THE MENTAL HEALTH OUTCOMES RESULTING FROM CRIMES COMMITTED BY THE KHMER ROUGE REGIME

Produced by the Human Rights in Trauma Mental Health Laboratory, Stanford University Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, on Mental Health Outcomes Related to Crimes Before the Extraordinary Chambers in the Courts of Cambodia in Case 002/2

I. Introduction

We represent the Human Rights in Trauma Mental Health Laboratory, an interdisciplinary program based at Stanford University and comprising members of the Department of Psychiatry and Behavioral Sciences and the Palo Alto University Clinical Psychology Ph.D. Program. Among our members are psychiatrists, professors of medicine, private treating psychotherapists and social workers, human rights lawyers, law professors, and graduate and undergraduate students. The members of this Lab have amassed considerable expertise in trauma mental health from a range of disciplinary perspectives that render us qualified to submit this Experts' Report ("Report"). In producing this Report, our lab has collaborated with professionals from the Kingdom of Cambodia and expert witnesses certified by the Extraordinary Chambers in the Courts of Cambodia (ECCC) specializing in Khmer mental health. By way of background, attached to this Report are the curricula vitæ (Exhibit A) from the writers of the report. We did not receive any compensation in connection with our preparation of this Report.

This submission is based on our review of the evidence and trial record in the cases designated ECCC 001/1, 002/1, and 002/2 (including the reference material on mental health accepted as evidence, the testimony of Dr. Sotheara Chhim of the Transcultural Psychosocial Organization (TPO), and the testimony of Civil Parties), along with a comprehensive and comparative literature review on the psycho-social impact of war violence and other forms of extreme trauma on individuals, their families, and their communities. In this Report, we rely upon empirical research that links trauma exposure with damaging psychophysiological and neurobiological outcomes, thereby elucidating the mechanisms by which violence and other forms of extreme trauma give rise to the psychosocial outcomes documented in the record. This Report is also

informed by our long experience treating, representing, and working with victims of severe trauma in communities wracked by massive human rights violations, including more than ten years of work with Cambodian survivors abroad and in the Kingdom of Cambodia. Finally, we reviewed testimony from victim witnesses at trial in order to show a direct connection between the academic literature, the expert testimony, and the impact of actual events in Cambodia during the Khmer Rouge era. Direct quotations from Khmer Civil Party testimony are compared with medical/psychiatric literature from the Cambodian and other conflict situations throughout the Report.

This Report highlights that the crimes underlying the charges at issue in Case 002/2 are associated with poor mental health outcomes and long-term psychological harm in cross-cultural contexts. Victims of the Khmer Rouge experienced a range of chronic adverse conditions and continual threats to safety and well-being that, when left unaddressed, are associated with an increased prevalence, severity, and complexity of mental health disorders along with lasting changes in neurological, physiological, and psychological functioning. These disorders include Post-Traumatic Stress Disorder (PTSD), major depression and dysthymia (chronic but less severe depression), generalized anxiety disorder, and panic disorder; these combine with certain Cambodia-specific expressions of distress. Many of these disorders are comorbid, which is to say that they appear simultaneously in individuals. In addition to reviewing the research on the physiological and neurological consequences of trauma, this Report presents a number of Khmer-specific studies that show extremely elevated rates of traumatic stress symptoms and diagnoses in Khmer populations exposed to multiple traumas (even when compared to other victim populations). These studies corroborate the evidence adduced at trial. This research includes studies of children and adolescents that reveal the impact of trauma experienced directly by child victims as well as indirectly via intergenerational transmission from traumatized parents. Although many of the survivors in this case were victims of multiple international crimes, this Report attempts to discuss the impact of discrete harms and traumatic events—such as harms related to starvation, forced labor, sexual and gender-based violence, and genocide—on victim populations.

The Report closes with a discussion of the prospects for healing among this victim population. Although the experience of repeated and prolonged trauma places individuals at a high risk for severe and persistent physical, psychological, and social damage, it is possible for survivors to lead meaningful lives after trauma with appropriate medical, psychiatric, and psychological treatment. A reparations order focused on the provision of such assistance will go a long way toward

enabling the Civil Parties to achieve optimum physical and mental health, notwithstanding the level of trauma experienced under the Khmer Rouge.

II. Methodology

The Human Rights in Mental Health Trauma Laboratory at Stanford University has served as a source of expert testimony and as a consultant to several international and domestic courts considering the impacts of trauma on survivors. The aim of this Report is to place the specific experiences of victims of the current crime base within the context of the general psychiatric, psychological, and medical knowledge of the impact of such crimes on victims, their families, and their communities as captured in the academic, medical, and legal literature. Our methodology entails a survey of documentation of local and specific experiences of Cambodian survivors, along with a broader review of the established science literature from a cross-cultural perspective. Graduate and undergraduate students associated with the Lab participate in the collection and review of data from the general medical literature under faculty supervision. We consult with faculty from other Stanford University departments as needed and with trauma experts across academic institutions the world over and in Cambodia specifically.

When incorporating established knowledge regarding the impact of experiences similar to the crime(s) in question, we begin by referring to the most recent Diagnostic and Statistical Manual of Mental Disorders (DSM-5), which is regularly updated and published by the American Psychiatric Association (APA, 2013). Now in its fifth iteration, the DSM-5 offers the standard criteria for the classification of mental health disorders and is used and accepted internationally by clinicians, researchers, health regulation agencies, legal systems, and policy makers. Diagnoses and specific symptom presentations of those impacted by the crime(s) in question can be defined in a standardized way based on the DSM-5. (It should be noted that some studies in this Report make reference to the previous editions of the DSM if they were operative at the time). This Report connects specific diagnoses and symptom presentations with the various forms of functional impairment that are known to be associated with the experience of trauma in Cambodia and in other societies experiencing international crimes such as those at issue before the ECCC.

In addition to the DSM, we have performed a comprehensive literature review to identify empirically-validated research articles related to topics addressed in the report. We have searched within electronic databases, including MEDLINE/PUBMED (United States National Library of Medicine, 2016) and PsycINFO (APA, 2016), for key terms related to areas of study relevant to the current Report

(e.g., "trauma" and "posttraumatic stress disorder"). The results include single studies, meta-analyses (wherein multiple studies on a particular subject matter are statistically combined), and review articles (wherein multiple studies are combined in narrative form to draw conclusions on a specific subject matter). Research articles cited in the Report are the products of a critical peer review process to confirm credibility; manuscripts are not included if they were purely theoretical or were based on case- or single-studies that did not undergo peer review (e.g., a thesis or dissertation). Wherever possible, we highlight seminal articles by experts and leaders in their respective field of study and studies involving the specific population of Khmer affected by the crimes being prosecuted. Lab members have also reviewed and incorporated official reports from global health agencies and human rights organizations. In short, this Report synthesizes the massive amounts of data that exist in the psychological and psychiatric literature on the impact of human rights trauma on human psychology with special, comprehensive attention to the effects of the Khmer Rouge.

