in order to provide the population with long term sanitation aid (Sabogal, 2014). Simultaneously, it was also trying to prevent diseases from transmitting (Yates, 2017). The WASH project results were evaluated, and it was found that although the population did benefit from the intervention, the infrastructure had maintenance problems after just four years, whereas ARC predicted the system to last for about 20 years (Sabogal, 2014). Currently, the International Red Cross (IRC) is implementing WASH in Honduras and is hoping to provide services to all 17 municipalities by 2022.

Pollution became an additional problem after countries opened for resource extraction by foreign mining investments, subsequently causing water sources of the rural communities to be contaminated (Basu & Hu, 2010). In Guatemala, the geological nature of the country also challenges the water quality, with a high level of carcinogenic content in groundwaters. Seventy-six percent of the total population in Guatemala actually has great access to improved drinking water sources; it is those in rural areas who suffer (Marcillo, 2020).

Private interests are commonly prioritized over the well-being and basic rights of the people in the Central America region. Industries that heavily produce toxic waste continue to operate under the influence of politics. In 2016, 90% of the surface water in El Salvador does not achieve the basic standard to be safely consumed (Umanzor, 2016). Salvadorans are constantly fighting for simple access to clean and drinkable water. The privatization of water to combat the pollution has had some positive impacts, yet private businesses have involved themselves in politics by lobbying politicians to make sure their industries do not get shut down (EcoViva, 2019).

There are several projects and foreign aid to help sanitation, but often these technologies are too expensive to maintain. Therefore, infrastructure solutions must be low cost for the locals to maintain without help from others. Well known organizations like the World Bank, CDC, and ARC have been helping these rural communities get better water supplies for years, but there are still millions of people who do not have access to drinkable water (World Bank, 2017). Community understanding, involvement, and planning of their own sanitation technology is crucial for a long-term planning of any sort to succeed in the region (Mara, 2003).

Strategic Partnerships

Strategic partnerships are created when two or more countries, groups, or individuals share common values and goals. Those that Central America has partnered with provide aid that focuses on poverty, reducing gang violence, ensuring food security, creating economic opportunities, fostering educational opportunities, combating climate change, and much more. Chahim and Prakash (2014) stated that Central American infrastructure operations largely rely on foreign funds to continue their work.

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International Partnerships

Countries located in Central America have joined international partnerships that they believe will prove beneficial for their countries. These partnerships can stimulate the economy, reduce gang violence and corruption, and/or provide educational opportunities.

United States-Central America Partnerships

The US is currently the main country that provides aid to Central America; the influence of the US reaches the economic, political, and cultural spheres. Due to the region's proximity to the US, the majority of the alliances focus on reducing immigration. In 2014, the Obama Administration introduced the Alliance for Prosperity Plan in the Northern Triangle of Central America (A4P). The plan was a five-year joint regional plan between the US, Guatemala, Honduras, and El Salvador. The plan was intended to not only be a collaboration between the US and the NT, but it also include regional organizations as well. A4P's strategy was aimed to reduce violence, enhance the economy, and fight anticorruption in the Northern Triangle (Hernandez, 2016). In 2016, the US Congress approved $750 million for A4P (Fact Sheet, 2015).

However, according to Iesue (2016), the plan has been under scrutiny for misuse of funds and human rights violations. A portion of the funds allocated by the US Congress were found to have gone to security and not development. Along with misuse of funds, the plan is labeled as contributing to the instability in the NT. Runde et al. (2021) stated that it is difficult to measure the success, or failure, of A4P because the funds allocated to the plan did not reach the region until 2017. A4P was then halted by the Trump Administration in 2019.

The Trump Administration introduced the US Strategy for Central America (USSCA). The strategy was to use foreign aid to reduce asylum seekers arriving at the US-Mexican border. In addition, the strategy wanted to create anti-corruption initiatives, reform security, and stimulate the economy. In 2017, the administration reduced foreign aid to Central America by 75% because they did not justify aid to be effective in curtailing immigrants (Runde et al., 2021). Foreign aid to the region continued to diminish from the $750 million in 2016 to $377 million in 2021 (Runde et al., 2021).

