

THE MITIGATION OF SEX TRAFFICKING FROM RURAL CAMBODIA VIA WOMEN'S
EMPOWERMENT PROGRAMMING:
A COMPREHENSIVE AND PROACTIVE APPROACH BASED ON HUMAN CENTRIC,
SYSTEMS-BASED SUSTAINABLE DEVELOPMENT METHODOLOGY

A Thesis

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ABSTRACT

Despite universal acknowledgement of the pervasiveness of sex trafficking from Cambodia, lack of consensus and reliable, objective research on its mitigation from the abduction stage indirectly perpetuates its existence. This paper seeks to triangulate the drivers of sex trafficking from a systems-based approach to construct a human-centric pragmatic proposal to guide its mitigation and aid sustainable development efforts. Given that many present implementations are influenced by foreign agencies, ethical change frameworks were analyzed to formulate a methodology for ethical theory of change construction. The proposed multiphase theory of change recognizes current barriers to propose an internal program model to elevate its practical deliverability with a focus on the Education-For-Education Model and a Design Monitoring Framework, which provides actionable insights to operationalize its implementation.

BIOGRAPHICAL SKETCH

Brianna Douglas is a New England native with professional work experience in 5 continents. She obtained her Bachelor of Science Degree in Biology and Society at Cornell University and completed minors in International Trade and Development, International Agricultural Rural Development, Business Entrepreneurship, and Inequality Studies. Insatiable curiosity and desire to understand gender equality and human rights issues from a multi-faceted approach inspired her diverse course study, as well as international engagements in biological, anthropological, and economic research. Following her undergraduate completion in 2019, Brianna leveraged her internship and consultancy experiences at the NIH and various development based social enterprises to found her social enterprise Re.born Denim LLC in Kansas City, MO. Re.born Denim partnered with local roasters and recycling facilities to mitigate textile waste and supplied over 2,000 lbs. of immediate-need and professional attire to survivors of sex trafficking and domestic violence for court appointments and job interviews throughout the COVID-19 pandemic. Considering financial circumstances emerging from the pandemic, Brianna accepted a U.S. Department of Education Foreign Language Area Studies Fellowship to return to Cornell and pursue graduate studies in Global Development and Khmer Language. Despite the influence of her academic and professional engagements, Brianna recognizes her passion for environmental sustainability, intersectional feminism, and human connectivity stems from her childhood in rural New Hampshire. Eager to expand on these passions, she enjoys backpacking, reading, attending concerts and engaging in LGBT+ and BIPOC activism. To hear more about her work, connect with her on [LinkedIn](#).

This research is dedicated to my family, who without their constant support, would not have been possible, and to Estrella, whose selfless kindness gives me direction and purpose in all the work I do.

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LIST OF ABBREVIATIONS AND FUNCTIONAL DEFINITIONS

Bodily Autonomy: The understanding that each individual has the right to autonomy over their own body and no other individual has the right to physically or sexually harm said body without consent.

Empowerment: Method of change defined by the deconstruction of societal oppression of one's autonomy and the elevation of self-confidence and decision-making ability (Volker & Doneys, 2020).

Stunting: low height for age, typically arises from prolonged malnutrition and may have impacts of neural development

Invisible power: A latent form of power which “causes the relatively powerless to internalize and accept their condition,” (Green, 2018).

Participation (Nominal): implementations based on legitimization which show an entity is ‘doing something’ based on inclusion; performative

Participation (Instrumental): implementations based on efficiency which limit funder's input and draw on community contributions to increase cost-efficiency

Participation (Representative): implementations based on sustainability and the avoidance of dependency; intended to give participants a voice and influence a project

Participation Transformative): implementations based on empowerment which enable participants to make their own decisions; a means and an end

Projects: a single focused endeavor which deliver strictly defined outputs within a time scale and budget , typically 2-5 years

Programs: multiple ongoing endeavors which evolve with circumstances and aim to approach the whole issue

Nutrition-Sensitive: methodologies which attempt to the interrelated and underlying factors of malnutrition

Nutrition-Specific: methodologies which attempt to mitigate caloric and specific nutrient deficiencies

Quality of Life: Inclusive of quality of health, physical, mental and emotional alongside autonomy of one's body and decisions

Wasting: Low weight-for-height, typically caused by acute malnutrition related to disease

AGP: α_1 -acid glycoprotein (elevation correlates with Anemia)

BCC: Behavior Change Communication

CRP: C-reactive protein (inflammation marker associated with Anemia)

CIFSRF: Canadian International Food Security Fund

DMF: Design Monitoring Framework

EFEM: Education for Education Model

EHFP: Enhanced Homestead Food Production

EHFP +C: Enhanced Homestead Food Production and Chickens

EHFP +F: Enhanced Homestead Food Production and Fishponds

EU: European Union

FF4F: Family Farms for the Future

HAZ: Height for Age Z-Score

HKI: Helen Keller International

KR: Khmer Rouge

MFAIC: Ministry of Foreign Affairs and International Cooperation (Cambodia)

MOWA: Ministry of Women's Affair (Cambodia)

NGO: Non-Governmental Organization, in this context synonymous with non-profit

ODA: Official Development Aid/ Foreign Aid

RBP: Retinol Binding Protein

RGC: Royal Government of Cambodia

RKC: Royal Kingdom of Cambodia

SDG: Sustainable Development Goals

SEA: Southeast Asia(n)

sTfR:

TOC: Theory of Change

UN: United Nations

VAD: Vitamin A Deficiency

VMF: Village Model Farm

WAZ: Weight for Age Z-Score

WE: Women's Empowerment

-

PREFACE

The abduction, transportation, and exploitation of girls and women is a practice perhaps most familiar to the world. For thousands of years, humans have systematically capitalized on the vulnerability of the most marginalized. Whether in Uruk in 4500 BCE, the United States in the 1700s, or Cambodia in 2021, humans have an extensive history of commoditizing each other. Only recently, however, the world decided on a standard term to broadly describe these age-old atrocities: Human Trafficking. Just as European and American powers coined the term and definition for trafficking, the recognition of trafficking epidemics and the social activation against them tend to ebb and flow with their acknowledgment by the countries in global power. In more recent history, these countries are those that make up the global north. Varying poverty levels plague many countries in the global south due to the lasting effects of colonialism which hyper-exposes young individuals in these countries to the likelihood of becoming victims of human trafficking.

The most recent wave of activism against human trafficking arose in the 1980s alongside the second wave of the western feminist movement (Hughes, 2014). Human trafficking was then re-

termed sex trafficking, or the commercialization of women in prostitution or pornography (Hughes, 2014). By the late 1990s and early 2000's this definition evolved to mean, "Modern-day slavery that involves the use of force, fraud, or coercion to obtain some type of labor or commercial sex act" (What Is Human Trafficking). This alteration resulted from various journalist reports that shed light on the prevalence of abduction, transportation, and exploitation of children in Asia (Downman, 2017). Also, in reaction to this information, many non-profit organizations with missions to end human trafficking began popping up around the globe, often with origins in the global north. Despite their well-intended efforts, many of the individuals leading these crusades aimed to fight a problem they could barely understand. Almost 20 years later, there is still no significant statistical data validating much of the literature in circulation due to the logistical barriers in its obtainment. The number of girls and women lost to human trafficking is difficult to discern because many are never reported missing, or the government alters and obscures these data. In Cambodia, such issues are omnipresent. In part, due to remaining conceptions enforced by the Khmer Rouge. One of which states the expectation of a woman's virginity prior to marriage and is utilized to assure her 'Khmerness' (Gbvkr.org, 2019). Strict cultural and social repercussions occur if a woman is found to have experienced intimate relations, even in the case of rape. Some women quote this as a reason they remain in sex work following their abduction (Galabru, 2004). The fear of a tarnished reputation restricts some families from reporting the loss of their daughter. In a similar vein, the Cambodian government underreports instances of sex trafficking in the pursuit of maintaining a positive global image.

The research enclosed herein aims to objectively triangulate the drivers of sex trafficking from a systems-based approach to construct a human-centric pragmatic proposal to guide its mitigation and aid sustainable development efforts. In the traditional definition of development, as efforts overlaid upon macroeconomic galvanization, the detrimental impacts of sex trafficking are

apparent. In recognition of available statistics illustrating most women trafficked from Cambodia are able-bodied and working-age from rural provinces to international communities, in concert with the acknowledgment Cambodian GDP is scaffolded by agriculture, economic repercussions are evident. These economic consequences reverberate throughout the country and compound to further restrict Cambodia from achieving the UN sustainable development goals of No Poverty, No Hunger, Equality in Education, and Gender Inequality. Although this research realizes the macroeconomic impacts of sex trafficking on Cambodian sustainable development, it focuses on the quality of life and satisfaction definition of development. The detrimental impacts are also apparent.

Under the assumption that quality of life includes quality of health: physical, mental, and emotional, alongside autonomy of one's body and decisions, the cessation of sex trafficking from Cambodia remains a critical undertaking. Survivors of sex trafficking from Cambodia experience greater prevalence of mental health disorders, HIV and sexually transmitted infections, and drug reliance, in response to the physical, mental, and emotional trauma of their lived experiences (Yasar, 2010). These traumas extend generationally to family members, children, and other women at risk of similar exploitation. Sustainable development within Cambodia depends on the cessation of sex trafficking and each of its related drivers.

Due to the nebulosity and corruption interwoven in the available statistics on sex trafficking from Cambodia, the author contends that the only viable solution to produce a successful theory of change is through the reconstruction of causal and correlated pathways via data triangulation through a systems-based/network framework. Contrary to earlier development theory which oversimplifies social change as linear and bound to economic theory, A systems approach is a means of understanding change as a multidimensional network of correlations rather than a linear causal effect. The very definition of a system as an "interconnected set of elements coherently organized in

a way that achieves something more than the sum of its parts" (Green 9) is inherent to this approach. At its core, the systems approach to the change process is the understanding and employment of change at various related and unrelated junctures to instill overall improvement.

This framework necessitates the identification and robust consideration of each actor of a system inclusive of:

- *What is a System?*
 - “An interconnected set of elements coherently organized in a way that achieves something more than the sum of its parts,” (Green 9)
 - “Portfolio of experiments that competes and evolves over time” (Green 14)
- *Who influences a system?*
 - Every individual, past, present, and future who may alter measured and unmeasured outcomes of an implementation
- *When are systems situated?*
 - Across time, events from the past often provide context to understand the present, and predictions about the future consequently influence the present
- *Where do systems occur?*
 - Across provinces, nations, and even continents, the primary consideration is connection accessibility
 - Systems must not be related to science which aims to achieve results within a vacuum
- *Why do systems exist?*
 - Biological and sociological perspective: The connectivity of life relies on the interaction between biotic and abiotic factors
 - Economical and historical: civilizations have acquired a predilection for wealth and power and maximize utility by interaction
- *How do systems operate?*
 - Overall, outcomes of systems are often unpredictable. Alterations at junctures or frontiers significantly alter other facets.

Whatsmore, a systems-based approach adheres to principles of reflexivity, curiosity, multiple perspectives, and humility, which are inherent to each facet of this research. The delineation of the sex trafficking system in Cambodia may be viewed List of Figures section of this document.

OBJECTIVES AND RELEVANT RESEARCH QUESTIONS

I. Objective One: Delineate the System

1. What is sex trafficking?
2. How does sex trafficking function as a global macroeconomic system?
3. What does sex trafficking look like in the Cambodian context?
4. How was the sex trafficking market developed in Cambodia?
5. What are the market drivers of sex trafficking in Cambodia, and what underlies them?
6. What market drivers should proactive programming target?

II. Objective 2: Construct Transformative Change Methodology

1. What is a Theory of Change?
2. What are the underlying drivers pushing the supply of rural Khmer women in the sex trafficking market?
3. What is the best way to mitigate the underlying drivers in the supply of rural Khmer women?
4. How can a non-Khmer American ethically propose a theory of change on women's empowerment programming?

III. Objective 3: Construct Theory of Change

1. How is women's empowerment defined in Cambodia?
2. How are past implementations selected for review?
3. How have past interventions succeeded/failed?
4. What restrictions are intractable and must be abided by in the first phase?

IV. Objective 4: Discuss Full Theory of Change

1. What are the inputs, outputs, outcomes, and outcomes proposed?
2. What programs are proposed?

V. Objective 5: Assess Potential Impact of Education-For-Education Model

1. What previous homestead garden implementations exist in Cambodia?
2. How effective were these programs with regard to E4E's intended outcomes?
3. What were the successes/failures?
4. What is the likelihood of E4E receiving government funds if successful?
5. How can E4E be adapted in light of these evaluations?

VI. Objective 6: Conclude Findings

1. What is the significance of this research
2. What else?

REFLEXIVITY STATEMENT

I would like to preface this research paper in recognizing my identities as an American-born, white, cis-gendered, able-bodied woman attending an elite university. Despite my various intersectional identities and experiences relating to the context of this paper, I recognize that the privilege my aforementioned identities hold may influence my interpretation of and presentation of this research.

I. OBJECTIVE ONE: DELINEATE THE SYSTEM

Sex Trafficking Functional Definition:

The official standard definition of sex trafficking is, "Modern-day slavery that involves the use of force, fraud, or coercion to obtain some type of labor or commercial sex act" (What Is Human Trafficking). Functionally, this research recognizes a commercial sex act inclusive of pornography and examines the exploitation of women identifying individuals in particular. Women comprise a near complete share of documented survivors (Goldenberg, 2015; Hughes, 2013; Martin, n.d.).

Operation of Sex Trafficking in Global Markets:

Transactional sex and the existence of sex labor through prostitution fails to be a novel concept in human communities. Likewise, sex slavery and trafficking existed within ancient civilizations; yet these conceptions of sex labor must not be drawn parallel with the industrialized markets of today. Present legal and illegal sex markets draw profits of billions of U.S. dollars each

year and have exponentially increased in the past 50 years (Poulin, 2003). This meteoric growth is often attributed to capitalist globalization and imperial warfare, which facilitated the fetishization of foreign women while allowing for efficient distribution channels exploited by traffickers. Prominent economists liken the trafficking market to commodity markets, particularly illicit commodity markets that dynamically match supply and demand (Aronowitz and Konning, 2014). Sex trafficking markets are said to be created and maintained by three underlying factors: consistent supply of persons 'available' for exploitation in source countries, insatiable demand from destination countries, and organized networks which control the capitalistic model of supply and demand (Aronowitz and Konning, 2014; Bales). The most prominent factor in creating these illicit markets is demand, which drives incentives for exploitation on behalf of secondary and tertiary abusers.

Just as price dictates the equilibrium point of alternative markets, the relative price of exploitation has enabled buyers in the global north to fulfill their abusive fetishes internationally.

Disproportionate global wealth and capitalistic ideals create uneven power structures which coerce traffickers and survivors into predatory circumstances. This consideration remains particularly pertinent as demand in sex trafficking markets proves to be highly elastic (Aronowitz and Konning, 2014).

Demand within sex trafficking is segregated into derived demand and primary demand based on where along the supply chain the desire for exploitation arises. Considering the organized networks which exploit individuals, supply chains are not uncommon. Derived demand is produced by those who initially coerce survivors through grooming and transport, as well as those who own establishments that harbor and sell their services. Primary demand is produced by those clients or buyers who consume pornography or services. A cost increase at either of the first two stages of the supply chain will inevitably increase the final price and thus decrease the primary and derived

demands, yet researchers find an unfaltering 'supply' of girls and women from source countries bolster the market (Aronowitz and Konning, 2014).

Overview of Sex Trafficking in Present Day Cambodia:

International reports classify Cambodia as a primary source country, with most trafficked women transported initially to Vietnam in the 1950s and to Thailand following 1980. Primarily, these translocations were part of a three-step supply chain wherein 1. rural girls and women were sold by their families or kidnapped by traffickers 2. traffickers sold them to brothel owners in foreign metropolitan areas 3. brothel owners subsequently sold their services to foreign servicemen and tourists. The transition in destination countries following 1980 is largely due to the decrease in U.S. military occupation in Vietnam and an increase in European tourism to Thailand (Reyes, 2015).

Although Thailand is still a prevalent destination for trafficked Cambodian women, a 2017 UN report notes that trafficking to Thailand has been decreasing (United Nations Office on Drugs and Crime, 2017). This abatement may be due to border tensions in the early 2010s and Thailand's 2014 crackdown on illegal immigrants (BBC, 2016). Additionally, recent reports show that there has been a rapid increase in the trafficking of Khmer women to China for forced and autonomous marriage and surrogacy (CIA, 2018, Kiss et al., 2015). Migration due to consensual marriage, surrogacy, and sex work is vital to note as young Khmer women do autonomously choose to enter these fields due to their relative lucrativity. Trafficking channels to China employ single, or two-step supply chains wherein Chinese men hire traffickers or directly coerce rural Khmer women into forced marriage or surrogacy. The continuous 'supply' of exploited women characterizes the sex trafficking market in Cambodia.

Cambodia has remained on the United States' Tier 2 Watch list since 2007. Countries on the Tier 2 Watch list do not fully comply with the 2000 Trafficking Victims Protection Act's (TVPA) minimum standards but are making significant efforts to comply (U.S. Department of State, 2013). In addition, a country on the Tier 2 Watch list has a very significant number of trafficking victims or a significantly increasing number; the prior includes Cambodia. The premise behind the minimum standards states that a government prosecutes offenders and protects victims along stringent criteria per the crime severity (US Department of State, 2012). Despite the Royal Cambodian Government's attempts to meet these standards through policy creation, its ineffective legal system and insufficient dissemination of legal repercussions maintain its Tier 2 classification.

Formation of Systemic Sex Trafficking from Cambodia:

Primary Demand: Influence of Western Powers in Indochina Wars:

Sex trafficking within the context of Cambodia operates similarly to that of the global market. Its industrialized impetus was driven by primary demand from the global north. Further, this demand arose from imperial military infiltration. Analysis of the market's construction and those who piloted it provide insight to drivers which perpetuate its existence.

Western imperial powers, France and the United States, spent the better part of the 20th century at war in Indochina (Vietnam, Cambodia, and Laos). First, France in an effort to retain the land under its rule with the financial backing of the United States (Britannica, 2019), and second, the United States to support the French sanctioned South Vietnamese Government (Encyclopedia Britannica, 2019). French involvement opposing communism in Indochina gave rise to the Communist Party of Kampuchea (CPK), or more infamously known today as the Khmer Rouge.

CPK became formalized in the 1960s along the northeastern border of Cambodia and Vietnam and gained strength due to continued Western involvement in Cambodia. Through an organized coup, Khmer Rouge claimed the nation's capital, Phnom Penh, in April 1975 and embarked on a 4-year totalitarian rampage (HISTORY, 2017).

Underlying each of these devastating engagements is another devastating truth: imperial involvement of western powers in Indochina gave rise and scaffolding to one of the largest and most prominent sex trafficking industries in the world. This industry has effectively stolen the lives and autonomy of hundreds of thousands of girls and women. In attempting to free these countries from communism, the U.S. and France enslaved countless to the rule of capitalism.

Patriarchal chauvinism dictated not only the role of the United States in its involvement in the Indochina Wars but also its soldiers in their personal engagements with local women at their duty stations in Vietnam. American soldiers demanded prostitutes and offered to pay for them. Various studies show, "The resulting increase in local prostitution established the infrastructure necessary for the development of sexual tourism," (Poulin, 2003), which underpins the sex trafficking market today. To meet growing demand, 'supplies' of women were found within Vietnam, in addition to Laos and Cambodia (Poulin, 2003), oftentimes these 'supplies' were met through kidnapping or sale of girls by their families in desperation.