This literature review is then combined with an analysis of testimony from the record in the ECCC to highlight the mental health outcomes as discussed in expert testimony and to extract clear evidence of harm expressed by Civil Party Participants. Civil Party statements were analyzed and grouped (when possible) according to the type of harm discussed in the statement.

The expert opinions contained in this Report are also informed by previous research and considerable experience treating, representing, and working with victims of severe trauma and in communities impacted by massive human rights violations. In particular, several members of the lab have worked extensively in Cambodia on transitional justice issues and mental health. The leading text about the psychology of Khmer Rouge victims, "Cambodia's Hidden Scars: Trauma Mental Health in the Wake of the Khmer Rouge" was compiled and edited by faculty from the Lab. Daryn Reicherter, the Director of the Human Rights in Trauma Mental Health Laboratory has extensive clinical and research experience with survivors of the Khmer Rouge through his long history of providing psychiatric service to Cambodian diaspora living in the United States and consultative service to the Documentation Center of Cambodia.

III. Psychological Consequences linked to Traumatic Events experienced under the Khmer Rouge Regime

The Khmer Rouge regime, led by Pol Pot, controlled Cambodia from 1975-1979. Nearly two million Cambodians died during this period as a result of the Khmer Rouge's efforts to create an idealized rural, communist society. As the

historical literature and jurisprudence of the ECCC reveals, those who were not immediately executed were forced into labor camps, where they lived and worked in extreme conditions characterized by fifteen hour work days, insufficient food rations, and severe beatings (Blair, 2001). Cambodian civilians were exposed to armed conflict and crimes against humanity, including mass population movements, the destruction of personal and state property, starvation, forced labor, executions, torture, rape, imprisonment, enslavement, deportation, and persecution on religious, racial, ethnic, and political grounds. Surviving leaders of the Khmer Rouge have been charged with the specific crimes of torture, forced labor, starvation, willful killing, detention of civilians without charge, and gender based violence.

These crimes, often experienced simultaneously and for an extended duration, represent serious traumatic events that have lasting psychological effects on victims and their loved ones. The science of psychiatry informs us that traumatic experiences cause mental illness and other poor mental health outcomes; profound changes in human cognition, emotions, and behaviors; and even physiological changes in the human brain. What follows is an overview of the epidemiologic science on specific outcomes in Cambodia as a result of the trauma experienced under the Khmer Rouge regime, with reference to specific psychiatric diagnoses, neuropsychiatric changes, and major mass psychological changes in the population.

A. Common Mental Health Pathologies Associated with Extreme Trauma and their Prevalence amongst Khmer Rouge survivors

The crimes of the Khmer Rouge caused many poor mental health outcomes in the Cambodian populace. Specific mental health disorders are still seen at extremely high rates in the surviving population. One study by Dubois, Tonglet, Hoyois, Sunbaunat & Roussaux (2004) surveyed Cambodians in the Kampong Cham province over five years after the fall of the Khmer Rouge regime. Within this group, 42.4% met criteria for depression and 53% had high anxiety symptoms. Comorbid disorders were also common: 29.2% had depression and anxiety, 16.5% anxiety, 6.1% depression, and 7.1% had triple comorbidity (PTSD, depression, and anxiety). 25.3% reported being socially impaired, and those with comorbid symptoms had increased risk for social impairment. We will examine each of these mental health outcomes in this section.

Cambodian survivors of trauma also report a number of cultural idioms of distress to describe their experience (Hinton, Pich, Marques, Nickerson & Pollack, 2010; Hinton, Nickerson & Bryant, 2011). Among Cambodian survivors

of the Khmer Rouge regime, *Baksbat* (Broken Courage), *Khsaoy beh doung* (Weak Heart Syndrome), and *Khyal Cap* (Wind Attack) have been cited as negative consequences of the traumas experienced during the regime (Hinton, Hinton, Um, Chea & Sak, 2002). In trial, Dr. Chhim specifically described *Baksbat* as the psychological damage to an individual in the context of his broader testimony about the range of suffering experienced by the Cambodian people throughout the regime (Chhim Testimony, 2013).

Below we describe some of the common mental health disorders caused by the traumatic events experienced during the Khmer Rouge and present data on the prevalence of these disorders amongst survivors.

1. Cultural Idioms of Distress in Cambodia

Criterion-based mental health disorders delineated by the American Psychiatric Association in the DSM and by the International Statistical Classification of Diseases and Related Health Problems (ICD), a medical classification list by the World Health Organization, provide a generalized means of describing psychological distress for clinical purposes and measuring it for medical science. But within each culture and among individuals, there also exist numerous idiosyncratic expressions of psychological suffering that can be well established and valid (Hinton & Lewis-Fernández, 2010). These cultural idioms of distress run parallel to one another, as well as to the medical models used in the DSM and ICD, each using a relatable language to give shape to the human experience of psychological distress. The mental health impacts of the trauma and stress experienced under the Khmer Rouge regime are documented in the language of both Western medicine and Cambodian idioms (Hinton, Pich, Marques, Nickerson & Pollack, 2010; Hinton, Nickerson & Bryant, 2011). Specifically, *Baksbat* (Broken Courage) and *Khsaoy beh doung* (Weak Heart Syndrome) and *Khyal Cap* (Wind Attack) represent commonly cited negative consequences of the traumas experienced during the regime (Hinton, Hinton, Um, Chea & Sak, 2002).

Baksbat denotes the negative experiences following distressing or life-threatening events and has been conceptualized by Chhim (2012) using a three-factor model: psychological distress (e.g., trouble thinking, easily fearful, feeling flat or low emotionally, loss of self-confidence), broken courage (e.g., submits to others, remains mute, cannot be open as before, cannot rely on oneself), and erosion of self (e.g., avoids meeting others, loss of honesty, loss of relationships with others). Fifty three experts on the subject, all of whom had been exposed to the Khmer Rouge regime, provided a consensus on the concept of *baksbat* and

assisted in the initial baksbat description. *Baksbat* and PTSD were found to be highly correlated; however, *baksbat* encompasses additional symptoms within the "broken courage" and "erosion of self" factors that are not included in the PTSD diagnostic criteria (Chhim, 2012). In his testimony, Dr. Chhim discussed *baksbat* as encompassing the psychological damage to an individual as well as the suffering experienced by the entire Cambodian people (Chhim Testimony, 2013).

Khyal Cap, or "wind attack," has many similarities to the experience of a panic attack, as understood through the DSM-5 criteria. Those experiencing "wind attack" typically report palpitations, shortness of breath, and fear of dying as the result of palpitations, which can be abruptly triggered by minor disturbances (Hinton & Lewis-Fernández, 2010). *Khyal* Attack is included in the American Psychiatric Association's DSM-5 (APA, 2013). Within a sample of 100 Cambodian refugees attending an outpatient mental health clinic in Boston, 60% reported that they currently suffer "weak heart" and 90% of those individuals thought that palpitations might result in death (Hinton et al., 2002).