China-Central America Partnerships

China has had a particular interest in partnerships with Latin American countries for their mineral, agricultural, and energy sectors (Ferchen, 2011). The relationship between the two began increasing in the early 2000s and has continued to grow. In 2019, China reportedly invested $2 billion in Central America to promote infrastructure projects (Runde et al., 2021). While the two may be separated by distance, economic opportunity has brought them closer.

One strategic partnership between the two is Central America's budding economy initiative. China has taken a patient capital approach in investing in Central America; this route allows for Chinese firms to profit over an extended amount of time (Kaplan, 2016). China sees the trade partnerships with Central American countries as a means to diversify its trade partners; instead of relying on advanced economies, the countries in Central America offer an alternative (Yu, 2014).

The promise of a growing economy is not the only lure China sees in Central America. The abundance of natural resources found in the area is enough of an enticement for China to continue its investments. Since its rapid growth, China has seen a depletion in its natural resources (Ferchen, 2011). If China wants to stay as an economic power, importing natural resources will have to be involved. Scholars foresee this factor as a large pull for China to invest in Central America (Petras & Veltmeyer, 2014).

Non-governmental Organizations

Not all partnerships have to be on an international scale. Countries often have non-governmental organizations (NGOs) that provide aid on a national level. NGOs are seen as a popular means to deliver aid due to their lack of political and economic interests (McCoskey, 2009; Petrikova, 2015). Petrikova (2015) found that while NGOs don't have a political interest, they often present aid that aligns with their donors' ideology. Not only do NGOs have the opportunity to see what is happening at ground level, but they are also seated at the table with their donors.

Petrikova (2015) analyzed how NGOs communicated with one another when working toward similar goals. The researcher found there was a lack of commination between the NGOs even though they were all providing aid to stop child labor in El Salvador. However, in Ecuador, the National Association of NGOs of Guyayaquil communicates with multiple other organizations to spread any information learned. Appe (2016) found that there are NGO networks that span national borders. The ability to work together and share information is critical when working towards a similar goal such as stopping child labor or preventing youths from entering gangs.

During the 2014 influx of unaccompanied minors to the southern US border, NGO groups worked in Guatemala to help mitigate the number of youths leaving (Nicholas et al., 2017). The NGOs provided support in the form of services such as education for the children who were being fed misinformation about the Deferred Action for Childhood Arrivals (DACA). The NGO staff members who were interviewed expressed the need for education initiatives. These initiatives are seen as a primary route to reduce the number of young adults emigrating to the United States.

Grassroot Initiatives

Unlike the other partnerships, grassroot organizations focus on change from the bottom up on a communal level. These organizations can be made up of groups of civilians or an entire community. Grassroot organizations address problems at the local level, for they are immersed in the community (Bettencourt, n.d.). These organizations are important when thinking of strategic partnerships because they have the knowledge of the problems and experience of what innovations would work in their community. Unlike international partnerships, grassroot innovations are small-scale but highly sustainable as the projects typically center around water sanitation, energy projects, and local agriculture (Smith et al., 2014; Phelps, 2013).

Honduras has grassroot community schools whose mission is to help educate those who reside in rural communities. As a grassroot initiative, they have a special link to their community and are able to see community needs and better evaluate solutions that would be successful (Lee & Smith, 1995). A portion of the curriculum focuses on community problem solving to teach real-world learning. Not only do these schools provide the skill set to problem solve, Stockard and Mayberry (1992) found that students in grassroot initiative schools were more likely to behave better and participate in class. These community schools provide the opportunity for rural areas to educate their youth, and improve the community in the process.