Critical to note is the prevalence of purchasing sex services by western servicemen prior to the Indochina Wars. This practice was so commonplace that the U.S. government, alongside many other allied powers, distributed condoms to deployed servicemen in World War 2 (Oatman-Stanford, 2012). Despite prostitution's ubiquity in previous wars, the globalized onset of sex trafficking as an industry is benchmarked within the 1960s while U.S. troops occupied land in Southeast Asia (Poulin, 2003).

Western military contact during the Indochina Wars created erotic social construction of Southeast Asian women on an international level through word of mouth and primary demand for fetishized pornography. Pornography began to exoticize and sexualize young Southeast Asian women and exacerbate derived demand for their trafficking and sexual violence within the region. Often, pornography would play off disproportionate power dynamics prevalent in imperial soldiers' minds, reaffirming their self-created superiority. It did and still does include violence towards young women, which has correlates with increased rates of sexual violence within Cambodia (Galabru, 2004). A predilection for young (early to mid-teen) actresses and workers is created both by the fetishization of virginity and fear for sexually transmitted diseases and HIV, which affects over half of Cambodian sex workers (Yaşar, 2010).

Globalized primary demand repercussions of Southeast Asian women are not confined to just western military personnel in the 20th century. Today, Southeast Asian women are the most widely trafficked of any other trafficking victim (Hughes, 2013; Taylor & Jamieson, n.d.). Their primary buyers are American and European men. Although a recent study from the early 2000's revealing 18,000 prostitutes consistently serviced 43,000 U.S. servicemen stationed in South Korea (Poulin, 2003), most western exploitation of Asian women now occurs from internet pornography and sex tourism. Following the removal of U.S. troops from Vietnam, the trafficking of Cambodian women shifted from Vietnam to Thailand, where sex tourism erupted. In the late 1980s and 1990s, Thailand's tourism board launched several advertisements boasting its robust sex tourism industry targeting European and American male travelers who harbored domineering fetishes for Southeast Asian Women (Reyes, 2015; Trafficking in Persons to Thailand Report, 2021).

Throughout the years, the infamy of Thailand's sex tourism has attracted increasing numbers of European and American men and has allowed for an estimated \$25 billion industry, 12% of its

total GDP (Forbes, 2013). Despite Thailand's many conspicuous back-end brothels, most of the women working are not Thai. Literature and unofficial primary research experience show that many of the women working along Soi Cowboy, Bangkok's most notorious sex tourism destination, are Burmese and Cambodian. These women were instructed to engage with white men and warned against speaking to women or other suspicious 'noncustomers' due to potential discovery and mandated nightly quotas. Abuse is common among victims, and some traffickers even threaten victim's families or involuntarily inject victims with methamphetamine to create addictions and thus dependency to ensure consistent profits (Glawogger, 2011; WuDunn,2014).

Derived Demand: Authoritative and Latent Power Constructed by Khmer Rouge:

The objectifying mentality described among western men was not exclusive to western militaries, although it may have enabled its power to spread. Just as described in global sex trafficking markets, primary demand from western militaries led to derived demand on the part of local traffickers. The reign of the Khmer Rouge reinforced this derived demand and its abusive justification in local contexts.

French involvement in Cambodia is often credited with the birth of the Khmer Rouge (as seen in the French influence of their namesake), while The United States, President Nixon in particular, is widely credited with their rise to power (BBC, 2018). Without congress' approval in 1969, Nixon led a secret bombing campaign targeting Northern Vietnamese camps in conflict-neutral Cambodia. This evident show of patriarchal chauvinism resulted in the War Powers Resolution to mitigate a U.S. president's power and instigated one of the largest waves of recruitment to the Khmer Rouge. Just six years later, the Khmer Rouge led by an authoritarian dictator, Pol Pot, became infamous for one of the largest genocides in world history.

Emboldened with contempt for French and American imperial attempts to overthrow communism in Vietnam, self-proclaimed communists, Khmer Rouge, claimed Phnom Penh in April 1975. Soon after commanding the capital, they murdered educated middle-class citizens and forced the remaining city-dwelling individuals into a brutal agrarian reeducation. In rural regions, the Khmer Rouge swept villages raping and killing the women who inhabited them in audience of their families as their first act to assert their dominance. Those who were not killed were forced to work through agrarian reeducation. Officials banished spouses to separate work camps and selected favored women based on physical attributes to utilize as sex slaves to service militants. Women not selected or murdered were forced to remarry. Coerced marriages under Khmer Rouge were facades devoid of celebration or cultural ritual (GBV.org, 2019). Ceremonies were held in groups and established solely to justify the rape necessary for women to bear children that would repopulate the country under the new regime. Survivors cite the expectation and enforcement of marriage consummations which were often overseen by militants (GBV.org, 2019).

Sexual violence perpetrated towards civilian women did not start with the Indochina Wars nor Khmer Rouge. It has long been a favorite wartime tactic utilized to illustrate overt power and cripple societies. Even when executed seemingly inadvertently (as some may assume among American soldiers), its damage seeps beneath fatality statistics and winds itself around the throat of postwar decimated societies. Sexual abuse often goes unpunished internally and unseen by the global eye, thus perpetuating and propagating its occurrence by constructing the mentality of normalization. Although the world at large does not bear witness to the human rights violations at hand, the survivors in a reborn postwar society do. These populations become both aggressors of such violence and the survivors of it. Abusers and survivors shape the public sentiment towards sexually-based violence and women themselves.

Although the reign of the Khmer Rouge ended in 1979, many of its toxic ideologies remain. Several NGOs and individuals attribute this to the culture of impunity during wartime that was not corrected in the post-conflict society (Gbvkr.org, 2019). The violent practices affecting women during the Khmer Rouge Era, such as forced marriage and rape, created a hostile precedent that leached into many aspects of mainstream modern Cambodia (Gbvkr.org, 2019). Included within this precedent is the belief that rape cannot occur within the bounds of marriage. In the early 21st century, 17% of women between the ages of 15-49 experienced sexual and physical violence by their husbands (Galabru, 2004). Despite belief negating marital rape predating the Indochina Wars, forced marriages and pregnancies during the Khmer Rouge further ingrained this ideology and justified trafficking for the purpose of forced surrogacy and marriage. In tandem, the Khmer Rouge's forced labor practices among women created the notion that: although women existed as reproductive vessels and did not even have rights over their own bodies, domestic labor and child-rearing did not qualify as labor.

Such a belief has drastic effects on the education of girls in Cambodia. Compared to 10.9% of boys, 20.5% of girls never go to school (UniversELLES, 2019). Disproportionate gender equity in education is mainly due to the assumption that girls will not, and cannot, pursue economic opportunities outside of the household and is exacerbated in rural populations. Thus, the investment in their education is unnecessary for income-constrained households. Without an education, Cambodian women are often unaware of their lawful rights regarding sexual violence, as 25% of women subjected to domestic physical and sexual violence do not believe they have been abused (Galabru, 2004). Additionally, they are also significantly more likely to experience sexual violence. Studies show an inverse relationship between education levels and violence; one reveals that, "19.8% of female victims having no schooling, 18% having only completed primary school, 10.9% finishing secondary school and 5.8% having graduated from upper secondary schools," (Galabru, 2004).

Directly contrasting the assumption that women will not work after becoming married is the strict cultural filial duty that assumes daughters will care for their parents. Without education, economic opportunities for women are limited, and 84% of women report making below minimum wage (Takei, Sakamoto, and Kim, 2013). Work opportunities are especially meager in rural communities. In part, this is due to a lasting devaluation of women's labor imparted by the Khmer Rouge, which emphasized that domestic labor is not considered labor. Since agricultural labor conducted by women is often considered domestic labor, many women resort to various forms of prostitution. Those that enter sex work willingly within their communities live in constant fear that their parents will find out. Female 'purity' is another strict cultural expectation brutally reinforced by the Khmer Rouge, who publicly executed unmarried women who had lost their virginity, even in the case of rape by CPK militants (Takei, Sakamoto, and Kim, 2013). To combat this constant anxiety and work extended hours, many women in sex work rely on Amphetamines. When used to facilitate work, "stimulants such as methamphetamines are used primarily for occupational reasons, as "power drugs" that give women the "strength" to forego sleep and food, work longer hours, and see more clients" (Takei, Sakamoto and Kim, 2013). However, due to the "enduring nature of life in poverty, frequent domestic abuse, and societal stigmatization, most female sex workers admit to using the drugs for enjoyment as well (Takei, Sakamoto, and Kim, 2013). Recreationally, these drugs serve to "enhance performance through its positive impact on mood and by reducing inhibitions, facilitating a sense of power and agency" (Takei, Sakamoto, and Kim, 2013).

Derivation of Sex Trafficking Market Drivers In Cambodia:

Primary Demand: Buyers

Despite the myriad of racist, sexist and colonial factors continuing to drive primary demand for Khmer women, the distilled underlying factor responsible for its perpetuation is the globalized disrespect for the bodies of Cambodian and Southeast Asian women originating from western involvement in the Indochina Wars. In many instances, American servicemen admit to pining for young Southeast Asian women to assuage the trauma of war (Encyclopedia Britannica, 2019). At best, these confessions may be considered self-serving and entitled through the claim that desperate escapism blinded soldiers to the trauma they were inciting. Subsequent investigation, however, illuminates that these actions are perhaps better connoted as racist and misogynistic. Little documentation exists on the specific interactions American soldiers had with coerced prostitutes during the Indochina Wars.

Nevertheless, the existence and treatment of the children they fathered suggest these were far from respectful. Despite the U.S. government standard issuing condoms during the Indochina Wars, tens of thousands of children were fathered by U.S. servicemen, implying a blatant disrespect for the women's bodies. When contacted about their existence, less than 1% of returned soldiers agreed to contact with their children; even after learning, many of these children were cast out of their mothers' homes due to the traumatic memories their Caucasian features brought (Amerasian Act, 1987). The Amerasian Homecoming Act, authored by former U.S. Congressman Robert Mrazek, is the only form of accountability and reparations Southeast Asian women received.

Gross lack of accountability on behalf of U.S. servicemen and severe trauma responses by the prostitutes they engaged with implies a domineering attitude and flagrant disrespect for the sex workers as individuals. Further, the production and popularity of violent pornography involving Cambodian and Southeast Asian women among American and European men reinforces this implication. Without respect for women, or more accurately Southeast Asian women, soldiers drove

up the demand for sexual exploitation by enabling its acceptance and fetishizing the women themselves. This objectification along ethnic bounds persists in the home countries of buyers where marginalization of Cambodian women endures.

In the United States, non-immigrant Cambodian women have some of the highest high school dropout rates at 15% (Takei, Sakamoto, and Kim, 2013), over two times higher than white men. Additionally, Cambodian non-immigrant women have lower wages than white women after controlling for education, native language, and a variety of other factors (Takei, Sakamoto, and Kim, 2013). To cope with the pervasive inequality and lasting trauma of the Khmer Rouge, Cambodian refugee women admit to using alcohol and sleeping pills to self-medicate (D'Avanzo, Frye, and Froman, 1994). This inequality persists years after the initial globalized exploitation of Cambodian women due to a lack of large-scale, active effort to dismantle the visible and invisible power structures which normalize this perception of SEA women in American nor Cambodian societies.

Derived Demand- Traffickers and Sellers:

Public reports on sex trafficking in Cambodia rarely include the perspectives of traffickers. However, one report which analyzed the RGC's judicial efficacy and recidivism among traffickers managed to include incarcerated trafficker's perspectives. Unanimous consensus in the question of why individuals engage in trafficking channels is the exorbitant income it provides. Individual complexities to this answer range from financial desperation to wealth and opulent material desires (Stan & C.L., 2017). Some of the sellers interviewed were previously arrested for trafficking but never convicted. They cited law enforcement bribery, survivor intimidation, and lack of evidence for their immunity. Despite being arrested, many of the repeat traffickers maintain arrogance concerning their likelihood of conviction and even admit to the intention of resuming trafficking efforts once

inevitably released. Their lack of remorse stems from an expressed notion that if they do not commit the act, another will, and they will forgo potential wealth (Stan & C.L., 2017). Ideologies such as these house a deep seeded dehumanization and industrialized commodification of Khmer women.

Supply- Survivors:

The archetypical profile for a survivor is an uneducated young woman aged 10-mid-twenties from rural Cambodia (United Nations, 2016). Although Khmer women voluntarily elect to enter sex work internationally and within Cambodia, this research addresses the issue of informed consent and deception. A 2004 study revealed that "64.45 % of prostitutes have been forced into [sex] work, 52.9% were duped by the prospect of a good job, 11.04% were sold by family members, and 0.58% were raped" (Galabru, 2004). As one can surmise, these circumstances are not mutually exclusive, and those forced into sex work may have been previously duped or any other combination

In the case of women who have been trafficked, internally or externally, for sexual purposes, "the percentage of those claiming they were duped by offers of improved employment has increased" (Galabru, 2004). Traffickers recognize the limited economic opportunity existing in rural regions of Cambodia and often flock to these areas. Much of sex trafficking in Cambodia begins as non-coercive, and most narratives shared by survivors adheres to the following formula:

1. A rural woman, age teen to early twenties, is approached by a well-dressed person of the same nationality and oftentimes is a trusted individual from the community or one nearby (data regarding the most common gender is inconclusive as men tend to be perpetrators, but women are also frequently employed to gain the prospective victim's trust. In return, the woman culprit reduces her own victimization).

2. The perpetrator mentions a low-skill job opportunity in another country or nearby metropolitan area. Commonly noted ruses are jobs at hotels or seasonal fruit picking and harvesting.
3. The perpetrator highlights the income opportunities. If the perpetrator is female, she will often attest to her own positive experience and give her reasoning behind accepting the offer.
4. The perpetrator offers the job to the prospective victim and explains that the offer is time-sensitive and will be offered to another individual if she does not accept
5. Pressured by the offer's attractiveness, the apparent competition in receiving it, and the economic need for a source of income in a community without many prospects, the woman accepts without deep consideration.
6. The perpetrator instructs the woman to accompany him/her without taking the time to inform her family. He/she promises new clothes at the location and a chance to tell her family after she arrives. This strategy prevents the victim's family from confirming her abduction (which stagnates any legal efforts) while simultaneously allowing the perpetrator to return to the same village and use the same story on another victim.
7. Once arriving at the secondary location, women are informed that they must work off an exorbitant amount of debt for their transportation and related costs through sex work.

Albeit this is a simplification of the most common narrative told by survivors, there remain instances of kidnapping and families selling girls and young women to traffickers and orphanages for sex labor due to high prices placed on virginity. In all instances, inadequate lucrative economic opportunity for women in rural poverty is the primary driver of sex trafficking undermined by the disrespect for their bodies and minds, which enables their commodification.

Enabling Environment- Government and NGO Effort Failures:

Government-

Although political turmoil previously reverted and stagnated past gender parity efforts, the reintroduction of the State of Cambodia and UN influence following 1991 increased efforts dramatically (Ashman et al., 2014). Today, the Kingdom of Cambodia is often regarded as having some of the most proactive gender-inclusive policies in Southeast Asia (Yang, 2016). Cambodia is one of the only Southeast Asian countries with an entire ministry, MOWA, dedicated to women's affairs. Since its creation in 1993, this ministry has primarily focused on gender mainstreaming policies (Ministry of Women's Affairs, 2014). Despite the necessity for gender mainstreaming and parity in dismantling a key driver in sex trafficking, the government, including MOWA, rarely addresses sex trafficking directly and often mitigates its existence in an attempt to preserve its image to the global community. In 2008, one year after Cambodia was placed on the Tier 2 sex trafficking watch list, the RCG instated the Law on the Suppression of Human Trafficking and Sexual Exploitation (Ministry of Women's Affairs, 2014, CIA, 2019). This measure was enacted in response to international pressure and is emblematic of nearly all the government's subsequent efforts, most of which remain at a policy level.

Presently, the Royal Kingdom of Cambodia does have a legal framework to prosecute and convict sex traffickers. However, convictions are rare due to lengthy trial periods and minimal witness protection, which frequently deters survivors due to fear of personal or familial harm. Additionally, due to high levels of corruption within law enforcement, officers are frequently involved or perpetrators of the trafficking itself. For those who are convicted, outlined channels for restitution exist. However, restitution is rarely actualized due to the mandate that survivors are paid after a trafficker serves their sentence (CIA, 2018).

Regarding identifying potential survivors and culprits of sex trafficking, the RGC has developed and utilized new victim identification and data collection technologies and worked with the Chinese government to implement consular screening measures of migrant applications. Unfortunately, authorities do not provide complete statistics on the number of survivors, perhaps due to government pressure. In 2018, the Cambodian government increased funding from 4.9 billion riels (\$1.2 million) to 5.4 billion riels (\$1.3 million) for an interagency that created the 2019-2023 national action plan. However, observers noted that the budget was still insufficient (CIA, 2018).

These policies rarely prove effective due to high levels of enforcement corruption in combination with the government's superficial positioning on maintaining a top-down approach. Without programmatic education of these laws and navigation of the legal system, these policies are insufficient.

International NGOs-

Following the intense political volatility of the 20th century, Cambodia became a primary target of international attention and thus a major recipient of foreign aid. One study estimates that net ODA accounted for about 94% of central government spending between 2002 and 2010 (Yang, 2016). Rapid growth in aid is the result of the exponential growth of NGOs in the country, and in 2013 Cambodia had the second most NGOs per capita in the world, moving from 0 to 3,500 in just two decades (Yang, 2016). This hyper-focus on Cambodia is postulated to have arisen from the UN's involvement in 1991 and continually pressures the semi-authoritarian government to prioritize efforts for gender equality (Ashman et al., 2014).

The actions of NGOs tend to be in a reactionary manner and any data released is done in the form of a report or baseline data without an intervention. More explicitly, they target their

efforts to rescue and restore the lives of victims through law, counseling, and education services. Although these interventions are necessary and correlate with the skillsets of those leading the NGOs, they do little to address the root problems associated with mitigating the occurrence of sex trafficking at large. Whatsmore, many of the NGOs involved in anti-sex trafficking work in Cambodia are foreign entities with Christian and Jewish founding. This religious orientation can implicitly manipulate Khmer women who are frequently Buddhist into converting belief systems and misdefine trafficking. Several sex workers in Cambodia reveal that Christian NGOs steadfast on equating autonomous sex work with sex trafficking led brothel raids that incriminated workers. This incrimination results in lost income, significant social repercussions, and the necessity to engage in higher-risk clandestine work to avoid detection (Stan & C.L., 2017).

Whatsmore, NGOs are constrained by their need to balance donors' interests with the effectiveness of their mission. Because donors often wish to see the impact of their altruism, NGOs often experience pressure to quantify a donor's direct effect to maintain donations. In practice, this looks like an NGO focusing on quantifying the girls they remove from trafficking (who at times are autonomous sex workers) or the number of resources given to women to re-assimilate into society after becoming victims. Such an emphasis on outputs rather than outcomes satisfies board members but does little to address impact and transformative change (Cornwall, 2014). Conversely, this research proposes a theory of change to construct a more sustainable and proactive approach to the issue, which can genuinely evaluate the impact of a program.