The Cambodian Symptoms and Syndrome Inventory (C-SSI; Hinton, Kredlow, Pich, Bui & Hofmann, 2013) was created to assess psychological distress in Cambodia in a more culturally-sensitive and –specific manner. The C-SSI is divided into somatic symptoms and cultural syndromes associated with traumatic experiences. Somatic symptoms include: dizziness, blurry vision, tinnitus, headache, neck soreness, palpitations, shortness of breath, chest tightness, rising sputum, stomach bloating/discomfort, cold hands and feet, numbness in the arms and legs, sore arms and legs, weakness, poor appetite, and feeling of lightness in the body. Cultural syndromes include: somatic-focused syndromes, that is, physical symptoms such as feeling out of energy to the point of fearing having a *khyal* attack or dying from depletion; agoraphobia/motion-sickness syndromes (e.g., the patient feels that they have been "poisoned by people"), emotion-focused syndromes (e.g., *kut caraeun* or "thinking too much"), cognitive-capacity syndrome (e.g., forgetful), and spiritual-type syndromes (e.g., *khmaoch sangot* or "Ghost pushing you down", also known as sleep paralysis). The C-SSI was administered to Cambodians identified as suffering as a result of the Khmer Rouge regime. Respondents had very high scores on the C-SSI, which increased across levels of PTSD severity; however, the C-SSI was found to be a better indicator of the severity of past trauma events and self-perceived health than the PTSD Checklist (Hinton et al., 2013). That said, the PTSD Checklist is still a valid tool for diagnosis in the victim community.

2. Post-Traumatic Stress Disorder

Post-Traumatic Stress Disorder (PTSD), a chronic and debilitating mental illness, is common in individuals experiencing a traumatic event. The DSM-5 (APA, 2013) defines PTSD as a conglomerate of symptoms that results from experiencing, witnessing, or being exposed to traumatic events. Individuals experiencing a trauma that represents a serious threat to one's social and psychological functioning often go on to develop a constellation of symptoms. These symptoms are divided into four different categories of symptomology:

1. intrusive thoughts pertaining to the event,
2. avoidance of stimuli related to the event,
3. negative changes in thoughts and/or mood regarding the event, and
4. hyper-arousal (APA, 2013).

Intrusive thoughts may include memories, dreams, dissociation/flashbacks, and psychological or physiological distress when triggered by reminders of the event (APA, 2013). Avoidance symptoms may include attempts to elude internal thoughts or emotions about the event or external people, places, and objects that are somehow related to the event (APA, 2013). The negative change in mood and/or cognitions includes an inability to remember events surrounding the trauma; negative views about the self, others, and the world; self-blame; negative moods such as shame, fear, or guilt; anhedonia (an inability to experience pleasure from normally pleasurable activities); a sense of detachment from people; and an inability to experience positive mood states (APA, 2013). Hyper-arousal symptoms may include irritability and/or anger, self-destructive behavior, hyper-vigilance (being on constant alert for external stimuli), an exaggerated startle response, decreased concentration, and sleep problems (APA, 2013). In order to meet the diagnosis of PTSD, individuals must have one symptom each from the intrusive and avoidance category, and two symptoms each from the categories of negative changes in thoughts and/or mood and hyper-arousal (APA, 2013).

Although trauma-related symptoms due to intense fear, terror, and arousal often fit within a PTSD diagnosis, the negative consequences of trauma extend beyond conditioned fear-responses and may alter fundamental aspects of one's identity, worldview, and general ability to find meaning in one's life. The vulnerability and terror experienced during a traumatic event significantly alters one's orientation and perception of the self, others, and the world such that individuals exposed to trauma can and often see themselves as at fault for, or deserving of, their experience. They may also see others as out to "get" them or as

unable to protect them and see the world as being a dangerous and unjust place. These disturbances are reflected in the symptoms of PTSD defined by negative alterations in cognitions and mood (Newman, Riggs & Roth, 1997). PTSD rating scales in Khmer are valid and are used as a standard for assessment in Cambodia.

Although the DSM contains a clinical check-list, trauma experiences and the related symptom presentations can also be understood in more nuanced ways. This is particularly relevant to the types of trauma experienced during the Khmer Rouge regime. The experience of recurrent and compounded interpersonal traumas is associated with increased symptom severity and complexity, and tends to have more pervasive impact on both social and psychological functioning (Herman, 1992). These types of traumatic experiences make it especially difficult for survivors to find meaningful and adaptive perspectives about themselves and their environment (Newman et al., 1997), resulting in particular impairments in relationship functioning. Impaired self-esteem and sense of identity, inability to trust others and form healthy relationships, and emotional hyper-arousal and hypo-arousal (heightened or blunted stress responses) are just some of the possible consequences of extreme trauma. These symptoms can persist long after the traumatic event and serve as risk factors for re-victimization (e.g., Marx, Heidt & Gold, 2005).

Survivors of the Khmer Rouge have extremely high rates of PTSD, even when compared to other survivors of war crimes and other mass atrocities. Dr. Chhim testified in the ECCC that the majority of victims to whom the TPO provided psychological services were severely traumatized and exhibited symptoms of PTSD (Chhim Testimony, 2013). The most commonly reported PTSD symptoms were: re-experiencing (e.g., vivid imagination, nightmares of being chased, tortured, or killed, as well as about relatives who were killed), physical arousal (e.g., difficulty breathing, shaking, heightened startle response, and muscle tension), and avoidance (e.g., avoiding thinking and talking about the traumatic events). In addition, there is great resistance to talking about what happened within Khmer communities, because people were conditioned to keep silent during the Khmer Rouge regime (Stammel, Heeke, Bockers, Chhim, Taing, Wagner & Knaevelsrud, 2013).

3. Comorbid Symptoms and Disorders

Many other mental health diagnoses are related to trauma and are often seen as co-morbid (i.e., occurring simultaneously) with PTSD. In fact, the comorbidity of psychiatric disorders is thought to be the rule rather than the exception in cases of interpersonal trauma and abuse. Also, other mental health symptoms and/or

disorders may be present without the presence of a formal diagnosis of PTSD. Forty percent of children exposed to trauma are diagnosed with at least two psychiatric disorders (Copeland, Keeler, Angold & Costello, 2007). Major depression, dysthymia (chronic but less severe depression), bipolar disorder, generalized anxiety disorder, panic disorder, agoraphobia (fear of open places), social phobia, and obsessive-compulsive disorder have all been linked to PTSD (Creamer, Burgess & McFarlane, 2001). The 1995 National Comorbidity Study—a massive epidemiological study that surveyed 5,877 individuals in the United States—established an historical precedent for understanding PTSD and its comorbid disorders. PTSD was found to be comorbid in 47.9% of individuals with a history of major depression, 21.4% with dysthymia, 16.8% with generalized anxiety disorder, 31.4% with specific phobia, and 27.6% with social phobia (Kessler, Sonnega, Bromet, Hughes & Nelson, 1995). However, other disorders without the presence of PTSD have also been documented. The range of psychological disorders associated with PTSD is further discussed below.