FUTURE-HUNTING INTERVENTIONS

We have identified many of the problems facing Central America. Now, we suggest solutions to these problems applying the TRADOC future-hunting premise. The goal being to glean from literature forecastable outcomes based on hypothetical interventions.

Based on our analysis of the region, interventions need to address gang violence, violence against women, governmental corruption, police reform, illegal-shadow economies, as well as water and sanitation infrastructure. Per Knox and Mayer's (2013) suggestions, the proposed interventions take into account the existing cultural values in the region, include ways to measure progress, and work to ensure everyone's basic needs are met. Further, the proposed interventions will not require large investments on the part of the United States and are meant to be flexible. The overall aim for the region should be creating pockets of sustainability and resilience which will in turn help reduce destabilization in the region. The interventions offered seek to empower local communities to combat ongoing problems while building resilient economies. Successfully resolving the litany of regional issues will take time and will require both community members and local governments to buy into the process (Knox & Mayer, 2013). Change will not happen overnight, but over time, the listed interventions can contribute to a more prosperous Central America.

Violence and Cultural Interventions

When considering what measures may be effective in improving Central American cultural conditions, one must view any attempted action through the lens of the highly collectivist societies they would be implemented into (Hofstede, 1980). As such, it is paramount to tailor a plan that emphasizes the collective good and the strong communal attitudes present within the culture. This, while generally not being assumed as an endpoint because of the typical increase in individualism as economic opportunities improve (Nickerson, 2021), is a massively helpful condition through which change can likely be aided.

One of the most obvious interventions needed in Central America is the promotion of non-gang community groups and increased engagement with formalized, purpose-driven groups. As one of the most collectivist areas in the world (Hofstede Insights, 2021), NT countries have a unique advantage in that the collective good and well-being of the community are already widely held values. In collectivist societies, the good of the individual is weighed as less important than the good of the whole (Markus & Kitayama, 1991). Additionally, bonds to in-groups and communities are much stronger than in individualistic societies (Triandis, 1994). This means that personal satisfaction and relative

happiness come from improving the community and carrying out social responsibilities. In this sense, members of collectivist societies are more likely to engage in projects that improve the community around them even without obvious direct personal benefits attached.

This collectivism can be utilized by providing basic funding for raw materials and oversight of community projects to improve the local area. Little in the way of compensation would likely be needed in order to promote community volunteering, and efforts could potentially be done in conjunction with schools, which has proven successful in aforementioned ventures. Such cost-effective methods of community improvement utilize the communities themselves as a means of developing improvements and leveraging existing community collectivism.

As mentioned above, these efforts could work in conjunction with public school systems to teach useful skills while framing the efforts as hands-on learning. Thus, the means of learning becomes a vehicle toward the development of practical skills and tradecraft, rather than purely abstract or intellectualized content. Such approaches to hands-on learning have successful models in the US, such as the Waldorf educational programs, who use practical hands-on development to teach critical thinking and bolster cognitive flexibility. Such programs should not be limited to youth, however. Many adults in the region fail to finish primary schooling and even fewer consider the prospect of university. As a result, there is widespread need for trade-based schooling. Collaborating with community-based non-profits to develop trade-based learning for specific regions could prove extremely valuable and help diversify both skillsets and opportunities.

Keeping youth out of gangs represents one of the biggest challenges within the area. Promoting engagement with organizations in schools and the community are shown to be the most sensible and cost-effective solution (Berdychevsky et al., 2016). Berdychevskey et

al. (2016) found a large proportion of gang related recruitment came out of 'boredom' and during 'leisure time.' This suggests that a highly engaged youth system is much less likely to result in youth gang initiation and, perhaps, less gang violence and crime within the community, especially when considering the collectivist nature of the region.

As an example, youth sports leagues offer multiple opportunities for engagement, collective success, and are relatively low-cost in nature. Soccer and basketball are both widely popular in the region and are both low maintenance, low infrastructure sports; little more is required beyond a playing surface, basic equipment, and refereeing fees. In return, communities and schools would receive an outlet in which kids can take out aggression in a productive way and expend excess energy. This would also provide an engaging activity which would give youth something to do in their free time; promoting life lessons taught by sports, offering ambition toward professionalism, and bonding the regional youth in a shared narrative of sport.