Lack of Impact Evaluations and Direct Information:

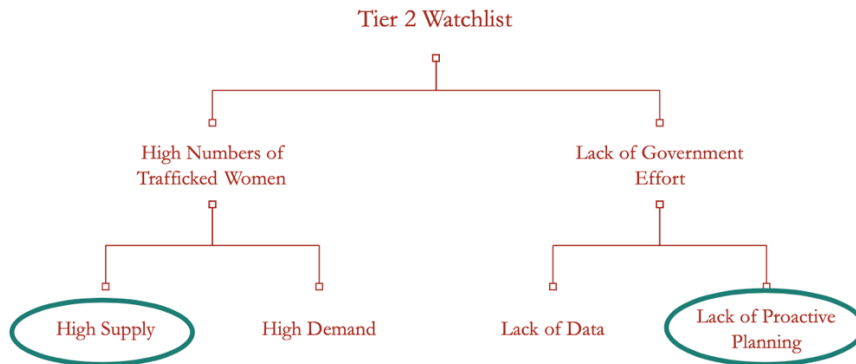
Within the body of literature currently available on sex trafficking from rural Cambodia, there is very little quantifying its existence or impact of preventative implementations. The minimal

information that addresses the number of trafficked women is highly contested between organizations. It cannot be validated due to high levels of government corruption, NGO survivor inflation, and the nonexistence of independent studies directly assessing how many women are affected. For this reason, in combination with the reality that no program to date has directly attempted to mitigate sex trafficking from rural Cambodia, no impact evaluations have been published.

Summary of Derived Demand Drivers of Sex Trafficking from Rural Cambodia:

A thorough analysis of the sex trafficking market from multiple perspectives has delineated the overt market drivers with regard to primary demand, derived demand, supply, and the enabling environment. Subsequent investigation reveals the underlying pushes and pulls of these actors to operationalize their mitigation. The ingrained sexualization and commodification of Khmer women through patriarchal chauvinism is the genesis for the primary demand on behalf of western consumers, which institutes a positive feedback loop on continued demand. Derived demand is encouraged by similar misogynistic perspectives, normalized by the devaluation of women's labor and the injection of capitalistic ideals in consideration of colonial-induced regional poverty. Recognition of the high demand elasticity mandates the understanding of antipatriarchal perspective interventions and international policy aimed at disempowering trafficking networks. These include but are not limited to: anti-corruption efforts, strict and expeditious enforcement of law enforcement, production of unbiased, reliable research, surveillance of repeat offenders, and thorough investigation of immigration. In acknowledgment of the multiplicity of bureaucratic barriers to formulating immediate programming to fulfill these interventions, this research will instead focus on dismantling the supply side of the sex trafficking market. Realization of the

market's function dictates that a decrease in supply will drive up costs of trafficking and thus price and ultimately demand to lower the equilibrium point. Breakdown of the system and this report's intended avenues of implementation are pictured below:



II. OBJECTIVE TWO: CONSTRUCT TRANSFORMATIVE CHANGE METHODOLOGY

Proactive Change from Supply Market Driver Mitigation:

Implementation of effective programming that mitigates the trafficking of rural Khmer women necessitates creating an operational theory of change. As expert Janie Chuang writes, "to be effective, counter-trafficking strategies must also target the underlying conditions that impel people to accept dangerous labor migration assignments in the first place...The problem of trafficking begins not with the traffickers themselves, but with the conditions that caused their victims to migrate under circumstances rendering them vulnerable to exploitation" (Chuang, 2006). Understanding trafficking as a process inclusive of the abduction, transportation, and

exploitation of individuals, solutions must target the prevention of the abduction stage, not just the exploitation stage, as most do. Sex trafficking can manifest in many forms at the exploitation stage, whether in forced prostitution, forced marriage, or otherwise. However, these repercussions are not the focus of this research because, if successful, this solution will negate the necessity for solutions to those issues.

Triangulation of Underlying Potential Drivers and Indicators of Sex Trafficking Supply:

Drivers-

Even without direct evidence on trafficked women, the drivers of sex trafficking supply may be ascertained through triangulation. Much of the information utilized in triangulation was obtained through interviews with survivors and traffickers themselves. As previously indicated, survivors' narratives consistently highlight the necessity for employment due to lack of local opportunity. These opportunities are limited due to their lack of education and inability to generate income through agricultural labor. Despite completing up to 60% of agricultural activities, agricultural labor by women is often regarded as domestic labor and unpaid (Sumner et al., 2016). One working paper from the FAO found that 70% of women who farm do so for subsistence on their own farms or as unpaid family workers (Sumner et al., 2016). Traditional land inheritance practices combined with unequal income opportunities default men as heads of households (Sumner et al., 2016). When women do head households, it typically follows the death or abandonment of a husband. The women face extreme economic hardships, often resulting in significantly higher child labor rates and malnutrition in female-headed households. Compounding the lack of economic opportunity afforded to women, the 22% of women-headed households in Cambodia have access to only 60-70% of the land that male-headed households in the same region have and only 418,000 hectares of

the total 3,359,000 hectares of agricultural land in Cambodia. (Sumner et al., 2016). Land deficiencies among women-headed households translate to more profound deficiencies in extension services and subsidized agriculture inputs as criteria for these are often determined by plot size and income generation (Sumner et al., 2016; Female Face of Farming; Cambodia- Agriculture, Forestry and Fishing); thus, deepening the gender divide in rural income opportunities.

Even with limited agricultural employment opportunities, rural Khmer women rarely have equal access to formal schooling. Education can be expensive; households with multiple children prioritize boys. A study among rural communities, including Battambang and Siem Reap provinces, found that only 48% of women in the study were literate (Stormer et al., 2020). In rural areas, reduced education among women often correlates with increased domestic violence and poorer nutrition (Stormer et al., 2020).

Ironically, the underlying cause for these insufficiencies' parallels traffickers' disrespect for rural women's bodies and minds. The false ideation that women exist merely for reproductive purposes and are incapable of performing income-generating activities enables a devaluation of their personhood. This devaluation encourages objectification to reinstate value in a capitalist society. Reiterations of this rationale have perpetuating effects leading women to internalize these perceived capabilities and even justify violence to their bodies (referred to as invisible power). A survey on women and violence conducted by the World Health Organization in partnership with the Cambodian Government in 2014 found that half of all women believe it is appropriate for a husband to hit his wife (Fulu, 2014). Additionally, 21% of women who have ever been in a relationship admit to experiencing severe physical or sexual violence (Fulu, 2014). These data are emphasized in rural areas where 22.5% of women experienced severe sexual and physical abuse

compared to 15.5% of urban women (where severity was rated based on the likelihood of resulting injury) (Fulu, 2014).

To summarize, substantial evidence indicates that the underlying drivers of sex trafficking of Khmer women from rural areas include:

- 1) Disrespect for women's bodies and capabilities
 - a) External and internal normalization of sexually based violence
 - b) Lack of economic opportunity for rural women
 - i) Girls have unequal access to education
 - ii) Agricultural labor of women is considered domestic work and often unpaid
 - iii) Internalization of inferior capabilities/invisible power

Indicators-

Due to the sub-surface level operation of trafficking, indicators of rural women abduction can be arduous to reveal fully. Insight to these drivers concludes that the most accurate indicator may be rural to urban migration of girls and unmarried women. Reports illustrate that of all internal migration, only 24.5% is from rural to urban areas (Open Development, 2015). Most of these cases are in women relocating for work. One study showed that 43% of workers in a garment factory in Phnom Penh migrated from rural areas in search of work (Takei, Sakamoto, and Kim, 2013). Additionally, migration of this same demographic of women to other countries, specifically China or Thailand, may indicate trafficking.

Women's Empowerment Connection:

As consistently mentioned, research on the effective mitigation of sex trafficking within Cambodia is scarce due to corrupt or incomplete data. The primary visible driver has routinely been identified as a lack of economic opportunity for rural women; however, the underlying cause of this lack of opportunity is the systematic devaluation of their bodies and minds. This disrespect arose from imperial involvement in the Indochina Wars and the Khmer Rouge, which rationalized the sexual objectification of women, the devaluation of their labor, and the violence imparted on them. The societal internalization of these normalizations has enabled: 1. high rates of sexual and non-sexual domestic abuse in rural areas, 2. lower rates of education among girls in rural areas, thereby decreasing non-agricultural employment opportunities, and 3. the perception that women farmers are domestic laborers, thereby negating the possibility of receiving resources like subsidized fertilizer and seeds.

To deconstruct the internalized devaluation, all local system actors must form respect for both women's minds and bodies. Functionally, Bodily respect is the understanding that each individual has the right to autonomy over their own body and that no other individual has the right to physically or sexually harm said body without consent. Although respect and consent are rights that should be afforded to every human being, capitalistic and patriarchal perspectives often complicate this basic expectation. Operationally, the most efficient way to dismantle the falsely contrived power structures implicit in this disrespect is through the destruction of invisible power. Invisible power is a latent form of power which "causes the relatively powerless to internalize and accept their condition," (Green, 2018). This addendum is not to say sufficient protections need not be in place to facilitate destabilization of patriarchal power structures or to blame potential victims of this structure. Instead, it is stated to highlight that change must start within the individual. This change ideology is called empowerment and is defined by the deconstruction of societal oppression

of one's autonomy and the elevation of self-confidence and decision-making ability (Volker & Doneys, 2020).

Ethical and Effective Khmer Women's Empowerment TOC Construction Methodology:

Recognition of the underlying drivers promoting the supply of rural Khmer women warrants the production of an empowerment framework to subvert their existence. Esurance of both morality and practicality in constructing this research's proposed change rationale from a foreign-academic perspective relies on analyzing and considering various effective change models from feminist and sustainable development experts. Experts and theories most instrumental are summarized.

Amartya Sen:

Amartya Sen is often referenced for his work in Welfare Economics and his attention to differential qualities of life across cultures. He frequently condemns modern development theory, which inextricably links development to economics (Sen, 1988). In one instance, he says, "the valuation functions accepted by different people differ from each other, and (2) the process of change involved in development alters the valuations of the people involved," (Sen, 1988). Sen highlights the potentially detrimental effects of equating increased income with quality of life as it may be incorrect and alter the perception of those involved, which is inherently imperial. Before constructing this model, research on the empowerment perspectives of rural Khmer women must be investigated.

Systems-Based Approach to Change:

The Systems-Based Approach to change by Duncan Green emphasizes the importance of recognizing the world as a system, both biotic and abiotic. A system is not linear; it evolves over

space and time through connections and perceptions of the past, present, and future predictions (Green, 2018). To effectively function within a system, Green highlights four criteria which are the guiding principle of the proposed framework:

1. Reflexivity or becoming conscious of one's role, prejudices, and power relative to a system
2. Curiosity or studying history and how it constructs context that influences a system
3. Multiple Perspectives or the inclusion of various perspectives, unusual suspects, and remaining open to different ways of thinking
4. Humility or embracing uncertainty and ambiguity (Green, 2018)

Green also discusses explicit and latent power structures that undermine development. The invisible power he delineates substantiates empowerment models which encourage self-confidence among rural women. Recognition of these power structures is at the forefront of this proposal.

Cornwall Participation Theory:

Andrea Cornwall is one of the most prominent development anthropologists focusing on issues of gender equality and women's empowerment. She questions the morality of women's empowerment programs which often place additional burdens on women experiencing extreme time poverty, while also emphasizing the need for women to sublimate from users and choosers to makers and shapers (Cornwall, 2001). Simultaneously achieving both empowerment objectives requires the employment of transformative participation models. Contrary to nominal or instrumental participation frameworks, which boast women's engagement for superficial purposes, transformative participation intentionally limits the influence of implementers to increase the agency of its participants. Adherence to transformative participation methodology mandates the priority of rural Khmer women's empowerment perspectives and intervention ideologies, especially if they differ from implementing agency objectives or definitions.

Impact Evaluations and Theory of Change:

Impact Evaluations are assessments that discern the impact of an implementation based on outcomes. Their application is a driving force behind securing funding for successful interventions. Innate to their structure is both a control group and a causal theory of change. A theory of change is defined as "a description of how an intervention is supposed to deliver the desired results. It describes the causal logic of how and why a particular program, program modality, or design innovation will reach its intended outcomes," (Gertler, 2016). This method is used to construct the implementation procedure to increase its eligibility for government and non-governmental funding.

Albeit the Systems-Based Approach and Impact Evaluations appear to be in direct contrast with one another (one is causal and the other defies causality) and are rarely placed in conversation, each is necessary to construct and maintain sustainable, transformative change. Alone, each has shortcomings that limit its potential impact. However, when overlaid, the systems-based approach becomes more affordable, and the theory of change becomes more ethical.

Summary of Empowerment Transformative Change Methodology:

The culmination of exploration into ethical and effective transformative change within empowerment frameworks mandates robust inspection of local definitions of women's empowerment, analysis of past interventions, identification of current framework shortcomings, and environmental restrictions prior to creating an alternative TOC.

III. OBJECTIVE 3: CONSTRUCT THEORY OF CHANGE

Women's Empowerment in Rural Cambodia:

Government:

As one of the only SEA countries with an entire ministry devoted to women's affairs, development experts often regard the Kingdom of Cambodia as boasting some of the most proactive gender-inclusive policies in Southeast Asia (Yang, 2016). MOWA's creation in 1991 was influenced mainly by UN oversight in the nation and has since been heavily focused on top-down gender mainstreaming policies in accordance with UN guidelines (Ministry of Women's Affairs, 2014). Despite the global ubiquity of the buzz phrase, 'women's empowerment,' the RCG, outside of the Ministry of Women's Affairs, prefers to utilize the UN SDG 'Gender Equity' to discuss matters of elevating women within society. The RGC claims this term is better understood by citizens who may otherwise interpret women's empowerment as the disempowerment of men (Ashman et al., 2014). Regardless of the progression of women's empowerment to gender equity, this semantic difference may explain why most of Cambodia's efforts have been composed of laws and board construction in line with the UN-approved SDG rather than program implementation that inherently empowers women.

Rural Women:

Although international agencies such as the UN and IFPRI assess empowerment based on standardized Women's Empowerment (WEI) and Women's Empowerment in Agriculture Indices (WEAI), criteria for women's empowerment are most important as defined by rural women themselves. One study which assessed women's empowerment in agriculture and the associated nutrition outcomes of 1,633 rural Khmer women found that their average satisfaction with leisure time was 6.34/10 when they worked an average of 9 hours a day. This labor was split almost evenly between reproductive and agricultural labor. With this in mind, it does not seem ethical to add more to the workload of rural women in Cambodia. However, another study that analyzed the outcomes and satisfaction of women across various empowerment projects and through participation theory

recommended by Cornwall found that women had significant increases to empowerment and well-being through income generation, knowledge of their rights, and belonging to a group. The community aspect of belonging to a group was frequently noted as the most positive determinant elevating empowerment and well-being.

Selection Basis for Past Program Examination:

This research evaluates government and NGO interventions in acknowledgment of the definition of, and criteria for, women's empowerment extrapolated from statements by rural Khmer women in previous interventions. Selected literature includes those that attempt to increase women's economic opportunities due to education and resource access, increase empowerment outcomes based on income and community participation, and decrease gender-based violence.

Evaluation of Past Implementations:

Neary Rattanak IV (2014-2018):

The Neary Rattanak IV is a strategic plan created by the Ministry of Women in Cambodia in response to previous gender parity initiatives named the Rectangular Plan. Neary Rattanak IV has the objective to: "empower women in the economy, education, attitude change, and public leadership, to combat gender-based violence, trafficking, and sexual exploitation, and to further mainstream gender in policies and programs across all sectors of government (MOWA, 2013). Despite noting its emphasis on evaluating the impact of each program, MOWA has yet to release a cohesive report on its findings. In light of this, relevant implementations in Neary Rattanak IV are placed in conversation with MOWA's country report submitted in 2020 in celebration of the 25th anniversary of the Beijing Declaration and Platform for Action. Neary Rattanak IV highlights four thematic areas in its objectives, these include:

1. Economic Growth with a focus on Women's Economic Empowerment,

2. Access to Social Services and Protection with a focus on 2.1) Education of Women and Girls, and Behavioral Change, 2.2) Health, HIV and Nutrition of Women and Girls, and 2.3) Legal Protection for Women and Girls,
3. Cross-Cutting issues with a focus on 3.1) Women in Public Decision-Making and Politics; Gender Responsive Government Policies and Reform Programmes and 3.2) Gender and Climate Change, Green Growth and Disaster Risk Management, and
4. Institutional Strengthening,” (MOWA, 2013).

Each theme received a budget of \$31,000,000 for the years 2014-2018, and MOWA notes its annual budget has increased annually by 5% (MOWA, 2020). Within these themes, MOWA, through the initial policy brief of Neary Rattanak IV, pledged to pivot from projects to programs and high-level strategic policy advisory (Ministry of Women Affairs, 2014). The official strategy plan even outlined the channels and interventions to construct program-based approaches. Nevertheless, despite these aspirational goals, Neary Rattanak IV failed to deliver cohesive programming and transformational impacts. Instead, it focused on media campaigns and top-level policy action (MOWA, 2020). In its country report, MOWA notes that the top areas of improvement in the last five years (the entirety of Neary Rattanak IV) were in retrieving surveys for baseline data and gender-based data processing (MOWA, 2020). When commenting on the efficacy of their activities, MOWA rarely used quantitative data; instead, they pivot to project what they will do. In instances where statistics were shared, specifically in the case of domestic and gender-based violence, MOWA admitted that 45% of women experience domestic violence in some form, a decrease from 50%, and cited the need for improvement (MOWA, 2020). MOWA also reflected on the pronounced prevalence of violence and inequality in rural areas.

Strategy Analysis and MOWA Criticism-

As illustrated by Neary Rattanak IV, Cambodia has aspirational plans to combat issues of gender parity and utilizes law and policy as a strategy to enact change. Unfortunately, the imposed legislature is rarely enforced, and citizens are uneducated on these new laws, especially in rural areas. Their effort to educate citizens merely includes advertisements on radio and television programs combined with a national day against gender-based violence (December 12) (MOWA, 2020). Additionally, the generalization of rhetoric in these policies also complicates their effect as specific interventions do not highlight those most vulnerable. Further, a lack of published specific data on the outcomes complicates the assessment of these interventions. MOWA has a reputation of frequently overstating its impact with its intended impact in its briefings, as depicted in these two pieces. Whatsoever, historically, MOWA's top-down attempts at mainstreaming gender equity and women's empowerment often focus on providing information to ministries rather than educating leaders. In part, this is due to the MOWA's responsibility to address all gender-related issues and is stated as an action item in the upcoming Neary Rattanak V. Without full integration of gender equality initiatives throughout each government ministry, women's empowerment and equality remains a women's issue and not a Cambodian issue. In the context of the theory of change proposed by this paper, this review highlights the need for programmatic approaches and established channels for access and education of policies, specifically for rural women.

Seeing Empowerment as Relational: Doneys et al. (2020)-

This study was conducted in 2018, following Neary Rattanak IV, and assessed the effect of various women's empowerment projects on the participant's perception of empowerment. These projects were carried out by NGOs considering Neary Rattanak IV and the National Action Plan to Prevent Violence (2014-2018). The authors interviewed 120 rural individuals, 78 women, and 42 men, on their experience with and perceived outcomes of the empowerment programs. Researchers

also conducted 27 key informant interviews with NGO workers and management-level employees from six different organizations. For the scope of this analysis, results from projects intended to increase income, decrease gender-based violence and increase confidence and community participation will be included below.