4. Dissociative Disorders

Dissociative symptoms are another common response to trauma. Dissociative symptoms include an unawareness of one's present state, flashbacks, out-of-body experiences (also known as "depersonalization"), or feeling as if the world around one is surreal or artificial in some way (known as "derealization"). Previous research indicates that approximately half of individuals who develop PTSD also experience significant dissociative symptoms (Briere, Scott & Weathers, 2005) compared to only 4.4% of adults with no PTSD diagnosis. Carlson, Dalenberg and McDade-Montez (2012) concluded that dissociative symptoms are related to traumatic experiences and their severity; effects can be long lasting; and high dissociative symptoms increase the likelihood and severity levels of PTSD symptoms.

5. Anxiety Disorders

Anxiety symptoms and disorders have numerous debilitating effects and consequences for the individual. The experience of fear, avoidance, panic, and uncontrollable arousal are common symptoms of anxiety disorders that can lead to significant functional impairment (DSM-5). These symptoms not only affect the individual but also have repercussions for family and community. For example, children of mothers with panic disorder are 6.8 times more likely to develop the disorder, and children of mothers with phobic disorders are 3.1 times more likely to be diagnosed with the disorder at some point in their life (Merikangas & Pine,

2002). Cultures differ in regards to individual presentation and societal explanations for anxiety symptoms. Hinton et al. (2002; 2010) describe symptoms associated with culturally bound anxiety disorders in Cambodia, which we discuss in section (1) above on Cultural Idioms of Distress in Cambodia.

6. Depressive Disorders

Mood disorders, such as Major Depressive Disorder, are a common outcome for trauma survivors (O'Donnell, Creamer & Pattison, 2004). According to the DSM-5, symptoms of depression include depressed mood, suicidal thinking, loss of appetite, weight loss or gain, loss of interest, and hopelessness. Irritability and physical complaints may also be present (APA, 2013).

Many survivors of the Khmer Rouge regime suffered symptoms of anxiety and feelings of hopelessness due to the multiple losses experienced under the Khmer Rouge regime, including loss of home, community, family, and friends. Some individuals reported considering suicide because of these factors. Other survivors present with continued experiences of paranoia as a result of being tortured on the basis of spurious allegations that they were spies. Many of these individuals remain suspicious that they are still being monitored or followed. People also became distrustful of one another and made efforts to conceal their identity. This sense of mistrust is the result of the PTSD, and all these factors are related to the events that took place during the Khmer Rouge era (Chhim Testimony, 2013).

7. Suicidal Behavior

The term "suicidal behavior" is typically used to describe suicide-related thoughts and/or actions, such as suicide ideation, suicide planning, and suicide attempts, or completed suicide. Suicide is a leading cause of death worldwide, and according to World Health Organization (WHO) data, suicide rates are projected to increase dramatically over the next few decades (Nock et al., 2008). Established risk factors for suicidal behavior include psychiatric disorders, psychiatric comorbidity, hopelessness, impulsiveness, anhedonia (inability to experience pleasure), high emotional reactivity, stressful life events and persistent stress. While being female is a risk factor for suicidal behavior, being male is associated with a greater likelihood of suicide completion (Nock et al., 2008).

Suicidal behavior is pervasive in Cambodia. The results of a study conducted by the Royal University of Phnom Penh revealed completed suicide prevalence rates in individuals above the age of 21 to be 42.35 per 100,000 people. This number is significantly higher than the WHO's estimated country average of 16

per 100,000 people. Furthermore, the ratio of attempted to completed suicides in Cambodia was found to be more than double the WHO country average (Dara & Dene-Hern, 2012). Suicidal behavior is listed as a DSM-5 criteria of major depression. However, other psychiatric disorders (trauma-related mental health outcomes, etc.) contribute to suicidal tendencies as well (Nock et al., 2008).

8. Substance Use Disorders

Another common form of mental health comorbidity involves substance use disorders (Kessler et al., 1995). Alcohol and drug use are a common form of coping with significant distress and posttraumatic reactions. Thus, PTSD and substance use disorders are highly comorbid (Mills, Teesson, Ross & Peters, 2006). Kessler et al. (1995) found that among individuals with PTSD, 51.9% were diagnosed with alcohol use/dependence, and 34.5% were diagnosed with drug abuse/dependence. Consistent with the findings of Kessler et al., (1995), Mills et al., (2006) found alcohol to be the most commonly abused substance amongst individuals with comorbid substance use disorders and PTSD.

Illicit drug use in Cambodia continues to be a public health concern with the number of reported drug users increasing each year (Yi et al., 2011). In a sample of Cambodian adolescents, traumatic events such as family-violence, victimization, and community-violence witnessing were identified as significant risk factors for substance use (Yi et al., 2011). Jacobsen, Southwick, and Kosten (2001) described the relationship between PTSD and substance-use disorders as a reciprocal process and form of self-medication. Individuals with PTSD often begin using illicit and addictive substances in order to alleviate or reduce their symptoms. If dependence develops, withdrawal symptoms can exacerbate existing PTSD symptoms. This interaction makes individuals with PTSD especially vulnerable to developing and maintaining substance use disorders (Jacobsen et al., 2001).

9. Physiological and Neurological Consequences of Trauma in Human Biology

Mental health disorders caused by traumatic experience often result in biological changes in the human nervous system. The continued activation of the sympathetic nervous system—that part of the nervous system that responds to stressful events—in response to threatening or stressful experiences has detrimental effects on both one's physical health and one's ability to regulate psychological responses to the environment (McEwen, 1998). The physiological process of allostasis is particularly relevant to recurrent trauma. Allostasis refers to the body's attempts at maintaining stability through change. Allostatic load

describes the physiological costs and consequences of maintaining this stability over long periods of time. Traumatic stress, and its subsequent physiological consequences, occurs when an individual experiences a threat to safety and well-being during a specific event or through exposure to chronic adversity, leading to an allostatic load that becomes too burdensome over time. The allostatic load is thought to be cumulative; therefore, while one specific traumatic event may not immediately result in the trauma-related symptoms and disorders discussed above, each individual event brings the individual closer to the clinical threshold.

Traumatic stress exposure results in the activation of the sympathetic nervous system (which prepares the body for action), without the compensatory response of the parasympathetic nervous system (which prepares the body for resting activities). The flooding of stress hormones and general activation of the body suppresses the immune system and impairs adaptive functioning (McEwen, 1998). Traumatic stress occurs when this accumulation of stress reactions overwhelm one's capacity to effectively manage—both psychologically and/or physiologically—environmental challenges. In essence, the individual is continuously faced with what are perceived as insurmountable barriers, resulting in chronic feelings of fear, hopelessness, and distress. Traumatic stress and a burdensome allostatic load leads to lasting alterations in physiological and neurological systems (McEwen, 1998; Sapolsky, Romero & Muncket, 2000; McEwen & Wingfield, 2003; Boyce & Ellis, 2005; Herbert et al., 2006).