While sports can be a great opportunity for promoting 'productive leisure,' other initiatives can be taken as well to keep youth engaged such as after school services in schools and places of worship. Nearly half of the population in the NT identifies as Catholic (Marshall, 2019). As one of the largest religions in the world, joint efforts between governments and Catholic officials to curb gang initiations by offering after-school services for children could be a productive, low-cost endeavor.

Additionally, increasing institutional trust in the area is a major key to improving the lives of citizens. In an area ravaged by police corruption, government corruption, and economic corruption writ-large, convincing citizens that the system around them is not beyond reform is of paramount importance. Encouraging citizens to engage with the system of government is crucial. Promoting local engagement in governance in coordination with non-profits focused on teaching democratic

principles should be woven into other planned interventions; as community members gain voice and experience on small scale intervention programs, eventually a robust community of leadership can emerge.

Economic Interventions

A variety of factors play into the economic instability of Central America. Among them are wealth inequality, which is difficult to study but thought to be partially fueled by corruption (Bull, 2014); slow bureaucratic legal processes caused by weak institutions (Kubickova & Smith, 2019); and shadow economies run by gangs (Blume, 2021). Additionally, the NT has major problems collecting taxes and thus providing services (COHA, 2011). In order to address these problems, corruption must be mitigated and engagement with the formal economy must be promoted. Viable interventions will require more than just economic incentives and outside investments; to truly build a better economy in Central America requires political and social reform in addition to a more skilled and educated workforce and better infrastructure. The following interventions, over time, will work to make those a reality in the region.

One of the biggest issues facing the region is corruption. There are many ways corruption can be addressed; one simple way is to reduce the perceived need for it. As previously noted, hotel and other types of developers often rely on bribing corrupt officials to streamline lengthy and difficult bureaucratic processes (Kubickova & Smith, 2019). Part of what makes these processes so cumbersome are the administrative burdens involved.

> "*Administrative burdens refer to regulatory costs in the form of asking for permits, filling out forms, and reporting and notification requirements for the government*" (Organisation, 2006, p. 9).

By simplifying these processes and reducing administrative burdens, Central American governments can lessen the support for corruption from potential investors and developers. That is not to say governments should do away with proper procedures, but rather make them more efficient. The United States can help by encouraging governments to examine their existing rules and regulations relating to businesses and development, and send administrative specialists to advise each government as they decide how best to reform burdensome regulations (Organisation, 2006). Additionally, as new policies are introduced, officials need to pay special attention to controlling how burdensome new regulations are. Governments can measure how successful their reforms are by calculating the average time it takes to complete and process all the paperwork involved with opening new businesses and developments.

Next, Central American countries need to implement police reforms. Police reform is important for myriad reasons. In addition to battling corruption within police departments and helping to address security issues in the region, police reform can also help to reduce people's reliance on shadow economies. A large part of shadow economies in Central America are drug cartels run by gangs. There have been many efforts made by US and local law enforcement to stop these trafficking operations, but it is difficult to combat drug trafficking when there is community support for the traffickers themselves. Traffickers earn this community support by investing in the communities they operate in and taking it upon themselves to reduce non-trafficking related crimes in the area (Blume, 2021). Proper police reform, which reduces corruption without focusing solely on trafficking crimes, can re-instill trust in law enforcement in the region; in turn, this can de-incentivize communities from relying on gangs for protection. The US can aid in police reform by advising Central American countries as they work on new policies to govern their police. Additionally, it is important to build into these reforms a third-party oversight entity to which law enforcement would be accountable.