Table One: Empowerment Outcomes of Doneys et al. Study

| Project Input | <u>Education on Legal Rights Regarding Violence and Gender Equity</u> | <u>Technical Training and Educations</u> | <u>Access to Resources (many of these projects are paired with education)</u> |
|-------------------------------------|---|--|---|
| Impact Stated by Woman/Women | <p>"Men can't use violence against me because I know clearly about the law. If we can't come to an agreement, I will call the lawyer to help ... I know the regulations, and I am not afraid."</p> <p>"Since I joined the project, my husband sees me in a different way compared with before. He said that I am more knowledgeable because before I didn't know how to talk. But, since I learned about domestic violence, I am able to tell him about what I understood."</p> <p>"I joined meetings and training that made me understand that domestic violence does not benefit us; it only ruins us. And it affects the feelings of the children very much"</p> | <p>"Now I have rights in speaking with my husband when we make any decision. In the past, when I spoke he did not listen to me. When he spoke about something, I did not have the right to speak ... Now, he follows me when I explain the reason to him."</p> <p>"Since I joined I can earn a good income so that I can support my kids with their studies ... my kids are happy when I can earn money because of that reason. When I can sell well, I always give my youngest two daughters each US \$2.50 and even sometimes up to US\$5 so that they can spend this money toward their studies."</p> <p>"Since I joined the project, my savings have been increasing ... I have changed since joining because I gained knowledge and I can grow vegetables for my own consumption".</p> <p>"People in the village admire us [project participants] when they see we can sell a lot to the project. We can earn 300 thousand riel a month."</p> | <p>"We can expand our markets – besides buying machines and fertilizer, we can expand our farming activities by selling agricultural supplies and seeds while buying vegetables from our group members to sell to outsiders."</p> |

| | | | |
|------------------------------------|--|--|--|
| <p>Impact Stated by Men</p> | <p>"Before and after joining this organization, my wife now seems to have become more confident and independent. She has made a lot of important decisions. There are a lot of changes in her for a good reason. This is the result of her increased income."</p> | <p>"I have seen how through these years my wife has grown in herself with confidence in her work."</p> | |
| <p>Impact by Community</p> | <p>"So, it means they have power now. And the local authorities respect them. I mean that before, when they spoke, their words were seen as valueless ... Last time, when they went to claim [the community's need for] water and electricity connections no one would listen to them. Now, they are empowered and they have water, electricity and a road."</p> | <p>"When I joined community meetings, they taught me about health care and the environment, and I feel that I gained more knowledge. When I acquire knowledge like that, the community leader always calls me for help when she has any activities. If I were not knowledgeable, she would not come to me. She always calls me to help her."</p> | |
| <p>Outcomes</p> | <p>Decreased gender-based violence Increased income Increased respect by men and community Increased self-esteem/decreased invisible power</p> | <p>Increased income Increased decision making Increased self-esteem/decreased invisible power Increased respect by men and community Increased education for children Increased diet diversity/nutrition</p> | <p>Increased income Increased diet diversity/ nutrition</p> |

Analysis of Study Doneys et al.-

The Doneys et al. study provides promising potential outcomes for empowerment programs implemented based around the loosely defined objectives of the Neary Rattanak IV and National Action Plan to Prevent Violence Against Women. The NGOs that implemented these programs highlighted the experiences of rural women and revealed that the most positive effects arose with those centered around training and education. The increase in income alone revealed positive effects for women's self-esteem and respect from all community members. Additionally, women cited the status of being part of an organization that facilitated these respects. Although promising, this study primarily incorporated middle-aged and married women who are not the primary demographic of women at risk for trafficking.

Summary of Previous Implementation Efforts: Successes and Opportunities:

Successes:

Community-specific programmatic implementations that target women's empowerment from a bottom-up perspective revealed the most profound results in destabilizing latent and invisible power structures. Historical power structure education and discussion of GBV laws among groups of both men and women in rural communities proved to be instrumental in bodily autonomy improvements. Agricultural education and knowledge attainment illustrated through income increases further elevated women's empowerment through self-confidence and community recognition. Additionally, RGC funding allocation negated the risk of cultural imperialism and foreign paternalism. The collection of baseline data prior to the RCG's interventions also provided clear data and evaluation potential.

Shortcomings:

Top-down, non-community-specific approaches do not consider those most vulnerable. Information does not equitably trickle down due to incomplete dissemination channels in rural communities where women frequently lack access to televisions, or personal phones and radios (WiP Cambodia Case Study). For efforts to be transformative, they must be created within the confines of current environmental restrictions.

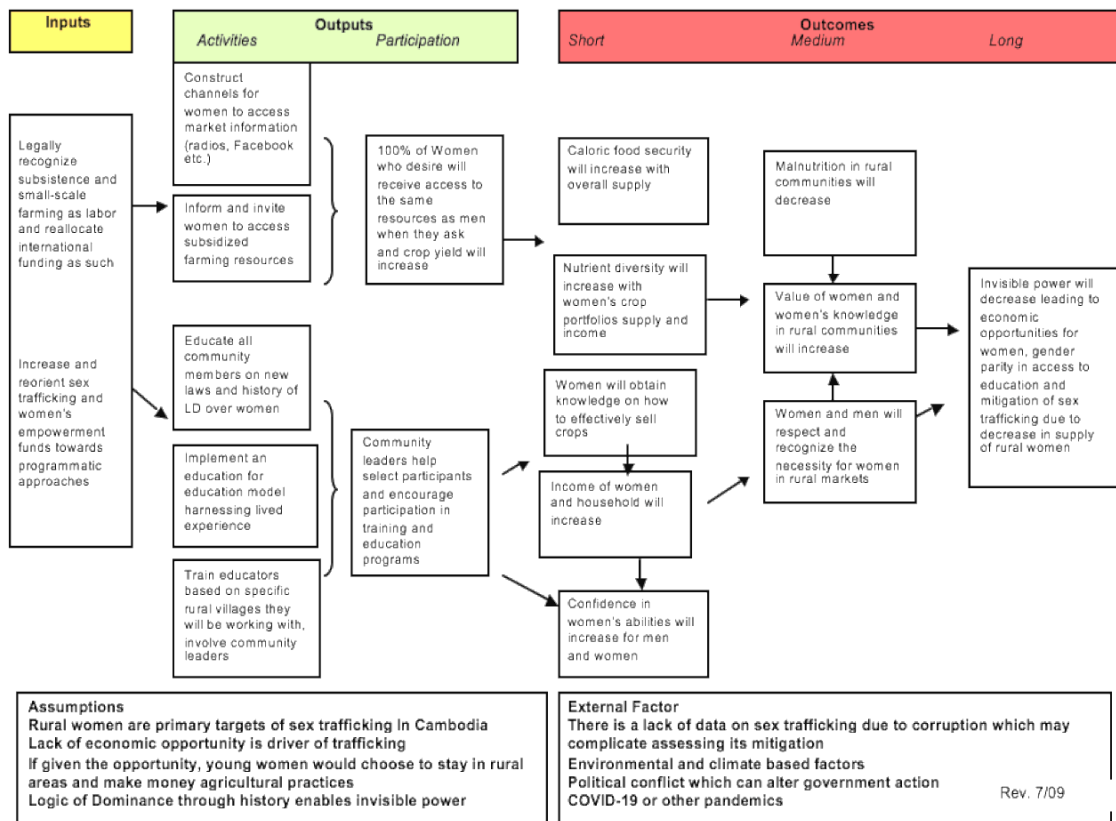
Remaining Restrictions:

Primary environmental restrictions, which may be intractable prior to the implementation of the proposed Sex Trafficking Mitigation Theory of Change, revolve around the RGC's extrapolated funding criteria. The RGC's funding allocation to support proposed implementation efforts is predicated upon verifiable results adhering to its explicit and implicit motives. Fixation on gender mainstreaming rather than women's empowerment and top-down policy creation reveals that the extent of RGC empowerment efforts hinge on nominal participation. Whatsmore, the lack of gender policy integration in ministries beyond MOWA suggests a lack of dedication to gender parity and insufficient recognition of its feedback multiplicity. The RGC currently bases each of its development initiatives on the UN's global SDG and prioritizes the UN's assessment of its compliance. The UN's high ranking of RKC relative to other SEA countries based on its nominal policies appears to have stagnated more comprehensive gender parity programming. The RGC's complacency enables the drivers of sex trafficking from the region and its oversight of women's empowerment relevancy to current malnutrition and sustainable agriculture initiatives. To achieve its sustainable development goals and capitulate its Tier Two Trafficking Status, RGC must recognize the pivotal role of women's empowerment programming.

Comprehensive impact evaluations on the first iteration of the proposed programming with particular attention to its SROI may shift these restrictions. However, the initial

interventions must abide by RGC’s criteria to ensure pragmatic functionality. The logic model that operationalizes this TOC is presented below:

Figure Two: Rural Cambodia Sex Trafficking Mitigation Theory of Change Logic Model:



IV. OBJECTIVE FOUR: DISCUSS PROPOSED THEORY OF CHANGE

A theory of change is organized by a logical progression chart that represents inputs, predicted outputs, and outcomes. Analysis of past empowerment implementations shows success at

the individual and community levels in those targeting women in groups at the village level and providing education on legal GBV rights, technical training, and access to resources. Autonomous income generation was the most impactfully stated outcome. Legal mandates also revealed marginal decreases in GBV. Despite ineffective change methodology, interventions by MOWA retained the advantage of receiving stable and increasing fund allocation from the RCG while negating the potential for paternalistic interventions by foreign agencies. Shortcomings occurred with policy-level interventions and inadequate dissemination of these policies to rural communities. Based on this evaluation, the following theory of change was constructed to mimic successful intervention methods as well as correct shortcomings:

Inputs:

The primary outputs of the overarching Theory of Change to Mitigate Sex Trafficking Supply of Rural Khmer Women were selected in consideration of the RGC's inclination towards top-level policy implementations. Inputs are typically the resources available and utilized to implement a strategy. The RCG rarely releases financial records on its implementations within foreign public domains; thus, exact funds will be decided by foreign aid agencies through ODA stipulations or by the RCG on Approval. If the RCG elects not to move forward with this proposal prior to impact evaluation of its internal programming, precise financial calculations will be formulated in subsequent stages. Thus, listed inputs are merely defined as funds and their intended purpose.

Input 1: Legally recognize subsistence and small-scale farming by women as labor and reallocate international funds as such

Input 2: Increase and reorient sex trafficking and women's empowerment funds towards programmatic approaches

Outputs:

Outputs are a combination of activities generated by the program and outputs of participants.

Activities:

Input 1 -

1. Construct channels to inform women of market prices (radios, sign postings, Facebook, etc.)
2. Inform and invite women to access subsidized agricultural resources (seeds, fertilizer, equipment, etc.)

Input 2-

1. Educate all community members on new laws and the history of invisible and authoritative power over women
2. Implement an Education for Education model harnessing lived experience
3. Train educators based on specific rural villages they will be working with and involve community leaders

Participation:

Beneficiary and associated stakeholder engagement is critical in successful, transformational implementation and is thus illustrated below as intended.

Input 1 -

1. 100% of Women who desire will receive access to the same resources as men when they ask and produce higher crop yields

Input 2 -

1. Community leaders help select participants and encourage participation in training and education programs resulting in more women and men may receive training and education.

Outcomes:

Outcomes are a critical piece of programming that is often overlooked due to difficulty in numerical assessment. Outputs are habitually listed as outcomes in impact statements by NGOs and governments to give the impression of high impact, leading to nominal change rather than transformational change (Cornwall, 2000). Outcomes are divided into short-, medium- and long-term categories. The Potential outcomes identified are not mutually exclusive nor collectively exhaustive and highlight positive women's empowerment outcomes on nutrition and the local economy to provide further incentive to the RGC.

Short-Term-

Input 1-

- i. Caloric food security will increase with the overall supply
- ii. Nutrient diversity will increase with women's crop portfolios supply and income

Input 2-

- i. Women will obtain knowledge on how to sell crops effectively
- ii. Sales knowledge leads to an increase in income for the women and the household at large
- iii. Confidence in women's abilities will increase for both women and men

Medium-Term-

Input 1-

- i. Malnutrition in rural communities will decrease

Input 1 & 2-

- i. Value of women and women's knowledge in rural communities will increase

Input 2 -

- i. Women and men will respect and recognize the necessity for women in rural markets.

Long-Term-

- i. Girls will have equal access to education and nutrition as boys
- ii. There will be mitigation of sex trafficking due to a decrease in the supply of rural women
- iii. The Cambodian Government will recognize the efficacy of this program and allocate more funds to its continuation

Assumptions and External Factors:

To properly and fairly interpret the outcomes of any implementation, the underlying assumptions and external factors must be stated for further analysis in the event expected outcomes are not realized due to an undetermined factor. The primary assumption for creating this theory of change is that it will be reviewed and edited by community stakeholders to assure its community-specific validity and morality. Within the logic of the model, the following assumptions were made:

Assumptions-

- i. Visible and invisible power structures opposing Khmer women underlie supply drivers of sex trafficking from rural Cambodia
- ii. Rural women are primary targets of sex trafficking in Cambodia
- iii. Lack of economic opportunity for women is a primary visible driver
- iv. Given the opportunity, young women would elect to pursue agricultural careers in rural areas

External Factors-

- i. There is a lack of data on sex trafficking due to corruption which may complicate assessing its mitigation
- ii. Environmental and climate-based factors may impact crop yields and potential crop varieties
- iii. Political conflict may arise and alter government action
- iv. COVID-19 or another pandemic may arise and alter specific variables

Education-for-Education Model in Depth:

Logic Model Nutrition Integration:

The RGC's illustrated posteriority in women's empowerment efforts and its commitment to nominal participation pilots the need for an impact evaluation based on quantitative outcomes within an alternative SDG to incentivize its action. Widely publicized UN entity assessment of Cambodia's progress towards the 'No Hunger' SDG maintains that the RGC is 'off course' for achieving its nutrition goals (Global Nutrition report, 2020). 36% of Cambodian children are impacted by stunting and nutrient deficiency; this statistic is exacerbated in rural regions (FAO et al., 2017; Wieringa et al., 2016). One of the primary nutrition concerns within Cambodia is the rate of Anemia. 46.8% of women aged 15-49 are affected by Anemia (FAO et al., 2017; Wieringa et al., 2016). Not only does this affect their health, but also the health of their potential children. Women of reproductive ages are at higher risk for Anemia due to menstruation. Additionally, Anemia strongly correlates with stunting in children and breastfeeding infants (Malako, 2018). Studies of diets in rural areas show iron intake in women and children; school-age included only meets less than half of recommended daily intake (Komatsu et al. 2018).

Contrary to its nominal participation methods in gender equity, the RGC employs instrumental participation models to address 'No Hunger' goals. These efforts dictate community involvement to drive cost-effectiveness and frequently revolve around nutrition-specific implementations, such as nutrient supplementation and staple crop intensification (AVKO, 2021; USAID, 2020; OECD, 2016; Olney et al., 2013). Nutrition-specific interventions fail to acknowledge the multiplicity of factors influencing food security and food sovereignty issues in Cambodia, thus targeting symptom alleviation rather than causal cures. Gender inequality is both a symptom and

promotor of food insecurity in Cambodia, indicated by correlations in mother's income and child stunting as well as disproportionate anemia rates, among others.

Various linkages between gender inequity and child undernutrition constantly compound to undermine the quality of health and autonomy across generations. However, these linkages can also operate in the inverse. A cross-analysis of studies among rural women in Cambodia illustrates that when women receive training on sustainable agricultural practices and animal husbandry, their income increases significantly (Doneys, 2020). Income increases are often associated with higher decision-making ability in a household and reduced domestic violence due to increased respect by partners and community members (Doneys, 2020). Women who have access to their own income consistently report greater self-esteem and spend their money on children's education (Doneys, 2020) and more diverse diets (Sumner et al., 2016). High decision-making ability concerning income is strongly associated with exclusive breastfeeding and compliance to Infant and Young Child Feeding Practices (Quisumbing, 2020), which are proven to increase childhood nutrition and mitigate stunting. Whatsmore, increases in decision-making ability also correlate with higher Height-for-Age Z scores (HAZ) and Weight-for-Age Z scores (WAZ) in children, especially among girls (Quisumbing, 2020).

Historic funding allocations reveal that the RCG supports programs which 1. Target goals highlighted and assessed by the UN and foreign governments 2. Provide evidence of high ROI extrapolated from quantitative data collection. Analysis across comparative UN assessments of Cambodia's progress towards 'Gender Equality' versus 'No Hunger' predict the RCG's preference in supporting programs that highlight clear nutrition outcomes regarding child anthropometric measures and incidences of Anemia. For this reason, in tandem with the identified nutrition and

gender equity pathway, nutrition insights are integrated within the Education-For-Education logic model.

Figure Three: Education-For-Education Logic Model:

Pre-phase:

In the Pre-Phase, community leaders will be identified and asked to participate. The E4E program proposal will be presented to Potential NGO and ODA agency funders, and baseline nutrition and empowerment statistics will be collected. Implementation and counterfactual villages will also be determined based on random selection. If funding is constrained at this phase, the pool of potential villages will be limited to those with existing and current baseline data.

Once identified, leaders from the implementation villages will be invited to help construct the functional E4E DMF.

Phase 1:

In the first phase, all community members will receive education on the historical basis for gender inequality and the current laws and judicial systems in place to protect women's rights. Women participants, based on identified criteria, will also be selected with the aid of community leaders. These women will receive training on nutrition-based agriculture practices specific to their area and land accessibility. Understanding that most women only have access to small plots, these training will be based on varieties that are high in nutrition and do not have high space requirements.

One example may be Cha-om, a fast-growing shrub high in beta-carotene (Duke, 2018). Sustainable practices such as multi-cropping will also be addressed. Potential crops include Chinese Cauliflower, lettuce, and gourds (Eam, 2017). For communities with infertile land or in cases where women do not have access to land, training in animal husbandry will be held. If funding allows, all women will receive training and resources for animal husbandry, which habitually results in high economic returns and significantly increased iron intake, whose deficiency is the primary driver of anemia and related afflictions. In combination with these lessons, the training sessions will also be an open forum for brainstorming methods and technologies to further increase efficiency, given a community's limitations. The final component of these training sessions will be accessing the local market and selling surpluses for profit.

The predicted short-term outcomes for these training and their application are increased caloric intake, increased knowledge, increased income from selling surpluses and increased nutrition due to more diverse diets, and increased income from sales. The middle-term projected outcomes based on the short-term predictions include a decrease in undernutrition in the community, increased value of women's knowledge, respect for women's capabilities, and increased girls' education due to increased income. The primary long-term outcomes this model targets are the dismantling of invisible power restricting women to allow for additional gender parity and nutrition outcomes such as decreased afflictions from undernutrition, equal access to education, and increased economic opportunities for rural women. Women report the highest empowerment outcomes from being part of a group. Due to the observation that Khmer women place the greatest empowerment value and satisfaction in being part of a group (Doneys, 2020), emphasis on cohorts has been expressed throughout this model.

Phase 2:

In the second phase, program implementers will help organize training sessions for men in the community. Men will be selected based on interest and aid from community leaders. Women who complete the first phase of the program will lead these sessions based on their trained knowledge and experience. This position of relative power will increase self and community confidence in women's abilities and lead to greater respect and the situation of women as trusted community members. Alongside empowerment and increased nutrition benefits, relaying information by women in the community would decrease the expenses required by government officials. Instead of entering these communities individually and performing training sessions, experts would lead sessions to teach women from various communities and then grant them the ability to bring the information back to their various communities. Especially in rural areas where transportation is limited, this would significantly increase the time and energy efficiency of enacting training.