The age at which trauma occurs is of particularly importance when considering the physiological and neurobiological consequences of trauma, as traumatic stress exposure can alter developmental trajectories in children. The experience of trauma in childhood, and specifically prolonged exposure to stressful events, greatly impacts the neurochemistry and brain functioning of the developing child (Carrion & Kletter, 2012; Van der Kolk, 1998; Teicher & Samson, 2013, 2016). Research using neuroendocrinological and neuroimaging assessment of children and adolescents has provided important insight into the understanding and implications of early trauma. Neuroendocrinology is the study of human hormones' effect on the brain. Abnormal levels of arousal impair the development of cognitive coping abilities, the capacity to modulate varying arousal states, and the ability to respond to a changing environment in adaptive ways. The endocrine (i.e., hormonal) system is affected by the hypothalamic-pituitary-adrenal (HPA) axis that secretes cortisol, signaling to the rest of the body to prepare for action. Cortisol is a hormone that is increased in times of stress or over-excitement. Research has shown that prolonged stress can damage the HPA axis, which in turn causes impaired regulation of cortisol secretion. This dysregulation in cortisol

levels, which can be either dulled or heightened, is associated with PTSD too. Among adolescents, the temporal proximity of the trauma is a strong predictor of the abnormal cortisol level, i.e. proximal traumas predict elevated levels and distal (i.e., more distant) traumas predict low levels (Carrion & Kletter, 2012).

Neuroimaging studies have demonstrated correlations between PTSD and abnormalities and impairments in brain structure (De Bellis, et al., 2002). Neuroimaging is a medical tool for scientists to look at effects on brain tissue in living subjects. A recent review of the impact of child abuse on neurobiology by Teicher and Samson (2016) demonstrates alterations in multiple brain structures as a result of childhood maltreatment, including heightened amygdala activation in response to emotional triggers and decreased activation of reward-pathways (striatum) in response to expected rewards. In other words, physical brain structures connected to emotion are altered by traumatic experience. In addition to prompting fear responses, the amygdala plays an integral role in the processing and consolidation of emotional memories. Among both adults and adolescents, those with PTSD showed increased amygdala activation when presented with threatening facial expressions in comparison to controls (Carrion & Kletter, 2012).

In addition, traumatic memories are qualitatively different from normal memories (Van der Kolk, 1998). Avoidance of reminders of the trauma and dissociation from the trauma itself interfere with memory encoding, consolidation, and reconstruction (Van der Kolk, 1998). Pediatric neuroimaging has also found abnormalities of the prefrontal cortex among adolescents who have experienced abuse. The prefrontal cortex is the area of the brain that is involved with planning. This study showed that adolescents with PTSD tend to activate their prefrontal cortex less than healthy controls, instead relying on the more primitive and emotion-based brain structures, such as the limbic system, which regulates our emotions (De Bellis et al., 2002).

10. Comparative Research on PTSD and Khmer Rouge Survivors

The mental health consequences of civil conflict have been well-documented around the world (Murthy & Lakshminarayana, 2006). An epidemiological study by de Jong et al. (2001) conducted over two years (1997-1999) surveyed survivors of mass political violence from community samples in Algeria (n = 653), Cambodia (n = 610), Ethiopia (n = 1200), and Gaza (n = 585). (The designation "n" indicates the sample size). The prevalence rate of PTSD was high in all four countries: 37.4% in Algeria, 28.4% in Cambodia, 15.8% in Ethiopia, and 17.8% in Gaza. In addition, conflict-related trauma after age 12 years was a significant

predictor of PTSD across all four countries. However, additional risk factors varied between samples. For instance, torture was a risk factor in all but Cambodia; psychiatric history and current illness were risk factors in Cambodia and Ethiopia; and youth domestic stress, familial death or separation, and parental alcohol abuse were risk factors only in the Cambodia sample.

Studies assessing the prevalence of PTSD symptoms in Cambodian populations have provided general support for the validity of the PTSD criteria; however, the avoidance symptom cluster was found to be less applicable, while the addition of dissociative symptoms appeared to increase cultural sensitivity of the disorder (Mollica, McInnes & Pool, 1998). There remain some concerns about the use of PTSD as a universal diagnosis, especially as it applies to cultures that relate to collective harm, rather than individual harm (Bracken, Giller & Summerfield, 1995). Nevertheless, PTSD remains a valid international standard for examining traumatic response in humans across cultures. And it has been used reliably to gauge trauma responses in Cambodian survivors given that Western diagnostic criteria for PTSD capture symptoms experienced by many Cambodian people. Still, the definition may neglect important cultural idioms and interpretation of the experienced distress (which we will discuss in the next section). As a result, some argue convincingly for the inclusion of other cultural idioms of distress to describe the suffering states reported by Cambodian survivors (Eisenbruch, 1991) (Hinton, 2013).

B. Additional Research on the Widespread Psychological Consequences of Trauma Associated with the Khmer Rouge Regime

The impact of the Khmer Rouge regime spans generations and touches individuals who remained in Cambodia as well as refugees who have sought asylum or attained refugee status elsewhere. The unusual longevity of symptoms speaks to the complex and continuous nature of the trauma experienced. The majority of Cambodians lost a close family member, and even three decades after the Khmer Rouge regime, a significant number of individuals still suffer from prolonged grief (Stammel, Heeke, Bockers, Chhim, Taing, Wagner & Knaevelsrud, 2012). Following the invasion of Vietnamese forces in 1979 and throughout the following decade, a large number of Cambodian refugees continued to experience and witness violence, and live in harsh physical conditions with limited food, water, and access to health care (Mollica et al., 1993). These are the types of chronic adverse conditions and continual threats to safety and well-being that, when left unaddressed, are associated with increased prevalence, severity, and complexity of mental health disorders along with lasting changes in neurological,

physiological, and psychological functioning.

Below we discuss additional psychological impacts identified amongst Cambodian survivors—namely on children, adolescents, descendants of direct victims, as well as refugees—that indicate the widespread psychological consequences of trauma related to the Khmer Rouge regime.

1. Effects of Trauma on Children and Adolescents who Survived the Khmer Rouge regime

Cambodians of all ages were impacted by the actions of the Khmer Rouge regime and mental health effects have been well documented in children who survived the Khmer Rouge regime. Children at different levels of development witnessed and directly experienced extreme violence and the loss of both family and culture. In addition to prolonged psychological symptoms, the instability and conflict during the regime had lasting impacts on the social structures needed to support the success of younger generations. For instance, the period during which the Khmer Rouge were in power witnessed the breakdown of school systems, depriving thousands of children of complete and continuous education. Those who grew up in the years following the regime experienced second-hand the destructive impact on their family and heritage. Therefore, understanding the unique impact of psychological trauma on Cambodians across the victims' lifespan is particularly important when considering the destruction caused by the Khmer Rouge.

Children were most traumatized by the forced evacuation of cities because they lost hope and dreams for the future and did not have sufficient coping strategies to understand and deal with the loss and chaos. For children who lost their parents, the psychological impacts are even more severe because by the time the Khmer Rouge regime fell, these children had lost their forms of social support and a sense of belonging (Chhim Testimony, 2013). Many children suffered from PTSD and/or exhibited behavioral problems, e.g., anti-social or oppositional behavior. Such behavioral problems are common manifestations of traumatic stress in children due to the disruptions in neurological functioning and related impairment in emotion and behavior regulation skills. These experiences have implications for future parenting styles and the psychological well-being of the next generation (Chhim Testimony, 2013; Field, 2011).