Police reform alone is not enough to eliminate support for gangs and traffickers in small communities. People turn to shadow economies when they feel they have no better options to make a living (Becker, 1968). Without providing alternative ways to earn income, no amount of policing will reduce community support for illicit economies (Blume, 2021). One method of promoting engagement with the formal economy is to increase incentives to engage with the tax system by offering tax credits which also promote governmental goals. A child tax credit, not unlike the one adopted within the US recently, could promote stabilization within lower income families. Other instances could be tax credits for entrepreneurs and businesses attempting to gain a foothold and further ones for those that develop positive communal outcomes such as employment opportunities. While taxing less to raise tax revenue may seem counterintuitive, in an area where paying taxes is a relative rarity (COHA, 2011), any amount of engagement with the formal economy and tax system is a welcome solution.

Another way to promote economic reform and engagement with the formal economy is to promote education. Education is important for a variety of reasons, including "*building human capital, breaking the cycle of poverty, promoting economic productivity, and eliminating social disparities and inequities*" (United Nations, n.d.). Education is especially important for countries seeking to build workforces with skilled laborers. In Latin America, 12 million school-aged children and teens are not in school, with the vast majority of them missing from upper secondary school systems (United Nations, n.d.), and a majority of immigrants from the NT report having no education past primary school, if any formal education at all (Gove, 2019). There is a clear need to promote education in Central America, and this can be accomplished in many ways.

One of the best ways to promote education is through free lunch programs at schools (Rehorn, 2017). Malnourished children struggle more in the classrooms, and by providing free meals at schools, Central American governments can combat food insecurity and encourage regular attendance to schools. To organize and run such programs, governments can work with local non-profit organizations and apply for funding from international organizations, such as the Inter-American Foundation. The US could aid with grant writing processes and providing insights on successful school lunch programs based on the existing ones in the US. The success of these programs can be measured by looking at enrollment rates, attendance records, and graduation rates. Long-term skill development in classrooms, which work toward sustainable feedback loops like in the Waldorf systems mentioned earlier, that teach students while also growing the food and resources required to maintain the programs themselves should be the goal. Additionally, tax credits for families that manage to keep their children attending schools could help to disincentivize gang initiation and subsequently limit gang violence.

School attendance, especially at the secondary level, might further be promoted by the creation of programs intended to teach trade skills to teens and young adults as well as the creation of programs intended to help them find jobs within those trades. These could include apprenticeship-like or internship-like opportunities that, even if they do not immediately pay dividends, can provide a pathway for future entrepreneurship. Following Kumble's (2019) example, these programs could be created in coordination with local faith-based or non-profit organizations and do not necessarily have to be part of the school system itself; though attendance for school-age participants should be mandatory. Such trade schools with internship/apprenticeship opportunities should also be opened to those who have already departed the school system as a means of reengaging them with the formal economy. An additional benefit to these types of programs is that they would create a workforce of skilled laborers who might eventually be

employed to work on infrastructure projects. The success of such programs could be measured by looking at the unemployment rates of the targeted age group as well as the number of taxpayers in the age group.

Promoting economic prosperity in Central America is a long-term process and doing so will require both political and social reform. Economic solutions need to include an emphasis on fighting corruption and engaging with the formal economy, and that can be accomplished in many different ways. Many of the proposed solutions can benefit other areas of society as well, such as promoting education, but they all require time, strategic planning, and commitment to be successful.

Security Interventions

Overall, there are three main issues that underlie security issues in Central America: irregular migration that is caused by a variety of economic, gubernatorial, and security issues (Cheatham, 2021; Cooley et al., 2021); high levels of violence stemming from a history of violence and criminality in the region (Ernst et al., 2020); and government corruption that prevents issues from being properly addressed (Ernst et al., 2020). As noted previously, the US provides significant sums of foreign aid to Central America --President Biden allocated $224 million to the NT alone (Price, 2021), with $430 million being provided to Central America overall (FA.gov, 2021).