Phase 3:

The final phase of the program will occur after the training sessions for men are completed. In this phase, women participants are provided the opportunity to attend secondary education or tertiary education at a heavily subsidized rate or receive equivalent subsidies in agricultural/animal husbandry inputs (fertilizer, seeds, animals, or even land). The opportunity for foundational education outside of farming education is essential for these women to participate in community decisions and transition industries if desired.

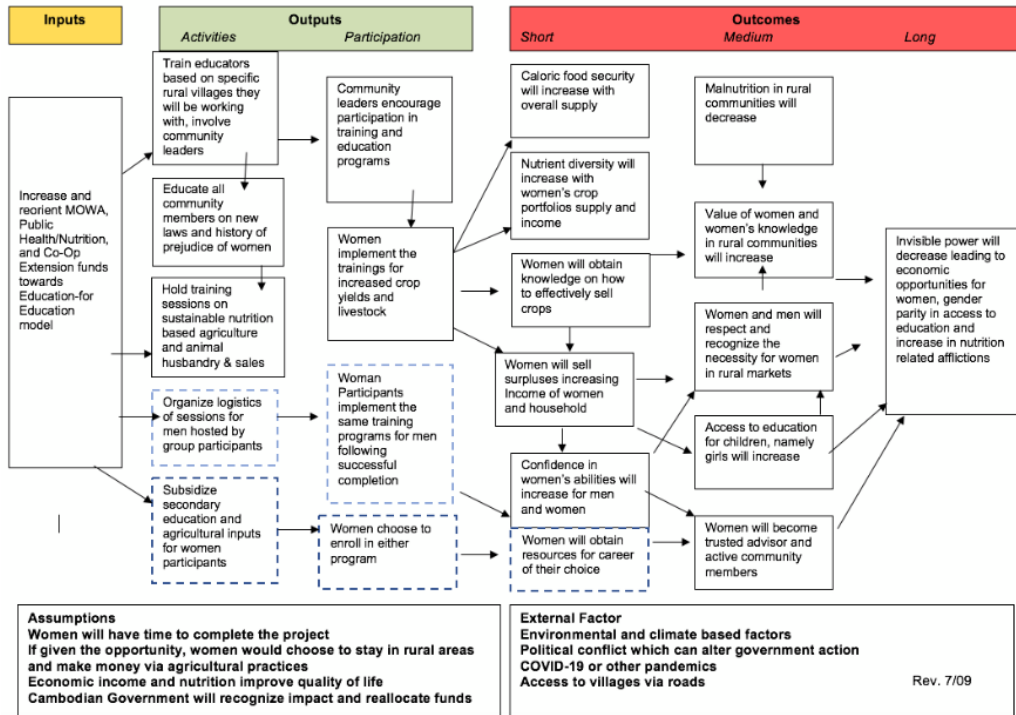
Compensation methods and the exact logistics of this Education-for-Education model would differ in various communities within Cambodia based on varying cultural aspects of a

community. However, the government must realize that by using rural women as leaders to distribute their knowledge acquired by the training sessions, they significantly decrease their costs at every level. The government would spend less money educating communities for efficiency initiatives, less money on food insecurity programs and other social programs resulting from food insecurity (e.g., health programs for micronutrient-related issues), and less money on energy and water use due to the multiplication of more sustainable methods. Ultimately, the self-sufficiency of these rural communities benefits the overall country's economy and should be invested in equitably through reallocation of the money saved by its implementation.

Post-Phase:

The intended impacts of the Education-For-Education model are dual faceted: 1. Effectively empower rural Khmer women and elevate community nutrition and economic status 2. Secure, reliable funding from the RGC to expand on these impacts and increase self-reliance. The second impact prong relies on E4E's successful implementation and the construction of an objective impact evaluation highlighting the program's SROI. Independent impact evaluation consultants must be hired in the post-phase to assess the outcomes outlined in the DMF.

Figure 3 Education-For-Education Model Logic Model:



V. OBJECTIVE FIVE: ASSESS POTENTIAL IMPACT OF EDUCATION-FOR-EDUCATION MODEL

Evaluation of Past Home Garden Interventions to Assess Potential Impact of E4E Model:

Successful implementation of the Education-For-Education Model is paramount in the overall success of the Sex Trafficking Supply Mitigation Theory of Change. Not only do the E4E outcomes drive empowerment from a grassroots level, however, they also additionally have the potential to secure domestic funding and national policy change to employ compounding empowerment through a positive feedback loop. These high stakes necessitate the evaluation of similar programs to avoid unintended consequences, uncover specific implementation methods,

approximate necessary inputs and construct a preliminary Education-For-Education Program Proposal DMF.

Criteria for Assessment:

The Education for Education Model is a systems-based programmatic approach to increase nutrition and empowerment outcomes for rural Khmer Women through agro-ecological practices of sustainable agronomy. The Education-for-Education Model's theory of change is nested within a more extensive theory of change to mitigate sex trafficking of Khmer women from rural villages in Cambodia based on the deconstruction of its drivers via women's empowerment across all dimensions. For this reason, the metrics used to assess past interventions will include:

1. Improved nutritional status of women
2. Improved nutritional status of children based on commonly utilized anthropometric evaluations
3. Increased women's empowerment based on self and community confidence of her abilities, especially as they relate to increased decision-making ability and position
4. Potential for policy change

Notes on Sustainability

Notes on Cultural and Local Accuracy

Notes on Time Poverty

Notes on Autonomous Reproducibility

Overview of Homestead Garden Efforts in Cambodia:

Most food security efforts and implementations by the Royal Cambodian Government have revolved around Nutrition-Specific (Black et al., 2013) methodologies which attempt to mitigate

caloric and specific nutrient deficiencies rather than Nutrition-Sensitive (Black et al., 2013). For this reason, nearly all home/nutrition garden and animal husbandry programs have been piloted by international NGOs and foreign governmental aid organizations (Duke, 2018; Doneys et al., 2019; Michaux et al., 2019; OECD, 2016; CIFSRF, 2018). Despite advantages in access to capital and required reporting tied to these organizations, foreign bias, cultural ignorance, and pressure to produce timely, quantifiable results to donors often obscure objective reflections on the outcomes of these organizations. Additionally, foreign-run programs often construct reliance on outside resources, which inherently limit the sovereignty of the communities they interact with and decrease stability with inherent ties to external politics. Longitudinal studies must continue to be conducted to systematically assess the reproducibility and impact of nutrition garden and animal husbandry programs sans foreign implementation and regarding the mitigation of underlying drivers of malnutrition. Although horticulture and livestock cultivation programs are most often based on nutrition-sensitive approaches and tout potential impacts to underlying food security issues and sovereignty, their evaluations tend to focus on nutrition-specific results due to their ease of evidence and recognition garnering facets.

Some of the organizations championing nutrition gardens and animal husbandry programs within rural Cambodia include: World Vegetable Center, Avko Educational Foundation, Canadian International Food Security Fund (CIFSRF), the Food and Agriculture Organization of the UN, Helen Keller International, (HKI) Save the Children, French Development Agency, Action Against Hunger, Agile Development Group and United States Agency for International Development. The research encapsulated herein focuses specific detail on the Enhanced Homestead Food Production Program engineered by HKI due to their overlap with proposed interventions in the Education for Education model and the robustness of extrapolation in their implementation methods and evaluation criteria.

Helen Keller International Associated Programs:

Helen Keller International has existed within the international nutrition and development space for several decades and is currently headquartered in New York City with regional offices in Phnom Penh, Cambodia. In the past, HKI has been accused of invoking the detrimental ideals of charismatic nutrients with Vitamin A supplements and fortification across various countries (Kimura, 2013). These nutrition-specific efforts created cascading negative impacts for sustainable agriculture practices, local cultures, international reliance on private corporations, and the situation of local women as the problem and solution of childhood malnutrition (Kimura, 2013). In acknowledging these organization-specific and the foreign-entity-specific flaws previously discussed, special notes on agricultural sustainability, cultural accuracy, autonomous sustainability and reproducibility, and women's time poverty will be addressed.

The primary criteria for intervention analysis will align with the predicted outcomes of the Education for Education Model to critically examine its potential for success as written. The full breakdown of these assessments is as follows:

1. Improved nutritional status of women
2. Improved nutritional status of children based on commonly utilized anthropometric evaluations: not ideal but necessary
3. Increased women's empowerment based on self and community confidence of her abilities, especially as they relate to increased decision-making ability and position
4. Potential for policy change

Notes on Sustainability

Notes on Cultural and Local Accuracy

Notes on Time Poverty.

Notes on Autonomous Reproducibility

HKI has implemented home horticulture, and livestock cultivation programs in many countries worldwide since 1990, with their most successful outputs realized in Bangladesh (Michaux et al., 2019; CIFSRF, 2018). Two iterations of this program have been implemented within Prey Veng Province in Cambodia, each with an intended timeline of 3 years (the first was cut short due to funding and then reinstated a few months later) (Michaux et al., 2019). The second iteration of this project has been added to the Canadian International Food Security Fund (CIFSRF) portfolio and renamed Family Farms for the Future (FF4F) as a part of their 18 projects Phase 2: Scaling Up food production efforts. CIFSRF has invested 4.4M Canadian dollars in FF4F in partnership with HKI and the University of British Columbia (UBC) and "aims to benefit 135 thousand people directly or indirectly while creating a sustainable legacy" (CIFSRF, 2018). Profiles of the first and second iteration are outlined below.

Homestead Food Production Program- HKI (Michaux et al., 2018)

Timeline: June 2012-July 2014

Implementations: Enhanced homestead food production (EHFP) and behavior change communication (BCC), enhanced homestead food production, BCC and fishponds (EHFP + F), enhanced homestead food production, BCC and chickens (EHFP + C) (very few households received this intervention in the pilot)

Objective: To improve the nutritional status of women and children through crop diversification, increased income, and education on gender, nutrition, and sanitation.

Intended Pathways:

1. *Production-Consumption Pathway*- Increasing the availability of micronutrient-rich foods through increased household production of these foods
2. *Production-Income Pathway*-Income generation through the sale of products from the homestead food production program

3. *Knowledge–adoption Pathway*–Increased knowledge and adoption of optimal nutrition practices, including intake of micronutrient-rich foods

Location: Four districts in Prey Veng Province (Kamchay Mear, Svay Anthor, Me Sang, and Bar Phnom). Prey Veng is a densely populated agriculture and fishing region located in southeastern Cambodia bordering Vietnam and the east bank of the Mekong River.

Sample size: 900 households in 90 villages

Participant Profile: Women 18-45 with at least one child, “poor” based on the Cambodian Ministry of Planning ID Poor classification, “sufficient” land defined by enough space for a 10 × 15-m fishpond and an additional (undefined) small amount of land around the homestead for small-scale plant-based agriculture, (Michaux et al., 2019).

Material Input Provision: All intervention households received basic agricultural inputs, such as seeds, seedlings, farming tools, and irrigation equipment (e.g., water pump and watering can), as required free of cost. Intervention households also received technical agricultural training and support and interpersonal BCC to target nutrition and hygiene practices and gender inequality.

Crops Grown: Fruit and vegetables of an unspecified category on raised beds.

Livestock Raised: Fish and Chickens of an unspecified variety with promotion for egg consumption.

Education Objectives:

1. “Nutrition and Water, Sanitation, and Hygiene education focused on promoting the following practices based on the WHO's Essential Nutrition Actions framework: (a) optimal nutrition for pregnant and lactating women; (b) control and prevention of micronutrient deficiencies and anemia; (c) optimal breastfeeding practices; (d) optimal complementary feeding practices; (e) optimal nutritional care of sick and malnourished children; and (f) essential hygiene actions” (Michaux et al., 2019).
2. "Women's empowerment was addressed using a gender transformative approach adapted from the nurturing connections methodology developed by HKI in Bangladesh. This approach identifies harmful gender norms and tries to change these norms to more positive and equitable practices. Gender messages were integrated into all project training, workshops, and meetings. Men were also included in nutrition training to remind them of the nutrition needs of their children and encourage them to share in childcare tasks with their wives. Regular monthly meetings were held where wives and husbands discussed issues related to gender disparities, especially those around decision-making power and division of labor,” (Michaux et al., 2019).

Method for Education:

Village Model Farm (VMF)

1. VMFs received technical assistance, training, and simple input support from HKI staff and local NGO partners, including seeds, agricultural tools, and fingerlings.
2. VMFs provided a standard number of saplings and seedlings to all households at no cost as part of their cost-sharing contribution to the project.

Village Health Volunteers

1. Received health and nutrition training from HKI
2. Relayed health and nutrition training to beneficiaries at scheduled meetings

Nutritional Outcomes:

The nutrition-specific nutrition analysis by HKI on its first iteration is claimed to be the largest published cluster-randomized controlled trial of an integrated small-scale agriculture and polyculture program, with multiple measures of maternal and child nutritional status, including Hb concentration, anthropometry, and biochemical measures of micronutrient status (Michaux et al., 2019). Despite rigorous nutrient-specific testing and evaluations on anthropometric measurements and nutrient concentrations obtained through evaluations of blood samples, the first iteration of EHFP and EHFP+F interventions (EHFP+C was not evaluated) found disappointing results regarding intended Anemia outcomes.

The primary intended outcome of the first iteration of the HKI Enhanced Homestead Food Production program as stated by HKI was, "the difference in the mean change in the prevalence of anemia among nonpregnant women and their youngest child 6–59 months randomized to the EHFP or EHFP + F groups relative to control," (Michaux et al., 2019). Although differences in Anemia prevalence among nonpregnant women were not deemed statistically significant, those among children in the EHFP group showed a 14% decrease compared to the control group (65.4% to 52.6%). A 9.74% decrease in Anemia rates among children in the EHFP+F group (63.1% to 54.3%) was also observed and deemed marginally although not deemed statistically significant (The control observed a 0.3% increase in rates) (Michaux et al., 2019). Similarly, Hb concentration for children in the EHFP and EHFP+F groups illustrated a 2.43 g/L and 2.54 g/L increase but could not be verified as statistically significant (Michaux et al., 2019).

Secondary intended outcomes of the study on the first intervention of HKI's EHFP program are outlined as "(a) the difference in the mean change of RBP, serum ferritin, sTfR, AGP, and CRP concentrations among nonpregnant women; (b) the adjusted mean difference in zinc concentrations among nonpregnant women at 22 months; and (c) the difference in the change in the proportion of underweight nonpregnant women, and stunted, wasted, and underweight children," (Michaux et al., 2019). Nevertheless, due to HKI's failure to capture baseline data on zinc concentration, the impact of differences in Zinc concentration in nonpregnant women cannot be assessed. As for Vitamin A and Iron indicators, only differences in RBP concentrations were observed.

Low Retinol Binding Protein blood concentrations, or RBP, are clinically indicative of Vitamin A deficiency (VAD). Despite a noted low existence among nonpregnant women, the EHFP+F showed a statistically significant increased mean ratio and total mean of RBP as compared to the control and no observed difference among the EHFP group. Total RBP concentrations among nonpregnant women in the control group dropped a considerable amount (Michaux et al., 2019). This result indicates that the presence of fish in women's diets had positive effects on bioavailable Vitamin A.

No statistically significant impact on Hb concentration or Anemia rates from the baseline to 22 months among nonpregnant women was observed between the intervention groups and the control. Additionally, after comparing anthropometric indicators for nutrition status among women and children, there was no statistically significant impact on underweight nonpregnant women or stunting, wasting, and underweight children (Michaux et al., 2019). There was an observed difference in each of these control comparisons showing a decrease in each. Yet, the statistical analysis did not provide a low enough p-value to be deemed significant. HKI predicts that both the insufficient

number of assessed children and age of the children assessed accounts for the lack of significance among children's groups as the average age at baseline was 24 months and thus passed the critical growth period within the first year of the intervention (Michaux et al., 2019).

An evaluation from objective researchers at the International Food Policy Research Institute highlighted the food security impacts of the EHFP and EHFP+C from this first intervention as well. Nearly all beneficiaries report an increase in accessibility and availability of vegetables with the provision of inputs and trainings. One states, "Vegetable production has increased due to the homestead food production program because now I have a garden and fencing since joining the program. I didn't grow vegetables in the past, but now I grow vegetables and we can have them to eat," (Olney et al., 2013). The absence of the program to state the quantity and variety of vegetables cultivated limits the ability to assess intervention impact on nutritional status and nutrient security at large. Home gardeners experienced fewer impacts on food security in relation to fruits, as did EHFP+C recipients. The lack of impact on fruit production was primarily due to the immaturity of the saplings received, which had not begun to produce fruit. Those who received chick inputs experienced similar functionality errors as chicks were often petite and had high mortality rates prior to egg production (Olney et al., 2013). A separate unanticipated obstacle for poultry production was the desire not to consume eggs despite high consumption promotion due to the fear an egg may already be fertilized and the associated opportunity cost of consuming an egg before chick maturation. One woman stated, "I don't eat chicken eggs because I regret if I eat chicken eggs, I keep them for hatching. I can get benefits from it when I have more chicks. I can sell them and earn more money," (Olney et al., 2013). Cannibalization of impacts such as this highlights lapses in food sovereignty due to the trade of crops and the importance of women's empowerment.

Empowerment Outcomes:

Despite claiming to integrate women's empowerment perspectives into all aspects of education and training, HKI and additional evaluations of the EHFP, EHFP+F, and EHFP+C programs did not assess the impact of the training or the programs themselves on women's empowerment. Analysis of several gender-related outcomes may, however, indicate impacts on empowerment.

Some of the individuals interviewed stated stark discrepancies in the genders of VMFs in attendance at specific training sessions. Male VMFs generally only joined the technical agricultural training while female VMFs participated in all training sessions (Olney et al., 2013). This disparity was diluted amongst home gardeners, albeit in some cases, husbands would participate in nutrition or gender training when their wives were not available and relayed the information. Imperfect male representation at the nutrition meetings, with relation to women, reveals an imbalance in childcare dispersal, but also may indicate malleability in this model with time poverty as men were willing to take on the responsibility when women were unable to. Similarly, food processing/preparation training provided only to those interested was made up entirely of women. This gender imbalance is predicted to be due to the broad perception of food preparation being a woman's task (Olney et al., 2013).

The attrition rate for women, in particular, was found to be over double that of households at large (38.6% as compared to 16.1%) (Michaux et al., 2019). One of the predicted causes for this disparity is temporary employment-related migration for women to obtain higher income opportunities. The necessity of this relocation is indicative of insufficient income related to gender empowerment from the program. Although it should be noted, the increased income is predicted post-harvest, and this implementation did not institute marketing training due to a funding cut.

Many home gardeners expressed a significant increase in knowledge and self-confidence indicative of empowerment from the provided training sessions. One beneficiary noted that she understood well enough to be able not only to implement the practices herself but to teach them to others as well: "I think the session is good, that's why I go. After I attend, I can practice at home because I understand. I think that if the organization stops teaching us, I can teach my children or grandchildren," (Olney et al., 2013). Many other home gardeners expressed similar sentiments regarding the home garden interventions. Without gender-specific comparisons, especially with regard to those in the control villages, it is difficult to assess the full impact of this training on women's empowerment. However, the gender distinction between training sessions attended, and their high regard suggests a positive women's empowerment outcome in relation to self-confidence.