Published studies of Cambodians consistently report high instances of psychological distress years after the fall of the Khmer Rouge. For example, one study reports that among those still living in Cambodia, 28.4% reported PTSD symptoms based on the DSM-IV criteria (a previous version of the DSM).

Additional findings indicated that only conflict-related events occurring after the age of 12 years were significantly related to PTSD (de Jong, et al., 2001). That said, given the impact of traumatic stress on child development, exposure to conflict before the age of 12 may manifest in symptoms and developmental aberrations that are not captured by the PTSD diagnostic criteria. In a separate study, 110 Khmer adolescents living in Portland and 99 Khmer adolescents in Salt Lake City were assessed for mental health issues; 20% of adolescents, over 50% of mothers, and about one-third of fathers diagnosed met criteria for PTSD (Sack et al., 1993). All of these studies show marked increase (indeed an order of magnitude increase) compared to other populations.

In addition, within a random sample of 182 adolescents, aged 12-13, and their parents living in a refugee camp on the Cambodia-Thai border, 53.8% of respondents manifested significant distress in the clinical range as reported by their parents with the aid of a survey tool developed by the study. The most commonly reported symptoms were somatic complaints, social withdrawal, attention problems, anxiety, and depression (Mollica, Poole, Son, Murray, Tor, 1997). In a similar study among 993 Cambodian adults surveyed in a Thai refugee camp, participants reported a mean number of 14 trauma events during the Khmer Rouge era and 1.3 trauma events during the past year (Mollica, McInnes, Poole & Tor, 1998). The number of reported trauma events was highly correlated with depression, PTSD, dissociation, as well as other culturally dependent symptoms.

Another study looked at the psychological health of 40 Cambodian high school students who moved to the United States from Cambodia (Kinzie, Sack, Angell, Manson & Rath, 1986). These adolescents experienced multiple traumatic events from 1975-1979 as a result of the Khmer Rouge regime. Specifically, adolescents reported separation from family, witnessing numerous deaths, and experiencing starvation and forced labor within work camps. After spending two years in a refugee camp in Thailand, these adolescents immigrated to the United States. A high prevalence of mental health issues was observed four years after leaving Cambodia. Fifty percent of students met criteria for PTSD; the most commonly cited symptoms included: recurring nightmares, heightened startle response, feeling ashamed for being alive, and avoidance of memories of Cambodia and/or discussion of the traumatic events. Pervasive depressive symptoms were also commonly reported; these included: appetite or weight changes, loss of energy and interest, difficulty sleeping, impaired concentration, guilt, hopelessness, and rumination. Fifteen percent of students reported suicidal thoughts. Twenty percent described experiencing something akin to a panic attack.

2. Intergenerational Effects of Trauma

Clinicians and physicians have long noted the presence of heightened levels of distress and psychopathology in the children of victims of trauma, even when the children themselves were not exposed to traumatic stress. These observations have led scientists to investigate the mechanisms by which traumatic distress is transmitted inter-generationally from a traumatized (or trauma-exposed) individual to his or her children. We now know that exposure to trauma and adversity can have an impact that spans across multiple generations through the transmission of traumatic stress inter-generationally and the impact of trauma on parenting. Traumatic stress exposure is associated with epigenetic changes in parents (i.e., changes in the expression of DNA) that are passed on to their offspring, altering the biological and physiological functioning of subsequent generations (Yehuda et al., 2015).

Research has confirmed that a parent's trauma exposure corresponds with increased risk for PTSD, mood disorders, and anxiety disorders in their children (Yehuda, Halligan & Bierer, 2001; Yehuda et al., 2015). For example, a study by Yehuda, Bell, Bierer & Schmeidler (2008) revealed a higher prevalence of lifetime PTSD, mood and anxiety disorders, and substance abuse disorders among offspring of Holocaust survivors, compared to controls. Maternal PTSD, in particular, was highly associated with PTSD among adult children. Furthermore, the neurobiological and psychophysiological alterations associated with PTSD and traumatic distress reviewed above have also been observed in the children of victims of trauma (Yehuda et al., 2015).

The experience of trauma and trauma-related symptoms can have significant negative effects on one's ability to parent effectively (Field, 2011). The parent, unable to manage his/her emotional distress, may rely on his/her child for emotional support; in response, the child often sacrifices his or her own needs in order to retain this limited opportunity for closeness. This can have significant long-term consequences for the child's emotional and relational functioning. As a result, children of parents suffering from traumatic stress are at increased risk for psychiatric disorder.

In addition, while the impact of trauma on relationships and parenting may contribute to the increased rates of post-traumatic stress and alterations in neurobiology observed in children of trauma victims, research has now shown that parental trauma exposure affects the expression of that individual's genetic code (Yehuda et al., 2015). Epigenetics is the study of how DNA expression can be altered in a single generation. Past research has demonstrated that environmental influences such as stress exposure can "reprogram" the genetic blueprint for the

development of neural and biological systems in rats and mice; these changes in the blueprint are subsequently passed on to the offspring (Bale et al., 2010; Bale, 2015). These findings have more recently been translated to humans, as parental trauma exposure has been found to alter how the genes that code for psychophysiological stress response (e.g., release of the stress hormone, glucocorticoid) are regulated both in trauma-exposed individuals and in their children. These findings reveal how exposure to trauma can alter the biology of both the individual victim and of their children, providing a biological explanation for the intergenerational transmission of trauma and traumatic stress.

These intergenerational risk factors have been documented in Cambodian families who survived the Khmer Rouge regime (Field, 2011). A sample of 110 Khmer adolescents in Portland and 99 Khmer adolescents in Salt Lake City, aged 13 to 25 years, and their parents were assessed for PTSD (Sack, Clarke & Seeley, 1995). PTSD of the parents was significantly related to PTSD of the adolescent. When neither parent had PTSD, 12.9% of youths received a PTSD diagnosis. When one parent had PTSD, the adolescent prevalence rate increased to 23.3%. When both parents were diagnosed, the rate increased to 41.2%. Likewise, Field, Om, Kim & Vorn (2011) found that among children whose parents had lived through the Khmer Rouge regime, both the mother's and father's Khmer Rouge-related trauma exposure and trauma symptoms were positively correlated with their child's depression and anxiety. The fathers' and mothers' perceived trauma symptoms (not trauma exposure) significantly related to role-reversing parenting style and the mothers' symptoms were also related to an overprotective parenting style. Role-reversing parenting occurs when children must take on the responsibilities usually done by parents. This role reversal is significantly related to childhood depression and anxiety. Overprotective parenting is also related to childhood depression. In addition, there was a significant direct effect for parents' trauma exposure on their children's levels of anxiety.