To halt the massive migratory numbers, potential emigrants will need an incentive to stay. Thus, NT governments need to address a multitude of issues, most importantly economic opportunity, social stability, corruption within their own government, and gang violence.

Social stability is often overlooked as a security concern but has potent soft power, particularly in combating gang violence. As noted previously, femicide is an issue in all three NT countries, and according to Cardeli (2019), an intact family not affiliated with gangs does a lot to discourage potential youths from joining

gangs. The US has encouraged anti-impunity action, and El Salvador passed a "femicide suicide" law in 2011 criminalizing the act of driving a woman to suicide because of her gender. Additionally, NGOs and other donors have set up organizations and assistance centers to help women who are being victimized (Ernst et al., 2020).

NT governments pay close attention to the posturing the US government takes on issues. By taking a stronger, more vocal anti-femicide stance, both at home and through the US ambassadors in the NT, regional governments will take the issue more seriously. This simple step on behalf of the US is virtually free from cost. Another intervention toward social stability is continual reform of the justice system; using journalists, NGOs, and others in a watchdog function to ensure that the laws are being enforced. Active officials and attorneys general should be appointed to achieve results like those of Attorney General Meléndez from 2016-18. However, these individuals will require protection from those desiring to maintain the status-quo, even after leaving their posts. Judges should also be insulated from the political process as much as possible to allow them to remain objective.

Further legislation should be passed protecting women from domestic violence and femicide, and Central America countries should repeal laws that prosecute women for homicide based on miscarriages or abortions. Education on domestic violence and approaches for involved law enforcement should be developed as training curriculums. Having aggressive attorneys general or NGOs oversight in a watchdog function could ensure compliance.

Sexual abuse is also a problem within NT society. Effective intervention programs could be modeled on the State Department's International Narcotics Law Enforcement Affairs program. It allows judges and prosecutors to ask the victim questions that psychologists then format to be mindful of the victim's trauma. So far, it has resulted in

numerous prosecution and convictions of sex offenders (Ernst et al., 2020).

Central America needs to lower violence holistically, de-normalize violence in families, and lower femicide. All of these would lower migration to the US while simultaneously strengthening NT society.

Community-based policing has been explored within the US as a counter-gang policy to some success; it could be attempted in the NT as well. Such programs go a long way toward restoring legitimacy in the government (Bertetto, 2013). Such programs require constant positive interaction between citizens and law enforcement in order to build up trust. This social capital translates to citizens reporting more crimes. Further, there needs to be a focus on specific counter-gang tactics on a parallel track, tailored to the particular strategies that the gangs in the area employ (Bertetto, 2013). Such policing should be based on population-centric counterinsurgency strategies. Community based-policing also presents a possible solution to the rising crime and murder levels.

Current US assistance to the NT includes counter-gang and counter-narcotics efforts from the State Department's International Narcotics and Law Enforcement Affairs (INL) and United States Agency for International Development (USAID) (Ernst et al., 2020). For 2021, the Biden Administration pledged El Salvador $66 million, Guatemala $87 million, and Honduras $71 million (Price, 2021). One of the difficulties encountered evaluating the effectiveness of US-backed programs is that there is often insufficient data, or a lack of comprehensive indicators to understand if the program is working. For example, many organizations monitor violence in the NT by examining murder rates. However, a number of crimes remain overlooked, including extortion, rape, and domestic violence. Extortion, in particular, has been cited numerous times as an oft-overlooked high-impact crime.

Another high-impact crime that is often overlooked is corruption. This has been a historical issue with all three NT countries. Actions have been taken to try and lower corruption in the past. However, actors within the government consistently shut down effective anti-corruption programs or permit their creation with so many restrictions the anti-corruption commissions are often toothless. This issue can be addressed in a similar manner to that of social stability-- mainly, enforcement via the judicial system. In particular, laws should be passed that require politicians to register their assets. A Salvadorian law passed in 2012 requiring such has aided significantly in discovering and prosecuting corruption (Ernst et al., 2020). This would be greatly aided by allowing aggressive prosecutors and attorneys to rise within their organizations. Several enforcements are required however.