Notes on Income-

Even with outlined incentives for increased income, impacts for the sale of surplus crops were significantly hindered by the absence of market training. HKI intended on providing market training in the last stages of the intervention but was prohibited due to severe funding cuts, which halted the program (Michaux et al., 2019). Many beneficiaries note selling some of their production-related products but were frequently confronted with lower than market prices due to a lack of market information and thus reported preferring to sell to intermediaries for higher prices (Olney et al., 2013). These obstacles are clear evidence of a lack of empowerment. Another access-based disadvantage arises from lack of transportation to markets as many home gardeners lack vehicles, and costs of transporting goods often outweigh the benefit from selling autonomously.

Notes on Sustainability-

The primary constraints on increasing intakes of fruits, vegetables, chickens, and other foods were related to seasonal issues and resource constraints. Although most beneficiaries were able to

obtain vegetables from their gardens during at least part of the year, only half of the beneficiaries who had gardens (17 of 34) were able to maintain year-round gardens (Olney et al., 2013). Aside from heat or flooding, the primary barriers to maintaining a year-round garden included access to water, problems with insects, and lack of seeds.

Notes on Local and Cultural Accuracy-

In order to meet the traditional diets of individuals within the target villages, HKI prioritized fish aquaculture over poultry cultivation. However, based on their nutritional outcomes, they stated that they would not choose to promote fishponds over poultry in future studies (Michaux et al., 2019).

Despite these assertions based on nutrition-specific outcomes, an assessment of iteration one EHFP programs made through interviews with beneficiaries found that participants in the EHFP+C intervention were largely dissatisfied with poultry production. The primary disappointment was with the inadequacy of received inputs. Many individuals reported that the chicks received were small and had high mortality rates. Inevitably this impacted egg production which was also noted as low or, in some cases, non-existent.

Regarding the cultural appropriateness of agricultural education, the VMFs were a helpful tool where home gardeners could experiment with training education hands-on. In this vein, beneficiaries requested more practical demonstrations in training, especially within particularly challenging topics such as chicken raising and organic pest and disease control methods. Home gardeners were overwhelmingly satisfied with the training delivery quality; one notes, "They taught well, they ask questions and let us answer whether we are right or wrong, they explain until we understand. They are polite," (Olney et al., 2013). This implies that the methods of delivery were

well adapted and suited for local customs. Contrasting this, however, is the perspectives of the village health volunteers who did not feel qualified to or motivated to attend or conduct nutrition training. Nutrition trainers reported heavy reliance on HKI facilitators due to this lack of knowledge, and training was not often held without their presence. Additional notes are the lack of monetary incentives and time for the village health volunteers.

Notes on Time Poverty-

Specific details of the perspectives of time poverty on behalf of the women were not discussed with attention to the first iteration (Michaux et al., 2019; Olney et al., 2013).

Notes on Autonomous Reproducibility-

The overall attrition rate for both EHFP and EHFP+F households was higher than anticipated by HKI (16.2%) and did not differ in a statistically significant manner. The attrition rate was doubled when evaluated among women (38.6%) (Michaux et al., 2019), which questions the ability of these programs to exist without foreign intervention. HKI predicts that temporary relocation for increased income opportunities and the lack of choice in intervention assignment may be to blame for this gendered differential. HKI further speculates that the free nature of the inputs may have reduced their participation due to a lack of ownership. Despite this high attrition rate, follow-up surveys have found that many intervention households maintained nutrition gardens and fishponds years after the implementation's completion (CIFSRE, 2018). This may suggest that the program stipulations, but not practices themselves, were the cause.

Family Farms for the Future (FF4F)- CIFSRE & HKI (CIFSRE, 2018):

Timeline: March 2015- June 2018

Implementation: Enhances Homestead Food Production systems with fruit and vegetable propagation, fishponds, and poultry production. Gender Training, Market Training, Agricultural Trainings. Additional chain-specific implementations were provided to hatcheries and Governmental policy discussions.

Objective: Scale-up of Homestead Food Production for improved nutrition in Cambodia

Location: 3 Prey Veng Province (3 districts evaluated in Kampot, Prey Veng, and Kampong Cham). Prey Veng is a densely populated agriculture and fishing region located in southeastern Cambodia bordering Vietnam and the east bank of the Mekong River.

Sample Size: unspecified with intentions to impact 135,000

Participants:

1. Beneficiaries: Men and women
2. VMF: Men and women with fishponds 1,000 m² and chicken coops
3. Satellites: Fish hatcheries and fish nursing ponds

Material Provision: All intervention households received basic agricultural inputs, such as seeds, seedlings, farming tools, and irrigation equipment (e.g., water pump and watering can), as required free of cost. Intervention households also received technical agricultural training and support and interpersonal BCC to target nutrition and hygiene practices and gender inequality. Households in target villages also received water filters at a subsidized cost.

Crops Grown: Fruit and vegetables of an unspecified local variety

Livestock Raised: Mixed fish species of unspecified variety, poultry production of the local variety, vegetables

Education Objectives: Gender equity, Market Information, Nutrition and Hygiene

Method for Education:

Village Model Farm (VMF)

1. VMFs received technical assistance, training, and simple input support from HKI staff and local NGO partners, including seeds, agricultural tools, and fingerlings.
2. VMFs provided a standard number of saplings and seedlings to all households at no cost as part of their cost-sharing contribution to the project.
3. Each VMF assigned 20-25 farmers

Village Health Volunteers

4. Received health and nutrition training from HKI
5. Relayed health and nutrition training to beneficiaries at scheduled meetings

Nutritional Outcomes:

The second iteration of HKI's Enhanced Homestead Food Production program in partnership with the Canadian International Food Security Fund (CIFSRF), also named Family Farms for the Future (FF4F), has not revealed as rigorous an analysis on nutrition-specific outcomes as seen in the first iteration. Their analysis of health and nutrition-related benefits revolve around more nutrition-sensitive outcomes such as diet diversity due to access and availability.

Diet diversification was esteemed as an overarching success by all primary beneficiaries. Prior to the intervention, home gardeners who grew vegetables concentrated on two varieties, whereas program participants now grow four to six, and those who run VMFs grow up to 8 (CIFSRF, 2018). Regarding fish aquaculture, many intervention households did not previously raise fish even with ponds due to lack of technical knowledge and opportunity to buy fingerlings or funds. Implementations that provided chickens proved less successful in increasing diets among target households as instances of mortality were high, and few chicks were provided (CIFSRF, 2018). This digression from otherwise stated positive intervention outcomes highlights the claims made by target households that access to high-quality seeds and propagative material was critical to horticulture success.

Non-target households in villages with intervention households noted an increase in accessibility of vegetables through their purchase from intervention households and VMFs at lower costs than the market; some even were gifted surplus vegetables (CIFSRF, 2018). Most consumers felt the quality and availability of fish and vegetables increased since the advent of the program.

CIFSRF notes the impossibility of attributing changes in health changes solely to the project as control villages report increases due to the opening of health clinics, increased Vitamin A supplementation, improved access to clean water and sanitation, and government-funded nutrition training. However, individuals in control villages also express concern regarding the quality of

available vegetables in the market and reliance on imported vegetables with excessive chemicals (CIFSRF, 2018).

Overall, many individuals in the intervention groups expressed an increase in health due to the ability to eat more organically produced vegetables, recognition of the importance of SIS fish, and altered sanitation practices. Individuals in these groups also noted a reduction in child diarrhea aligned with sanitation practices and overall healthier babies due to breastfeeding. However, some noted that older children were more prone to sore throats and bronchitis than earlier generations. CIFSRF ultimately claims that the interventions implemented have increased health and nutrition through increased diet diversity and increased nutrient absorption from decreased instances of disease.

If this assumption is accurate, these implementations may reveal decreased stunting and wasting by anthropometric evaluations based on increased Vitamin A absorption and consumption by lactating mothers and children.

Empowerment Outcomes:

Like HKI's initial iteration, CIFSRF's implementation of enhanced homestead farming programs touted intended efforts to increase women's empowerment through gender education and mainstreaming throughout their process. Yet, CIFSRF allocated some efforts to assess these impacts as they relate to decision-making ability. At the intervention baseline, households that were not headed by women very rarely saw joint decision-making. Women had particularly low personal autonomy on decisions surrounding production, income decisions, and household expenditures

(CIFSRF, 2018). The survey conducted near the project's completion found that women primarily controlled incomes related to the sales of home garden products

(CIFSRF, 2018).

Women's empowerment within the community is limited even with increased decision-making ability from realized home garden incomes. The concept of gender and gender parity is not often directly translated into the communities surveyed, and the training sessions are noted as minimal in number with minimal information retention (CIFSRF, 2018). CIFSRF regards the training as not necessarily impactful at this time but leading to sizable positive change in the future as a reinforcement tool as gendered perspectives and concepts become further integrated into local culture. At the time of the evaluations, local individuals strayed from discussing gender due to their discomfort and stated lack of knowledge on the topic (CIFSRF, 2018). However, one unmarried man did cite gender training as a valuable tool in resolving previous long-standing conflicts within his extended family (CIFSRF, 2018). A few others mentioned the training's positive impact on calming their approach to conflict within spousal disagreements. In communities with a relatively high incidence of domestic-based violence, outcomes such as these are promising for violence mitigation, leading to greater empowerment among women.

Due to the integrated approach of gender mainstreaming, CIFRSF identified two substantial complications. The first is the necessity of training staff to obtain strong facilitation and engagement skills prior to each meeting. Participant discomfort surrounding perceived ignorance and gendered power dynamics frequently stagnated discussion (CIFSRF, 2018). Probing questions are often considered rude in Khmer Culture, which deepens the difficulty in engaging participants. Additionally, CIRSf addresses the sizable time commitment of training staff and seamlessly integrating gender mainstreaming commits (CIFSRF, 2018). Inevitably this negates funds and time

for alternative interventions, but the importance of centralizing gender perception and norms outweighs these potential costs. In the coming years, CIFSRF and HKI are negotiating with the Japan International Committee about investing in the gender training components (CIFSRF, 2018).

Although still minimal in total impact, these results bode promising for empowerment incomes of women as they have begun to address the first few steps of dismantling latent power over local women.

Notes on Income-

The second iteration with market training found significant, though unspecified, positive impacts on household incomes except in poultry production, which was lacking due to a desire to save hens for special occasions and refrain from selling eggs. On a macro scale, this implementation illustrated that demands of imports are decreasing and demand for homegrown products is increasing (CIFSRF, 2018), which has positive potential impacts on food sovereignty.

Notes on Sustainability-

As addressed within CIFSRF's report, sustainability is regarding the legacy of their project as it pertains to their initial investment in the inputs rather than the environmental sustainability of their practices. They do, however, promote agro-ecological techniques such as reducing chemical inputs through compost and manure fertilizers, IPM techniques, live fencing, and the use of locally appropriate varieties (CIFSRF, 2018).

Notes on Cultural and Local Accuracy-

The second iteration of homestead garden networks incorporated local varieties for cultural appropriateness and noted that ducks showed better results in village communities than chickens (CIFSRF, 2018).

Notes on Time Poverty-

Households reportedly spent the same median time on household food production activities (60 minutes/day), spending the same median amount of time – 60 minutes daily – on HFP activities in the early and later survey rounds (CIFSRF, 2018).

Notes on Autonomous Reproducibility-

CIFSRF notes a high probability for autonomous reproducibility and maintenance of its home garden implementations (CIFSRF, 2018). Primarily, this is due to observations of past implementation and their maintenance by those previously involved in the vegetable beneficiary groups. Before CIFSRF aided fish hatcheries, obtaining fingerlings was difficult due to minimal supply and high prices, but with vertical beneficiary frameworks, CIFSRF successfully mitigated barriers. The most significant barrier in autonomous reproducibility is among those who wish to engage in fish production. Digging a pond was estimated at \$1000 and thus unattainable for many households despite desire (CIFSRF, 2018). However, the widespread interest and decision to invest in these ponds by non-beneficiaries reveals strong predictions that their use will be retained following CIFSRF implementations. Further, this project emphasizes using local varieties, seed saving, and propagative material to enable subsequent season cultivation.

Summary of Homestead Garden Implementation Evaluations:

HKI Assessment:

1. Improved nutritional status of women

This study did reveal significant increases in RBP among women, which can be tied to an increase in nutritional status. However, without clear distinctions in alterations of Anemia prevalence and underweight status, it is difficult to properly quantify the change in status with regard to the Royal Cambodian Government's primary nutrition goals.

2. Improved nutritional status of children based on commonly utilized anthropometric evaluations

This implementation did not reveal any statistically significant changes in nutritional status based on standard anthropometric measures of stunting, wasting, or underweight. Although the children's ages are a valid consideration for this, the impact of this study appears to reveal inadequate data for RCG policy change.

3. Increased women's empowerment based on self and community confidence of her abilities, especially as they relate to increased decision-making ability and position

The interventions described do not give specific details on impacts on women's decision-making ability, community perception, or position in the community. Some perceptions of the increase in women's self-confidence can be ascribed to their stated trust in their abilities arising from agricultural training. However, the full impact of this cannot be accurately measured without clarity in the genders of village health volunteers. The short timeline of this implementation further complicates the longitudinal impacts on

4. Potential for policy change

The evaluated impacts for the first iteration of HKI's EFHP programs did not reveal significant nor sufficient data to entice the Royal Cambodian Government to relocate its funding for nutrition or gender equality. With strict adherence to nutrition-specific metrics (OECD, 2016)) and previous funding cuts, it is unlikely for the lack of anthropometric and quantitative data to sway the government's position.

CIFSRF Assessment:

1. Improved nutritional status of women-

No assessment of women's nutritional status was reported outside of increased diet diversity, with failure of increase from poultry and egg production.

2. Improved nutritional status of children based on commonly utilized anthropometric evaluations

No specified anthropometric evaluations were conducted, but parents and community members noted improvements in health to children concerning size, increased diet diversity, and reduced illness.

3. Increased women's empowerment based on self and community confidence of her abilities, especially as they relate to increased decision-making ability and position-

Decision-making ability as interpreted by income shares from household products were positively noted along with personal confidence levels. These impacts are preliminary and expected to increase with time. Gender training yielded minimal empowerment outputs but is expected to increase as community familiarity with gender components increases.

4. Potential for policy change

Despite historically necessary nutrition-specific evidence to guide Cambodian Government intervention, this iteration attracted potential policy change through vertical integration channels of the supply chain.

Successes and shortcomings from HKI’s initial iteration of the home garden implementation and CIFSRF’s subsequent iteration of the program guided the initial E4E DMF pictured below:

Figure 4: Education-For-Education Model Initial Design Monitoring Framework:

| <u>Design Summary</u> | <u>Performance Indicator/ Target</u> | <u>Data Sources/Reporting</u> | <u>Assumptions (As)/ Risks (Rs)</u> |
|-----------------------|---|--|---|
| <u>Impact</u> | Invisible power decreases leading to economic opportunities for women, gender parity in education and decrease in nutrition related afflictions | Post Phase surveys on empowerment and self sufficiency Post phase collection on statistics from baseline data | ASSUMPTIONS: Economic income and nutrition improve quality of life RISKS: RGC chooses not to fund Political instability alters RGC funding Men feel threatened/disenfranchised |

| | | | |
|-------------------------------|---|--|--|
| <p><u>Outcomes</u></p> | <p>SHORT:</p> <p>Caloric food security increase via supply</p> <p>Participants sell surplus for additional income</p> <p>Nutrient diversity increase with diverse portfolios and income</p> <p>Participants gain knowledge on effective selling techniques</p> <p>Increase in women’s abilities for men and women</p> <p>Participants receive resources for career of choice</p> <p>MID:</p> <p>Rural malnutrition decrease</p> <p>Value of women and women’s knowledge in rural communities increase</p> <p>Women become trusted advisors and active community members</p> <p>LONG</p> <p>RGC recognizes connectedness of WE and all other SDGs</p> <p>RGC fund subsequent iterations of E4E</p> | <p>Quarterly surveys for participants</p> <p>Annual surveys for men on WE</p> <p>Monthly anthropometric measurements</p> <p>Monthly lab work for female participants</p> | <p>ASSUMPTIONS:</p> <p>Women have time to complete the program</p> <p>Given the opportunity women will choose to stay in rural areas</p> <p>Predictable climate and weather</p> <p>Stable political environment</p> <p>RISKS:</p> <p>Program deepens time poverty</p> <p>Participants do not give full consent/informed consent is not thorough</p> <p>Women do not complete the program</p> |
| <p><u>Outputs</u></p> | <p>PRE PHASE</p> <p>Baseline statistics</p> <p>Implementors trained in antibias</p> <p>PHASE 1:</p> <p>Community leaders encourage participation in training education programs</p> <p>Women implement trainings for increased crop and livestock yields</p> <p>PHASE 2:</p> | <p>Analysis of Baseline statistics</p> <p>Interim reports</p> <p>Final reports</p> <p>Impact evaluations</p> <p>Frequent check-ins with participants and implementors</p> <p>Co-created DMFs</p> | <p>ASSUMPTIONS:</p> <p>Access to and from villages is possible</p> <p>Outside of COVID-19 or other pandemic related factors</p> <p>RISKS:</p> <p>Implementors do not complete thorough introspection</p> |

| | | | |
|---|--|--|--|
| | <p>Implementors organize logistics of training sessions for men led by women participants</p> <p>Subsidize education and agricultural inputs for women</p> <p style="text-align: center;">POST PHASE</p> <p>Follow up survey on baseline statistics</p> <p>Objective consultants prepare impact evaluation</p> | | |
| <p style="text-align: center;"><u>Activities and Milestones</u></p> <ol style="list-style-type: none"> 1. International consultants receive bias training 2. Baseline data is collected and analyzed via statistical software 3. Implementation and counterfactual villages are randomly selected 4. Village leaders are identified to aid in DMF construction 5. Participants selected and with informed consent 6. Participants identify empowerment and gender sensitivity targets 7. Program offer gender sensitivity training with meals 8. Program distributes agricultural tools 9. Program leads agricultural and livestock extension training to participants via VMFs 10. Program provides transportation to markets 11. Quarterly surveys for participants 12. Annual surveys for male males 13. Monthly anthropometric measurements 14. Monthly lab work for female participants | | <p style="text-align: center;"><u>Inputs</u></p> <p>\$Xmillion ODA</p> <p>Bias training manuals</p> <p>Local Vegetable Seeds</p> <p>Fertilizer</p> <p>Stakes and garden tools</p> <p>Duck hatchlings</p> <p>Duck feed</p> <p>Photo farming and livestock manuals</p> <p>Flashlights</p> <p>Radios</p> <p>Desktop computers</p> <p>Meals for Gender Training</p> <p>Trucks</p> | |

VI. OBJECTIVE SIX: CONCLUDE FINDINGS

Education-For-Education Implementation Specifics:

Stakeholders:

Village Profile-

The villages selected for the implementation of this program will be within Battambang and Siem Reap Provinces due to their high rural to urban migration patterns and proximity to Phnom Penh for travel facilitation. Criteria for selection will include high rates of undernutrition and low engagement of women in income-generating agricultural activities based on baseline studies. The counterfactuals will also be from these areas with the same criteria; villages receiving the implementation will depend on random selection. Villages selected as counterfactuals will be offered the program in the next iteration if proven successful.

Participant Profile-

Participants in this study will be women of reproductive age with a commitment and interest in the program. Particular interest is in those who are either:

1. Unmarried Non-Heads of households
 1. Ages 12-25
 2. Not currently in school or gainfully employed
 3. Interested in income generation from sale of agricultural products
 4. Have access to 10x15ft plot of land or grazing area for ducks
 5. Have participation permission from caretakers

OR

2. Non-Heads of Households
 1. Ages 16-45
 2. Currently breastfeeding or caring for dependents under 1 year of age (for maximum arthrometric outcome evaluation)
 3. Are or have a history of Anemia and consent to testing
 4. Not currently in school or gainfully employed
 5. Interested in income generation from sale of agricultural products
 6. Have access to 10x15ft plot of land or grazing area for ducks

Particular caution and Community leaders will help select participants.