3. Effects of Trauma and Other Mental Health Problems in Refugees

Moreover, symptoms of trauma and other mental health problems follow the victim, even after fleeing the country where the harm occurred. Refugees are at high risk for the development of mental health problems as a result of pre-migration, migration and post-migration experiences (Boehnlien & Kinzie, 1995). Post-migration problems—such as adaptation difficulties, loss of culture, and loss of support—are significantly associated with PTSD symptoms and emotional distress (Carswell, Blackburn & Barker, 2011). In his testimony, Dr. Chhim noted that although Cambodian people who have resettled overseas may

experience increased security and may enjoy more resources, they lack attachment to their home country and their culture, including religious institutions and buildings (Chhim Testimony, 2013).

Mental health outcomes of Khmer refugees in the United States have been assessed in multiple settlements, including Long Beach, California, which represents the largest Cambodian refugee community in the United States. In a sample of 490 adults from this community, all individuals interviewed had experienced trauma prior to immigration and over 50% reported current symptoms consistent with a diagnosis of PTSD and/or Major Depressive Disorder (Marshall, Schell, Elliott, Berthold & Chun, 2005). Among a sample of Cambodian immigrants living in Utah, 45% met criteria for PTSD and 81% reported five or more symptoms of PTSD (Blair, 2001). Arousal and re-experiencing were the most commonly reported symptoms. In addition to PTSD, 51% met criteria for Major Depression, 27% were diagnosed with social phobia (fear of social situations, isolation), and 14% were diagnosed with Generalized Anxiety Disorder (Blair, 2001). Among Cambodian refugees who had survived 2-4 years of concentration camp experience and who met the then-applicable DSM-III criteria for PTSD, the predominant symptoms reported were avoidance, hyperactive startle reactions, emotional numbness, intrusive thoughts, and nightmares that lasted at least 3 years after imprisonment (David, 1984). Participants within this study also reported high instances of depressive symptoms, including somatic symptoms, poor concentration, insomnia, and poor appetite.

Kinzie (1989) has reported on the results of an Indochinese Refugee Clinic in Oregon (sponsored by Oregon Health Sciences University). In this study, 85 Cambodians were evaluated and 60 were in therapy at the time of publication. The majority of patients demonstrated lasting psychological effects of the Khmer Rouge regime. Depressive symptoms were present in most patients at intake, and 20% of patients had been hospitalized, largely related to depression and suicidality. Intrusive symptoms (e.g., nightmares, intrusive thoughts, feelings that one is re-experiencing the trauma, and startle reactions) and avoidance symptoms (e.g., consciously avoiding memories of or reminders of past events, numbing, social withdrawal) were also common. In a study by Carlson and Rosser-Hogan (1993), fifty adults (26 women and 24 men) were randomly selected from a list of Cambodian refugees who had resettled in Greensboro, North Carolina, between 1983 and 1985. 90% of these refugees displayed marked symptomatology related to PTSD, dissociation, depression, and/or anxiety.

The elevated rates of traumatic stress symptoms and diagnoses reported in all these studies are consistent with the increased risk for post-traumatic stress that

would be expected for a population exposed to the multiple traumas and threats posed by the Khmer Rouge regime.

4. Destruction of Relationships and Social Suffering Amongst Khmer Rouge Survivors

It is estimated that over 20% of the Cambodian civilian population was killed during the Khmer Rouge era (Kiernan, 2003). Social systems along with protective community and cultural structures were dismantled during the civil war, effectively assaulting individuals' source of identity, values, and connection to the past (Summerfield, 2000). Traditional healers, village elders, and those who practiced and disseminated the arts were forced to cease their activities (Eisenbruch, De Jong & Van de Put, 2004). This collective loss compounds the numerous personal losses and interpersonal traumas experienced by the Cambodian people. In one study of 130 survivors of the Khmer Rouge regime still living in Cambodia, 72% of participants reported forced separation from family, 59% witnessed the torture of family or friends, 70% witnessed the death of family or friends, and 49% witnessed the murder of family or friends; furthermore, 43% reported experiencing forced social isolation, and 11% were forced to betray or harm someone (Field & Chhim, 2008).

Dr. Chhim's testimony at trial describes the impact on children who were separated from their family and forced to live in detention centers where they were often subjected to indoctrination. He noted that children were told that they did not belong to their parents and instead belonged to Angkar (the regime); for that reason, they were told they should obey Angkar at all times. Some children reported to Angkar about their parents. The social suffering and relational ruptures resulting from this forced violence and betrayal seriously impact the long-term health of both the individuals and the community. Dr. Chhim's testimony also highlighted the social effect of the forced evacuations during the Khmer Rouge regime, reporting that segregation between the New People and Old People was a serious issue. New People lived in fear, were the target of surveillance, and were prone to attacks and allegations by others, which could lead to being killed (Chhim Testimony, 2013). Indeed, Dr. Chhim testified about his own experience as a New Person, reporting a loss of identity and security, both physical and spiritual. During the Khmer Rouge period when people were forcibly evacuated, they were detached from their loved ones, tortured, subjected to hard labor, and were constantly threatened. In addition to losing housing, employment, and connection to their community, worship traditions and religious rituals were destroyed, further intensifying the sense of disorientation and loss of identity (Chhim Testimony, 2013).

IV. Psychiatric Outcomes Linked to Statements of Specific Forms of Harm Alleged in Case 002/2

Numerous victims have testified in Case 002/2 and alleged specific harms that constitute gravely traumatic experiences. The following section highlights some of the harms alleged in Case 002/2 and the known mental health outcomes associated with such harms. Given that many of the survivors of the crimes in this case were victims of multiple crimes, it is difficult to untangle the mental health outcomes for each specific crime charged. We can, however, state with certainty that the commission of international crimes (like torture and rape) cause severe and long-lasting mental health damage. It is also clear that multiple traumatic experiences, or the combination of traumatic experiences, make poor mental health outcomes significantly more likely. This section of the Report will review the scientific, psychiatric literature on the mental health outcomes associated with the specific crimes and harms alleged in Case 002/2 and also examine the available data from survivors of the Khmer Rouge regime. It is important to note that the physical and psychological trauma that is highlighted in the literature and throughout this report is congruent with the testimony that was presented in court.

A. Harms Related to the Crimes Committed at Cooperatives and Worksites

Victims testifying in Case 002/2 have identified numerous harms related to crimes committed at cooperatives and worksites under the Khmer Rouge regime. This includes harms associated with enslavement, deportation, forced transfer, and attacks against human dignity such as the deliberate withholding of adequate food, shelter, medical assistance and minimum sanitary conditions.