First, attorneys and judges would likely need physical security for themselves and their families, as entrenched corrupt actors will not hesitate to use threats of violence to deter investigation and prosecution. Second, there is a need to establish measures and consequences to prevent politicians from obstructing corruption panels. As Guatemalan President Jimmy Morales demonstrated when the CICIG began investigating him, certain government officials can still obstruct established commissions (Schneider, 2019). A possible solution is to encourage groups like the CICIG to work closely with international counterparts and possibly merge them; making dissolving such a commission much more costly regarding international political and social capital. Third, there is a need to thoroughly vet officials before placing them on such a commission.

As NT governments pay attention to US rhetoric and stances, a heavier emphasis on anti-corruption measures from US officials would help make the case for such commissions. While US ambassadors wield a lot of soft power in the region, only Guatemala has a sitting ambassador from the US ("Ambassador William", 2021). This sends a message that the

US does not prioritize individual countries in the region, even though Ricardo Zuniga was appointed as the Special Envoy to the Northern Triangle. US ambassadors should be vocal advocates for human rights, anti-corruption measures, and committed to helping lower violence in the NT.

Sanitation Interventions

In this section, suggestions on how technology can assist the Central American region toward water sanitation infrastructure is detailed. While there are numerous clean water and sanitation initiatives in Central America, significant numbers of rural villages in the region need attention.

As lack of access to clean water in rural areas is normalized, hygiene issues ranging from dental problems (as high-sugar content sodas replace water intake) to more serious bodily infections and waterborne illness occur. An experimental game study in a rural area done by Stopnitzky (2016) showed specialty designed gaming interventions improved the preferences of sanitation and hygiene of the locals. The focus of such games teach and promote sanitation practices such hand washing, latrine building, and other basic hygiene practices that help cope with limited fresh water access. Discussions are held after game play to explain the consequences of the decisions made in the game itself (Stopnitzky, 2016). Such interventions are extremely low cost, with numerous readily deployable games and teaching programs, such as those designed by the University of California, Berkeley's Professor David Levine.

Engineers Without Borders USA (EWB) is a non-profit organization that utilizes engineering projects to help others achieve basic standards of living. The EWB International Community Program focuses on projects that create long-lasting and sustainable infrastructure for the community in need. The EWB of Oklahoma State University (OSU) is currently working on a project to improve the water pipeline in El Rancho, Guatemala. At OSU, the EWB club has planned to build clean water pipelines across parts of Central America. They have offered 80 residents water purification devices in a rural area of Guatemala. Federal coordination and partnership with the various EWB organizations across the US is a low cost, high return intervention given that such programs are already in operation. Assisting with target selection, project coordination, and resource sharing across various EWB organizations can concentrate and amplify resources that would otherwise be in operation independently.

While such assistance is much needed, education for locals on maintenance is also required. One of the possible ways to educate the locals is to involve them in the process of construction early on, promoting voice, political participation, and teaching skills. "Water equals development and transforms into well-being, dignity, and health" (Rodríguez, 2021).

Strategic Partnership Interventions

When providing foreign aid, the US should focus its efforts on distributing those funds to NGOs and grassroot initiatives. The USSCA provided foreign aid, but mainly across the border between the US and Mexico (Iesue, 2016). The aid was not given to organizations who could fix the problems in Central American nations, but rather spent at the border as a defense for the US. Initiatives within communities are shown time and again to have the biggest impact, as locals know best how to allocate funds. Local organizations and community leaders better understand the issues in their communities and should be the primary focus of distributed funds.

The foreign aid provided by the US also needs to be distributed in a timely manner. Past initiatives, such as the A4P, had a large budget for foreign aid, but the individuals on the ground did not see it until three years after the start of the A4P (Iesue, 2016). The A4P was

curtailed two years later, leaving only a small window of opportunity for impact. The lack of efficiency in distributing the $750 million for A4P was a large reason the plan did not succeed in curtailing the flow of migration from the NT (Runde, 2021).