Non-Participant Community Members-

In the first stage, men and non-direct participants will be encouraged to attend training sessions on laws, policies, and prejudices by the community and spiritual leaders.

Community Leaders-

Community leaders will be identified through robust background investigation and contacted prior to the program and compensated if they wish to partake in its implementation.

Cambodian Government and NGOs-

The Cambodian Government and NGOs will be contacted to seek aid in this project's financial and logistical operations.

Program Managers and Volunteers-

All members working to implement the program must undergo bias training, history and cultural training, and research ethics to adhere to reflexivity criteria. They will be compensated for their implementation efforts.

Other Stakeholders-

Other stakeholders include secondary schools, universities, animal breeders, crop breeders, extension workers, and others not previously mentioned.

Timeline:

The specific timeline will be constructed with the stakeholders and agricultural experts who will advise based on high nutrient crop growing cycles, animal birth cycles, and other related variables. The baseline statistics will be achieved one year before implementation via government census or individual study (depending on the year). Functional DMF construction will occur in August prior to training implementations. The training is slated for late November or early December prior to planting in late December (the start of the sunny season when roads may be accessible) and will continue with rainy season crop recommendations. Phase 2 is expected to begin the following year,

and the final phase will begin once training is complete so women may enroll in university or receive subsidized agricultural inputs. The impact evaluation will occur following this phase.

Budget:

The initial budget for this program will consist of the reallocation of ODA previously allocated to women equity initiatives, nutrition initiatives, and co-operative extensions and/or NGO funding sources. Given previous funding inconsistencies in similar NGO funded implementations, following iterations are intended to be funded by the Royal Cambodian Government in recognition of the compounding impacts and long-term financial sustainability of this model. The scale of this project will depend on the access to funding.

Provisions:

Training:

The E4E two disparate education and empowerment pathways. The first is gender sensitivity training to deconstruct visible power structures among men in the community and invisible power among women via bodily autonomy. The second form of education is through agricultural extension which deconstruct the same power structures via self-confidence and increased decision-making capability. These trainings will take place in a centralized location to ensure transportation is not a barrier to attendance.

Gender Sensitivity:

Gender sensitivity training will be open to all genders and ages after fieldwork hours. Meals will be provided at the trainings to 1. Incentivize all family members to attend 2. Reduce domestic labor for women 3, Create an environment of safety and community. The first part of each training will include a community educator led module on GBV, historical gender inequity, current equity laws, or other necessary education as stated by stakeholders. This initial component will take place in a coed group while attendees eat. Following the module, attendees will be segregated into men and women and given the opportunity to discuss their perspectives with guided facilitation.

Agricultural Extension Training:

Agricultural extension will be open to select female participants and facilitated by extension workers on Village Model Farms in the first phase and previous beneficiaries in the second. Modules will include village-specific extension education topics within sustainable cropping methodology, nutrition density of selected crops, sustainable poultry husbandry, and surplus sale methodology. A module egg fertilization and assessment of an egg's fertilization status will be included to encourage egg consumption. Participants will have the opportunity to apply their understanding at village model farms under the guidance of extension workers and provided with photo-based module manuals to take home.

Agricultural Provisions:

All materials necessary for the successful implementation of home gardens and animal husbandry will be provided to participants and VMFs to ensure accessibility. Additional resources such as weekly transportation to markets, radios highlighting market prices, and recorded videos of modules will be provided from the VMF which will act as a resource hub for participants.

Crop Provisions:

Beneficiaries will receive a predetermined quantity of seeds, fertilizer, stakes, and tools required for the home garden implementation. Vegetable seeds will be selected based on nutrition density, seasonality, labor, space, and time requirement, sustainability, reproducibility and cultural appropriateness. Potential recommendations and ranking according to program fit are included in the annex of this document.

Livestock:

Beneficiaries will receive a predetermined amount of duck chicks and feed.

Monitoring:

Quarterly surveys will be completed by women. Questions will address empowerment metrics, diet diversity, income changes, and evaluation of trainings. Annual surveys will be completed by men and address the same topics. To quantitatively assess nutrition outcomes, weekly diet recalls, monthly anthropometric measurements of children, and monthly lab work on women will be performed and recorded anonymously.

Remaining Potential Obstacles:

Obstacles-

The two most considerable foreseeable obstacles in enacting the Education-for-Education model are the possibility for the government to deny the reallocation of funds for its inception and continuation and the possibility that some aspects of empowerment may lead to decreases in diet diversity among women and children. Additional obstacles include transportation to and from training, lack of participation, transportation of educators, and language discrepancies.

Strategies to Overcome-

In the event the government does not elect to allocate funds for this model, various NGOs and grants are accessible and can be explored for a pilot of the program. If the model is proven to

have significant impact returns, this will help persuade the government for future iterations. If there is no discernable impact, the project should be reworked, or another avenue should be explored. The program will be closely monitored with aid from local community members. If detrimental patterns in nutrition begin to arise with the program's implementation, the theory of change can be adapted to meet the circumstances. Participation is hoped to be encouraged with the aid of local community leaders, as studies have shown this is an effective method of engagement (Yang, 2016). Transportation details for both participants and educators will need to be explored. However, the project takes place in the sunny season. Both Siem Reap and Battambang are in close proximity to the capital, Phnom Penh, where most educators are expected to arrive. This close geographical location also mitigates the likelihood of language discrepancies as 96% of Cambodians speak Khmer and those who do not tend to be in the Northeastern part of the country (USAID, 2020).

Conclusion

Research Significance:

The primary mission for this thesis research was to add objective analysis to the limited existence of sex trafficking data from rural Cambodia via the first construction of a comprehensive and proactive approach to the mitigation of sex trafficking from rural Cambodia based on human-centric, systems-based sustainable development. The vision for this approach is for it to be digested by development experts and government officials with the intentions of implementation. Each of the 6 objectives deliver nuanced outputs which differ from existing public discussion and analysis within the sex trafficking contexts.

Objective One:

The first objective provides a wholistic and unbiased delineation of the sex trafficking system within Cambodia inclusive of each primary actor across time and space. This delineation was constructed through an economic lens in audience of governmental, intergovernmental, nongovernmental, and individual experiences with the system to examine its function and derive its underlying drivers. Complete derivation of these drivers from the same multiplicity of perspectives has never been published; thus, the formulation of this transparent delineation remains publicly unprecedented.

Objective Two:

The second objective delivers a meticulous analysis of drivers in the supply of rural Khmer women in line with evolving discussions. The distinct output of this objective is the production of an initial theory of change production framework. The framework observes ethical principles from a plethora of development theoretical models to create a pliable methodology which may be utilized across opposing economic and anthropological sectors to inform foreign development agents with minimal unintended consequences.

Objective Three:

The third objective investigates previous empowerment implementations in Cambodia to formulate an overarching sex trafficking mitigation theory of change which is both transformative and practical in the local context. This objective's primary output is the logic model which accounts for present-specific restrictions in the local landscape. These limitation integrations bolster the proposed RCSTMTOC's capabilities to predict pragmatic and deliverable outcomes rather than unobtainable potential outcomes boasted by other program implementations.

Objective Four:

The fourth objective expands on the RCSTMTOC and its realistic contingency on the Education-For-Education Model. The E4E Program and its associated logic model are the primary output of this objective. E4E differs significantly from any program proposed on the empowerment of rural Khmer women with regard to its government funded nutrition-sensitive approach, inclusion of mandatory impact evaluations in adherence to global standards, and its unique playback on the larger RCSTMOC.

Objective Five:

The fifth objective of this research postulates the potential efficacy of the E4E model through evaluation of previous related program implementations. Meticulous analysis at every stage of these programs and articulated associations with food sovereignty characterizes this objective. Although review of these programs may prove useful to the facilitators and additional development specialists, the most substantial output is the E4E Design and Monitoring Framework. Construction of the E4E DMF provides an itinerary within the RCSTMTOC which may operationalize its methodology.

Objective Six:

The sixth and final objective serves to recommend specific input and activities to the E4E DMF and summarize the significance of the research enclosed. The primary output of this deliverable differs from the previous outputs due to its reliance on reader engagement. Contrary to previous outputs, this output is dual pronged. The first output is in the conferral of the Master of Professional Studies Degree in Global Development from Cornell University. The second and perhaps more influential output, is the mobilization of the reader to impart change within sex trafficking mitigation. Analysis of this research's nuance and provision of actionable steps to invoke change have the potential to navigate this research from academic theory to professional application.

REFERENCES:

1. *5599.pdf*. (n.d.). Retrieved July 13, 2021, from <https://cws.journals.yorku.ca/index.php/cws/article/viewFile/6411/5599>
2. *Agricultural diversification: Empowering women in Cambodia with “wild gardens”* | Penn State University. (n.d.). Retrieved July 12, 2021, from <https://news.psu.edu/story/524262/2018/06/05/research/agricultural-diversification-empowering-women-cambodia-wild-gardens>

3. Amartya Sen (1988). “[The Concept of Development](#),” Handbook of Development Economics, Volume 1, Edited by H. Chenery and T.N. Srinivasan, Elsevier Science Publishers.
4. Aronowitz, A. A., & Koning, A. (2014). Understanding human trafficking as a market system: Addressing the demand side of trafficking for sexual exploitation. *Revue internationale de droit penal*, Vol. 85(3), 669–696.
5. Asian Development Bank. (2020). *Guidelines for Preparing and Using a Design and Monitoring Framework: Sovereign Operations and Technical Assistance* (0 ed.). Asian Development Bank. <https://doi.org/10.22617/TIM200275-2>
6. Ashman, D., Wilkie, J., Mer, S., & Sreng, S. (2014, December 8). Women's Leadership as a Route to Greater Empowerment: Cambodia Case Study by USAID. Retrieved 2020, from <https://www.usaid.gov/sites/default/files/documents/1866/WiP%20Cambodia%20Case%20Study.pdf>
7. *Bates_Strengthening_Informal_Indigenous_Seed_Systems.pdf*. (n.d.-b). Retrieved July 12, 2021, from https://horticulture.ucdavis.edu/sites/g/files/dgvnsk1816/files/extension_material_files/Bates_Strengthening_Informal_Indigenous_Seed_Systems.pdf
8. BBC. (2018, July 20). Cambodia profile - Timeline. Retrieved November 26, 2020, from <https://www.bbc.com/news/world-asia-pacific-13006828>
9. Beban, A. (2012). The Politics of Wellbeing in International Development: Research with Organic Farmers in Cambodia. In H. Selin & G. Davey (Eds.), *Happiness Across Cultures: Views of Happiness and Quality of Life in Non-Western Cultures* (pp. 149–165). Springer Netherlands. https://doi.org/10.1007/978-94-007-2700-7_11
10. Black, Robert E., et al. "Maternal and child undernutrition and overweight in low income and Middle income countries." *The Lancet* 382.9890 (2013): 427451.
11. Britannica. (2020). Agriculture, forestry, and fishing. Retrieved November 26, 2020, from <https://www.britannica.com/place/Cambodia/Agriculture-forestry-and-fishing>
12. Brassica. (2016, September 7). Home gardens: Cambodia. *World Vegetable Center*. <https://avrdc.org/home-gardens-cambodia/> *Cambodia Country Gender Analysis* [January 2012]. (2012). Mandaluyong City, Phillipines: Asian Development Bank. doi:978-92-9092-894-2 (Print), 978-92-9092-895-9
13. *Cambodian Gender Strategic Plan - Neary Rattanak 4* (Rep.). (2013). Phnom Penh.
14. Cambodiatribunal.org. (2019). *Chronology of the Khmer Rouge Movement | Cambodia Tribunal Monitor*. [online] Available at: <https://www.cambodiatribunal.org/history/cambodian-history/chronology-of-the-khmer-rouge-movement/>
15. *Cambodia Country Gender Analysis* [January 2012]. (2012). Mandaluyong City, Phillipines: Asian Development Bank. doi:978-92-9092-894-2 (Print), 978-92-9092-895-9
16. *Cambodia: NGOs working on human trafficking urge the govt. to raise more funding to fully implement anti-trafficking policies and agreements*. (n.d.). Business & Human Rights Resource Centre. Retrieved July 12, 2021, from <https://www.business-humanrights.org/en/latest-news/cambodia-ngos-working-on-human-trafficking-urge-the-govt-to-raise-more-funding-to-fully-implement-anti-trafficking-policies-and-agreements/>
17. *Cambodia profile—Timeline—BBC News*. (n.d.). Retrieved July 13, 2021, from <https://www.bbc.com/news/world-asia-pacific-13006828>
18. *Cambodia—Agriculture, forestry, and fishing | Britannica*. (n.d.). Retrieved July 13, 2021, from <https://www.britannica.com/place/Cambodia/Agriculture-forestry-and-fishing>
19. *Cambodia-stepitup-commitment-followup-20170228-en.pdf*. (n.d.). Retrieved July 13, 2021, from <https://www.unwomen.org/-/media/headquarters/attachments/initiatives/stepitup/commitments-speeches/cambodia-stepitup-commitment-followup-20170228-en.pdf?la=en&vs=3840>
20. Cambodiatribunal.org. (2019). *Chronology of the Khmer Rouge Movement | Cambodia Tribunal Monitor*. [online] Available at: <https://www.cambodiatribunal.org/history/cambodian-history/chronology-of-the-khmer-rouge-movement/>

22. Canadian International Food Security Research Fund (CIFSRF), 2018. *Scaling up home gardens for food & nutrition security in Cambodia (IDRC project #107982)*. Overseas Development Institute and Cambodia Development Resource Institute June 2018 1 Overseas Development Institute (ODI) London, UK <https://www.odi.org/> 2 Cambodia Development Resource Institute (CDRI) Phnom Penh, Cambodia <https://cdri.org.kh/> . Phnom Penh, Cambodia: Canadian International Food Security Research Fund (CIFSRF).
23. *Care Groups and their Gardens Flourish in Cambodia*. (2020, July 10). <https://www.actionagainsthunger.org/story/care-groups-and-their-gardens-flourish-cambodia>
24. Christian, David. 2004. *Maps of Time: An Introduction to Big History*. Berkeley: University of California; C8 "Intensification and the Origins of Agriculture" C9 "From Power over Nature to Power over People: Cities, States, and 'Civilizations'"
25. *Chronology of the Khmer Rouge Movement | Cambodia Tribunal Monitor*. (n.d.). Retrieved July 13, 2021, from <https://www.cambodiatribunal.org/history/cambodian-history/chronology-of-the-khmer-rouge-movement/>
26. Chuang, J. (2006). Beyond a Snapshot: Preventing Human Trafficking in the Global Economy. *13 Indiana Journal of Global Legal Studies* 137 (2006), 13(1). <https://www.repository.law.indiana.edu/ijgls/vol13/iss1/5>
27. CIA. (2018, February 01). *The World Factbook: Cambodia*. Retrieved November 26, 2020, from <https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html>
28. *Country Nutrition Profiles*. (n.d.). Retrieved July 13, 2021, from <https://globalnutritionreport.org/resources/nutrition-profiles/asia/south-eastern-asia/cambodia/>
29. Cornwall, A. (2000) "Making a Difference? Gender and Participatory Development," *Institute of Development Studies*. <http://www.ids.ac.uk/publication/making-a-difference-gender-and-participatory-development>
30. Doneys, P., Doane, D. L., & Norm, S. (2020) Seeing Empowerment as Relational: Lessons from Women Participating in Development Projects in Cambodia, *Development in Practice*, 30:2, 268-280, DOI: 10.1080/09614524.2019.1678570
31. Douglas, B. (n.d.). *Mitigation of Human Trafficking Through Agricultural Development* [Scholarly project].
32. Downman, S., & Ubayasiri, K. (2017). *Journalism for Social Change in Asia: Reporting Human Rights*. Palgrave Macmillan UK. <https://doi.org/10.1057/978-1-349-95179-6>
33. Dragojlovic, N., Michaux, K. D., Moumin, N. A., Li, K. H., Talukder, Z., Hou, K., Mundy, G., Stormer, A., Ngik, R., Green, T. J., & Lynd, L. D. (2020). Economic evaluation of an enhanced homestead food production intervention for undernutrition in women and children in rural Cambodia. *Global Food Security*, 24, 100335. <https://doi.org/10.1016/j.gfs.2019.100335>
34. Duflo, Esther. 2005. "Gender Equality in Development." BREAD Policy Paper 11, Bureau for Research in Economic Analysis of Development.
35. Duke, A. (2018, April 5). Agricultural diversification: Empowering women in Cambodia with 'wild gardens'. Retrieved December 22, 2020, from <https://news.psu.edu/story/524262/2018/06/05/research/agricultural-diversification-empowering-women-cambodia-wild-gardens>
36. Eam(WorldFish), D. (2017, March 21). Working with women farmers to make Cambodian communities "Plantwise". Retrieved December 22, 2020, from <https://ccafs.cgiar.org/news/working-women-farmers-make-cambodian-communities-plantwise>
37. "EAST ASIA AND PACIFIC." *Farming Systems and Poverty*, Food and Agriculture Organization of the United Nations, www.fao.org/docrep/003/y1860e/y1860e08.htm.
38. Encyclopedia Britannica. (2019). *Vietnam War - The Diem regime and the Viet Cong*. [online] Available at: <https://www.britannica.com/event/Vietnam-War/The-Diem-regime-and-the-Viet-Cong>
39. Editors, H. com. (n.d.). *Khmer Rouge*. HISTORY. Retrieved July 13, 2021, from <https://www.history.com/topics/cold-war/the-khmer-rouge>

40. *Farmers' Journey from FFS to a Cooperative | FAO in Cambodia | Food and Agriculture Organization of the United Nations.* (n.d.). Retrieved July 12, 2021, from <http://www.fao.org/cambodia/programmes-and-projects/success-stories/farmers-journey-from-ffs-to-a-cooperative/en/>
41. *Farming Systems and Poverty.* (n.d.). Retrieved July 13, 2021, from <http://www.fao.org/3/y1860e/y1860e08.htm>
42. FAO. 2014. *Cambodia – Food Security and Nutrition Profiles.* FAO. Available at: <http://www.fao.org/3/a-at706e.pdf>.
43. FAO, IFAD, UNICEF, WFP and WHO. 2017. *The State of Food Security and Nutrition in the World 2017. Building resilience for peace and food security.* Rome: FAO.
44. Food and Agriculture Organization of the United Nations (FAO). 2017. “Royal Government of Cambodia Launches Mid-term and Strategic Review of the National Strategy for Food Security and Nutrition 2014-2018.” Available at: <http://www.fao.org/cambodia/news/detail-events/en/c/884930/>.
45. Feary, Daniel. “Gender Equality and Women’s Empowerment in Asia and the Pacific.” *ESCAP*, 2015, doi: <http://www.unescap.org/sites/default/files/publications/B20%20Gender%20Equality%20Report%20v10-3-E.pdf>.
46. Ferguson, K. (2014). *CAMBODIA FLOATING VEGETABLE GARDENS PROJECT REPORT.* 41
47. Forbes. (2013, June 06). GDP: The sex sector. Retrieved December 19, 2020, from <https://www.forbes.com/forbes/1999/0614/6312214s2.html?sh=2b4510ef2cc7>
48. Fulu, E., Dr. (2015). National Survey on Women's Health and Life Experiences in Cambodia. *WHO Multi-Country Study on Women’s Health and Domestic Violence against Women Report.*
49. Galabru, D. (2004). *The Situation of Women in Cambodia.* [online] Fidh.org. Available at: https://www.fidh.org/IMG/pdf/kh2004_women-en.pdf .
50. Glawogger, M. (Director). (2011). *Whore's glory* [Video file]. Retrieved December, 2020.
51. Gbvkr.org. (2019). *Impact of GBV | GBV under the Khmer Rouge.* [online] Available at: <http://gbvkr.org/gender-based-violence-under-khmer-rouge/impact-of-gbv/>
52. *GDP: The sex sector.* (n.d.). Forbes. Retrieved July 13, 2021, from <https://www.forbes.com/forbes/1999/0614/6312214s2.html>
53. Gertler, Paul J.; Martinez, Sebastian; Premand, Patrick; Rawlings, Laura B.; Vermeersch, Christel M. J.. 2016. *Impact Evaluation in Practice, Second Edition.* Washington, DC: Inter-American Development Bank and World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/25030> License: CC BY 3.0 IGO.
54. *Gender Equality and Human Rights | OHCHR.* (n.d.). Retrieved July 13, 2021, from <https://cambodia.ohchr.org/en/issues/gender-equality-and-human-rights>
55. *Gender Equality and Women’s Empowerment in Asia and the Pacific.* (2016a). United Nations. <https://doi.org/10.18356/cf524c69-en>
56. George, J., Yiannakis, M., Main, B., Devenish, R., Anderson, C., An, U. S., Williams, S. M., & Gibson, R. S. (2012a). Genetic Hemoglobin Disorders, Infection, and Deficiencies of Iron and Vitamin A Determine Anemia in Young Cambodian Children. *The Journal of Nutrition*, 142(4), 781–787. <https://doi.org/10.3945/jn.111.148189>
57. George, J., Yiannakis, M., Main, B., Devenish, R., Anderson, C., An, U. S., Williams, S. M., & Gibson, R. S. (2012b). Genetic Hemoglobin Disorders, Infection, and Deficiencies of Iron and Vitamin A Determine Anemia in Young Cambodian Children. *The Journal of Nutrition*, 142(4), 781–787. <https://doi.org/10.3945/jn.111.148189>
58. Global Nutrition Report. (n.d.). Cambodia: The burden of malnutrition at a glance. Retrieved December 22, 2020, from <https://globalnutritionreport.org/resources/nutrition-profiles/asia/south-eastern-asia/cambodia/>

59. Goldenberg, S. M. (2015a). Trafficking, migration, and health: Complexities and future directions. *The Lancet. Global Health*, 3(3), e118-119. [https://doi.org/10.1016/S2214-109X\(15\)70082-3](https://doi.org/10.1016/S2214-109X(15)70082-3)
60. Green, Duncan. *How Change Happens*. Oxford University Press, 2018.
61. Heylen, C., Meunier, F., Peeters, A., Ek, S., Neang, M., Hean, S., & Peanh, S. (2019). Multidimensional Benefits of Sustainable Agriculture Practices of Cambodian Smallholder Farmers. *Sustainable Agriculture Research*, 9, 10. <https://doi.org/10.5539/sar.v9n1p10>
62. Herndon, J. (2018, May 31). Self-Serving Bias: Examples, Definition, and Experiments. Retrieved December 19, 2020, from <https://www.healthline.com/health/self-serving-bias>
63. HISTORY. (2017). *Khmer Rouge*. [online] Available at: <https://www.history.com/topics/cold-war/the-khmer-rouge>
64. *History of Prostitution and Sex Trafficking in Thailand—End Slavery Now*. (n.d.). Retrieved July 13, 2021, from <http://endslaverynow.org/blog/articles/history-of-prostitution-and-sex-trafficking-in-thailand/>
65. *Home gardens | FAO in Cambodia | Food and Agriculture Organization of the United Nations*. (n.d.). Retrieved July 12, 2021, from <http://www.fao.org/cambodia/programmes-and-projects/success-stories/home-gardens/en/>
66. Horiuchi, Y., Kusama, K., Kanha, S., Yoshiike, N., & The FIDR research team. (2019). Urban-Rural Differences in Nutritional Status and Dietary Intakes of School-Aged Children in Cambodia. *Nutrients*, 11(1), 14. <https://doi.org/10.3390/nu11010014>
67. Hughes •, D. (2013, October 7). Combating Sex Trafficking: A History. *Fair Observer*. https://www.fairobserver.com/region/north_america/combating-sex-trafficking-history/
68. *Human Trafficking FAQs*. (n.d.). United Nations : Office on Drugs and Crime. Retrieved July 13, 2021, from <http://www.unodc.org/unodc/en/human-trafficking/faqs.html>
69. *Impact of GBV | GBV under the Khmer Rouge*. (n.d.). Retrieved July 13, 2021, from <http://gbvkr.org/gender-based-violence-under-khmer-rouge/impact-of-gbv/>
70. Ingrid Palmer, Rural Women and the Basic-Needs Approach to Development, 115 *Int'l Lab. Rev.* 97, 108 (1977)http://heinonline.org/HOL/Page?handle=hein.journals/intlr115&div=14&g_sent=1&casa_token=&colle
71. Keats, S., Sim, S., & Phon, D. (n.d.). *Overseas Development Institute and Cambodia Development Resource Institute June 2018*. 39.
72. KEO, C., BOUHOURS, T., BROADHURST, R., & BOUHOURS, B. (2014). Human Trafficking and Moral Panic in Cambodia. *The Annals of the American Academy of Political and Social Science*, 653, 202–224.
73. Kimsan, V. (n.d.). “My neighbors said to me “you’re planting rice, but you’re going to feed your family dirt,” Thet recalled. 8.
74. Kimura, Hirata. 2013. Hidden Hunger: Gender and the Politics of Smarter Foods. Ithaca: Cornell Univ Press. chapters 1,2 and 3 (62pgs). <https://www.jstor.org/stable/10.7591/j.ctt1xx5n3>
75. Kiss, L., Pocock, N. S., Naisanguansri, V., Suos, S., Dickson, B., Thuy, D., . . . Zimmerman, C. (2015). Health of men, women, and children in post-trafficking services in Cambodia, Thailand, and Vietnam: An observational cross-sectional study. *The Lancet Global Health*, 3(3). doi:10.1016/s2214-109x(15)70016-1
76. Komatsu, H., Malapit, H. J. L., & Theis, S. (2018). Does women’s time in domestic work and agriculture affect women’s and children’s dietary diversity? Evidence from Bangladesh, Nepal, Cambodia, Ghana, and Mozambique. *Food Policy*, 79, 256–270. <https://doi.org/10.1016/j.foodpol.2018.07.002>
77. Lewis, D. (2016). Bodies, matter and feminist freedoms: Revisiting the politics of food. *Agenda*, 30(4), 6–16. <https://doi.org/10.1080/10130950.2017.1328807>
78. Lund, R., Doney, P., & Resurreccion, B. P. (Eds.). (2015). *Gendered entanglements: Revisiting gender in rapidly changing Asia*. NIAS Press.

79. Martin. (n.d.). Report: Majority of trafficking victims are women and girls; one-third children. *United Nations Sustainable Development*. Retrieved July 13, 2021, from <https://www.un.org/sustainabledevelopment/blog/2016/12/report-majority-of-trafficking-victims-are-women-and-girls-one-third-children/>
80. *Mekong-economic-social-issues-affecting-low-income-women-final-report.pdf*. (n.d.). Retrieved July 12, 2021, from <https://www.dfat.gov.au/sites/default/files/mekong-economic-social-issues-affecting-low-income-women-final-report.pdf>
81. Michaux, K. D., Hou, K., Karakochuk, C. D., Whitfield, K. C., Ly, S., Verbowski, V., Stormer, A., Porter, K., Li, K. H., Houghton, L. A., Lynd, L. D., Talukder, A., McLean, J., & Green, T. J. (2019). Effect of enhanced homestead food production on anaemia among Cambodian women and children: A cluster randomized controlled trial. *Maternal & Child Nutrition*, 15(S3), e12757. <https://doi.org/10.1111/mcn.12757>
82. Ministry of Women's Affairs. (2014). Gender Mainstreaming: Institutional, Partnership and Policy Context- Cambodia Gender Assessment. *Ministry of Women's Affairs*.
83. MOWA. (2014). *National Action Plan to Prevent Violence Against Women* (Rep.). Phnom Penh: Kingdom of Cambodia.
84. MOWA. (2020). *Cambodia Report* (25th Anniversary of the Fourth World Conference on Women and the adoption of the Beijing Declaration and Platform for Action (1995), Rep.). Phnom Penh: Royal Government of Cambodia.
85. MOWA. (2020). *MAINSTREAMING GENDER INTO WASH (MRD) CCA INVESTMENTS Guidance Manual for Policy Makers and Practitioners* (Rep.). Phnom Penh: Kingdom of Cambodia.
86. *National Development Plan—Cooperation Committee for Cambodia*. (n.d.). Retrieved July 13, 2021, from <https://www.ccc-cambodia.org/en/what-we-do/campaigns-and-advocacy/national-development-plan>
87. Nkoka, O., Lee, D., Chuang, K.-Y., & Chuang, Y.-C. (2021). Multilevel analysis of the role of women's empowerment on use of contraceptive methods among married Cambodian women: Evidence from demographic health surveys between 2005 and 2014. *BMC Women's Health*, 21, 9. <https://doi.org/10.1186/s12905-020-01141-z>
88. OECD. (2016). *A territorial approach to food security and nutrition policy: The case of Cambodia*. 69–83. <https://doi.org/10.1787/9789264257108-5-en>
89. Olney, D. K., Vicheka, S., Kro, M., Chakriya, C., Kroeun, H., Hoing, L. S., Talukder, A., Quinn, V., Iannotti, L., Becker, E., & Roopnaraine, T. (2013). Using Program Impact Pathways to Understand and Improve Program Delivery, Utilization, and Potential for Impact of Helen Keller International's Homestead Food Production Program in Cambodia. *Food and Nutrition Bulletin*, 34(2), 169–184. <https://doi.org/10.1177/156482651303400206>
90. Pak, S. (n.d.). *Dependence for Independence: Economic Transformation and Its Implications for Women's Perceptions of Autonomy in Cambodia*. 239.
91. Poulin, R. (2003). *Globalization and the Trafficking and the Commodification*. [online] Cws.journals.yorku.ca. Available at: <https://cws.journals.yorku.ca/index.php/cws/article/viewFile/6411/5599>
92. Pearson, J. (2011). No visible difference: A women's empowerment process in a Cambodian NGO. *Development in Practice*, 21(3), 392–404. <https://doi.org/10.1080/09614524.2011.558064>
93. *Population and censuses | Open Development Cambodia (ODC)*. (2015, August 3). <https://opendevelopmentcambodia.net/topics/population-and-censuses/>
94. Quisumbing, A. R., Sproule, K., Martinez, E. M., & Malapit, H. (n.d.). *Women's Empowerment in Agriculture and Nutritional Outcomes*. 70.
95. *Reducing malnutrition in women and children in Cambodia with the World Vegetable Center*. (n.d.). Akvo Foundation. Retrieved July 12, 2021, from <https://akvo.org/stories/south-east-asia->

- [pacific/reducing-malnutrition-in-women-and-children-in-cambodia-with-the-world-vegetable-center/](#)
96. Reyes, C. (2015, October). History of Prostitution and Sex Trafficking in Thailand. Retrieved December 19, 2020, from <https://www.endslaverynow.org/blog/articles/history-of-prostitution-and-sex-trafficking-in-thailand>
 97. *Seeing Women Farmers Oppressed by Unequal Rules, You “Want to Do Something About It.”* (n.d.). [Text/HTML]. World Bank. Retrieved July 13, 2021, from <https://www.worldbank.org/en/news/feature/2016/03/05/seeing-women-farmers-oppressed-by-unequal-rules-you-want-to-do-something-about-it>
 98. *Self-Serving Bias: Examples, Definition, and Experiments.* (2018, May 30). Healthline. <https://www.healthline.com/health/self-serving-bias>
 99. *Sex Trafficking in Cambodia as a Complex Humanitarian Emergency | Crown Family School of Social Work, Policy, and Practice.* (n.d.). Retrieved July 12, 2021, from <https://crownschool.uchicago.edu/sex-trafficking-cambodia-complex-humanitarian-emergency>
 100. Stan. J. C.R. & C.L. 317 (2007) Reconceptualizing Approaches to Human Trafficking: New Directions and Perspectives from the Field(s) <http://heinonline.org/HOL/LandingPage?handle=hein.journals/stjcrcl3&div=15&id=&page=:>
 101. Sumner, D., Christie, M. E., & Boulakia, S. (2017). Conservation agriculture and gendered livelihoods in Northwestern Cambodia: Decision-making, space and access. *Agriculture and Human Values*, 34(2), 347–362. <https://doi.org/10.1007/s10460-016-9718-z>
 102. Suvedi, M., Kaplowitz, M., & Ghimire, R. (n.d.). *EVALUATION CASE STUDY REPORTS*. 197.
 103. Takei, I., Sakamoto, A. and Kim, C. (2013). The Socioeconomic Attainments of Non-immigrant Cambodian, Filipino, Hmong, Laotian, Thai, and Vietnamese Americans. *Race and Social Problems*, 5(3), pp.198-212.
 104. Taylor, Ian, and Ruth Jamieson. “Sex Trafficking and the Mainstream of Market Culture.” *SpringerLink*, Kluwer Academic Publishers, <link.springer.com/article/10.1023/A:1008302724190>.
 105. Teixeira, Diana. “United Nations Office on Drugs and Crime.” *FAQs*, United Nations, 2017, www.unodc.org/unodc/en/human-trafficking/faqs.html.
 106. “The Female Face of Farming.” *Food and Agriculture Organization*, Food and Agriculture Organization of the United Nations, www.fao.org/gender/infographic/en/.
 107. *The Situation of Women in Cambodia.* (n.d.). 55.
 108. *Trafficking Victims Protection Act: Minimum Standards for the Elimination of Trafficking in Persons.* (n.d.). U.S. Department of State. Retrieved July 13, 2021, from [//2009-2017.state.gov/j/tip/rls/tiprpt/2012/192370.htm](https://2009-2017.state.gov/j/tip/rls/tiprpt/2012/192370.htm)
 109. *Trafficking in persons to Thailand report.pdf.* (n.d.). Retrieved July 13, 2021, from https://www.unodc.org/documents/southeastasiaandpacific/Publications/2017/Trafficking_in_persons_to_Thailand_report.pdf
 110. UNDP. (2020). *The Next Frontier: Human Development and the Anthropocene Briefing note for countries on the 2020 Human Development Report Cambodia* (Rep.).
 111. United Nations Human Rights. (2015). Gender Equality and Human Rights. Retrieved November 26, 2020, from <https://cambodia.ohchr.org/en/issues/gender-equality-and-human-rights>
 112. United Nations Office on Drugs and Crime (UNODC), U. (2017). Trafficking in persons from Cambodia, Lao PDR and Myanmar to Thailand. Retrieved 2020, from https://www.unodc.org/documents/southeastasiaandpacific/Publications/2017/Trafficking_in_persons_to_Thailand_report.pdf
 113. United Nations. (2016, December 22). “Report: Majority of Trafficking Victims Are Women and Girls.” *United Nations*, United Nations, www.un.org/sustainabledevelopment/blog/2016/12/report-majority-of-trafficking-victims-are-women-and-girls-one-third-children/

114. UNWomen. (2017, February). Progress Report on Cambodia's Commitment on Gender Equality. Retrieved 2020, from <https://www.unwomen.org/-/media/headquarters/attachments/initiatives/stepitup/commitments-speeches/cambodia-stepitup-commitment-followup-20170228-en.pdf?la=en&vs=3840>
115. universellesproject. (2017a, July 25). Chbab Srey – The way to be the perfect Cambodian woman. *Univers'ELLES*. <https://universelles.net/2017/07/25/chbab-srey-the-way-to-be-the-perfect-cambodian-woman/>
116. universellesproject. (2017b, September 8). Girls' education: Current challenges in Cambodia. *Univers'ELLES*. <https://universelles.net/2017/09/08/girls-education-current-challenges-in-cambodia/>
117. USAID. (2020). *Cambodia: Nutrition Profile* (Rep.). USAID.
118. *Vietnam War—The Diem regime and the Viet Cong*. (n.d.). Encyclopedia Britannica. Retrieved July 13, 2021, from <https://www.britannica.com/event/Vietnam-War>
119. U.S. Department of State. (2012). Trafficking Victims Protection Act: Minimum Standards for the Elimination of Trafficking in Persons. Retrieved December 19, 2020, from <https://2009-2017.state.gov/j/tip/rls/tiprpt/2012/192370.htm>
120. Völker, M., & Doneys, P. (2021). Empowerment as one sees it: Assessment of empowerment by women participants of development projects. *Development in Practice*, 31(1), 125–138. <https://doi.org/10.1080/09614524.2020.1828284>
121. Wieringa, F. T., Dahl, M., Chamnan, C., Poirot, E., Kuong, K., Sophonneary, P., Sinuon, M., Greuffeille, V., Hong, R., Berger, J., Dijkhuizen, M. A., & Laillou, A. (2016). The High Prevalence of Anemia in Cambodian Children and Women Cannot Be Satisfactorily Explained by Nutritional Deficiencies or Hemoglobin Disorders. *Nutrients*, 8(6), 348. <https://doi.org/10.3390/nu8060348>
122. Wieringa, F. T., Sophonneary, P., Whitney, S., Mao, B., Berger, J., Conkle, J., Dijkhuizen, M. A., & Laillou, A. (2016). Low Prevalence of Iron and Vitamin A Deficiency among Cambodian Women of Reproductive Age. *Nutrients*, 8(4), 197. <https://doi.org/10.3390/nu8040197>
123. *WiP Cambodia Case Study.pdf*. (n.d.). Retrieved July 13, 2021, from <https://www.usaid.gov/sites/default/files/documents/1866/WiP%20Cambodia%20Case%20Study.pdf>
124. Wood, K. M. (n.d.). *Sex-Trafficking in Cambodia: Assessing the Role of NGOs in Rebuilding Cambodia*. 43.
125. *Working with women farmers to make Cambodian communities "Plantwise."* (2017, May 31). <https://ccafs.cgiar.org/news/working-women-farmers-make-cambodian-communities-plantwise>
126. WuDunn, K and S. (2014). *Half the sky: Turning oppression into opportunity for women worldwide*. New York, NY: Alfred A. Knopf.
127. Wong, K. V. (2016). Nutritional Practices and Predisposition towards Aggression in Homo sapiens. *Journal of Clinical Nutrition & Dietetics*, 02(04). doi:10.4172/2472-1921.100028
128. Yang, Y. (2016a). Commitments and challenges in participatory development: A Korean NGO working in Cambodia. *Development in Practice*, 26(7), 853–864. <https://doi.org/10.1080/09614524.2016.1210086>
129. Yang, Y. (2016b). Commitments and challenges in participatory development: A Korean NGO working in Cambodia. *Development in Practice*, 26(7), 853–864. <https://doi.org/10.1080/09614524.2016.1210086>
130. Yaşar, Y. (2010). Gender, Development, and Neoliberalism: HIV/ AIDS in Cambodia. *Review of Radical Political Economics*, 42(4), 528–548. <https://doi.org/10.1177/0486613410375062>