As shown previously, anti-corruption initiatives in the area are successful up to a point. Future anti-corruption initiatives need to be able to conduct investigations independently. Initiatives such as CICIG and MACCIH both fell apart when they attempted to bring charges to former political leaders. These two examples illustrate the need for anti-corruption commissions and initiatives that are shielded from political interventions.

Not only do anti-corruption efforts need to be autonomous, they need to be transparent. Having a transparent system that eliminates conflicts of interests and bolsters public trust in governments are stated in literature as of utmost importance. Instilling system transparency as normative creates better relationships between governments and constituents.

The US can help by providing aid to the anti-corruption initiatives, vocal support from designated officials, and by providing training and support. US soft power in the region remains strong, as the US has a history of acting as de-facto international police concerning human rights violations and corruption. By the US maintaining its presence and assistance, the confidence and credibility of such initiatives are bolstered.

To ensure that the local and national governments maintain their anti-corruption initiatives, media sources should be trained to identify governmental abuse. By equipping media sources with the knowledge to detect abuse, they can take on their role as a watchdog for the citizens.

Educational partnerships can be fostered between institutions in the US and local universities, schools, and organizations to share practical practices and knowledge. The US has a history of being a strong leader in higher education; leveraging such knowledge for regional benefit can be promoted through reallocation of federal available research grants for academics. Educational partnerships are an easy way to strengthen US presence and image throughout the region.

As an example, Seattle University is partnered with the Jesuit universities in Central America, and other partners in the region, to work on projects such as sustainable livelihood projects for rural youth, efforts to end gender violence, and many more topics. This partnership not only tackles problems within Central American communities but also encourages volunteerism. Volunteers are a great low-cost resource to help tackle some of the issues plaguing these areas.

CONCLUSIONS

Central America faces many issues. Among the most prominent are violence and corruption, which, combined with poor economic outlooks and lacking infrastructure, has led to a massive migration to the United States. The US' current immigration system cannot process the large numbers of migrants coming from Central America, and the Northern Triangle in particular. Therefore, long-term, systematic interventions need to be implemented to address these ongoing problems.

As Central America is a heavily collectivist society, working with places of worship, schools, and other local organizations to harness this collectivist tendency to promote stability in the family unit as well as the community as a whole can reduce gang violence in the region. Such measures will also help to improve security in the region, as would anti-corruption initiatives. Police reform is also incredibly important to improve regional security and re-instill trust in the nation state systems as viable protectors and upholders of larger social contracts.

In addition to reforming the police, reforming bureaucratic processes is also necessary. Cumbersome bureaucratic procedures, especially procedures surrounding business development, lend support for governmental corruption simply because it is easier to bribe officials than go through the proper procedures. Addressing infrastructure issues is also important for increasing stability in the region, particularly sanitation infrastructure. Promoting education can help address problems in all of these areas; but such interventions need to take in account of local voices, concentrate resources, and leverage existing programs and organizations working on the ground. Student retention should be a focus, for when students stay in schools longer they are less likely to join gangs. Low-cost sporting leagues and other incentives are easy interventions to promote student retention. Additionally, a more skilled and educated workforce is needed to address problems like infrastructure.

All of the interventions listed will take time to implement. One key to success is strategic partnerships with NGOs and other local organizations. When it comes to international partnerships with other governments, it is important to make sure money goes to communities, not the military or the pockets of corrupt officials. Additionally, there needs to be community buy-in for all interventions.

All the problems outlined in the various areas of this report are interconnected, and interventions cannot focus solely on one area. A workable strategy should be multi-faceted and focus on low cost interventions that can maximize sustainability and resilience in targeted areas. As such pockets are established, connecting them to one another becomes the long-term goal.

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