1. Statements Identifying a Climate of Terror

According to the victim impact statements of several civil parties, fear tactics and excessive punishment of civilians created feelings of helplessness and developed a climate of terror for the population. Terror is defined by acts that produce a state of continued stress, fear, and uncertainty of survival that renders its targets helpless and hopeless (Tilly, 2004). The manipulation of terror in order to gain and maintain control is executed through both the direct destruction of people and property, and the psychic destruction of one's sense of security and

autonomy. This sends a message to the target that a powerful and prevailing threat exists and may manifest at any time. Terror tactics include extreme and highly visible acts of punishment that are carried out in order to demonstrate violent control and unforgiving intolerance of disobedience (Tilly, 2004). In the history of the Khmer Rouge, tactics of terror were used throughout a wide spectrum of situations to control, oppress, and intimidate. The chronic nature of the psychological damage is well evidenced through medical science and also demonstrated in the present discussion of survivors.

The following statements and dialogues have been extracted from Civil Party Testimony from Case 002/02 to illustrate the pervasive condition of terror imposed through fear tactics and excessive punishment at cooperatives and worksites:

> *Q. You also stated that you tasted the fertilizer you made using excrements. And they said it wasn't—you had to test to make sure it wasn't too salty to destroy the rice shoot. Why did you have to taste the fertilizer made with excrement? A. I was ordered to taste it, so I had to force myself to do that as I was scared. Q. And if the rice shoot died, what would have happened to you according to the orders that were given to you by the Khmer Rouge? A. We were told if the rice seedlings die, then we would be tortured.* (E1/286.1 Ms. TAK Sann (Tram Kok) 01 April 2015)

> *I was afraid. Despite some days I was not feeling well, I decided not to seek permission to rest. I had to go to work. During the six month period that I was at the dam worksite, I actually rested for only two or three times from sickness. But when I was just fairly unwell, I did not dare to ask permission. I had to force myself to work.* (E1/339.1 Ms. NUON Narom (1st January Dam) 01 September 2015)

> *I actually worked extremely hard at the dam construction site. I became so emaciated, I did not have any physical strength, but I had to keep on working in order to avoid being killed.* (E1/339.1 Ms. CHAO Lang (1st January Dam) 01 September 2015)

> *I was brought and when I was asked to climb up to the house, I was tied up and I was told that because I stole something, I was tied up. As I said, I was tied up, and my legs were tied up and my hands were tied to the back—behind my back. They tied my hair to the window bar. I was thirsty during that time. I called a person, "Bong", and I asked for water. I was deprived of food. I was so starved and hungry. I asked for food and water for a few times and he did not hear what I asked. At the third time when I asked again, I was given water. And after that, the chief of the units brought in a whip or a bamboo stick and they hit on my abdomen and I was warned that next time, please, do not go and steal something. And I replied, "No, I would not do it again."* (E1/286.1 Ms. IEM Yen (Tram Kok) 01 April 2015)

> *I was tortured at that time. I was so hungry at that time that is why I—I went to steal the cassava. I was arrested while I was stealing cassava, and I was throw—thrown on to the cart a few times and after that I was taken to be tortured.* (E1/286.1 Ms. IEM Yen (Tram Kok) 01 April 2015)

> *Q. When you were being buried, were you allowed to have some food? A. At that time I was deprived of food and water. I was starved and so thirsty. My whole body was in pain and I called for my parent's help, but no one could come to help me. After I was arrested, I was buried. Not in front of others. The other children went—already went to work and I was buried at the unit where I was staying at that time. … A. I was buried alive and nothing could compare to it. I was buried to up to my neck. I could not move and I could not do anything. I tried to call my parents, but no one would answer my call, and it was the greatest pain I experienced.* (E1/286.1 Ms. IEM Yen (Tram Kok) 01 April 2015)

> *She was beaten, and her hands were tied to her back. She was beaten. I witnessed the incident in front of me. I said nothing. I did not reply to the question. She, my colleague, was warned at that time that she was not allowed to go anywhere besides the worksite.* (E1/2881 Ms. NUON Narom (1st January Dam) 01 September 2015)

The environment described above fosters paranoia and fear, both of which can deeply damage personal well-being, irreversibly erode interpersonal relationships, and have a lasting negative impact on an individual's level of functioning and personal growth. Expert testimony highlights this environment

of helplessness created by the Khmer Rouge, citing the repeated relocation of people as a means of destabilizing the populace so that they lost their ability to challenge authority and felt incapable of controlling their own lives (Chhim Testimony, 2013).

These reactions were compounded by acts of physical violence, hard labour, insufficient water and food, untreated illnesses and other forms of hardship enforced in cooperatives and worksites throughout the country (Chhim, 2013). In addition, a large number of survivors reported being seriously injured (22%), tortured (37%), and brought close to death (69%) as a result of the Khmer Rouge regime (Field & Chhim, 2008). These stressors continued through the refugee period. Aside from direct physical injury or illness, the indirect effect of continued stress on the immune system has serious implications for one's long-term health. Without adequate treatment, distressing psychological symptoms will likely not improve. Dr. Chhim noted that although many people are able to function in everyday life, there is high potential for decompensation (i.e., deterioration in the mental health status of a person who had previously been healthy) if met with a trigger (Chhim Testimony, 2013).

2. Harms Related to Enslavement and Forced Labor in Cooperatives and Worksites

Many survivors described being dehumanized during the Khmer Rouge regime and treated as "slaves". This kind of treatment, compounded with hard labor and lack of food, further traumatized individuals (Chhim Testimony, 2013).

The following statements and dialogues have been extracted from Civil Party Testimony to illustrate the harms related to enslavement at worksites:

> *We stayed at Prey Khab (phonetic) for about 10 days with some of our clothing and then they confiscated the clothes that we had for communal and cooperative use. I asked my elder sibling and I was told that they just kept it for us and let us go to work. And then in return we were given black uniform and I asked my elder sibling again about this and I was told that I had just to put them on. And then a man, Uncle Chorn (phonetic) told me that Khmer Rouge would only allow us to wear black clothing and because of the lack of clothing, lice, we were infested with lice throughout the body. It was as big as the lice of the dogs, because we only had a pair of clothing. So we, I mean my siblings and I blamed my mother for urging us to come in expectation of abundance of food and my mother told us that please bear with her, it's too late now to go anywhere and we had just to survive.* (E1/288.1 Ms. YEM Khonny (Tram Kok) 03 April 2015)

> *The skin on my shoulder peeled from heavy load of earth on the basket. Then sometimes during the night we were instructed to return to the sleeping quarter and sometimes we had to attend a meeting, and that happened every few nights, then we could sleep. But it was only a few hours before we was woken up again by a whistle blow. [...]When we were carrying the dirt in the open sun, we could have water but the water was muddy and it was brought to us. We had to drink although it was not clean water. At night time I sometimes dreamt that I could have a cold water to drink. The meetings would be held once in every two days and we were told that if we were not in—active and we would obstruct the wheel of the history, although that we were sick we had to go to work.* (E1/339.1 Ms. NUON Narom (1st January Dam) 01 September 2015)

> *Some of my colleagues, those four or five were beaten and they were instructed to carry dirt they were given with a big earth basket to carry dirt. I could not say anything. But it was painful in my heart. I was doing my utmost at that time, I had to work. Women had periods and they had cramps in their abdomen. They need sanitation but we were deprived of this. We were treated as animals.* (E1/339.1 Ms. NUON Narom (1st January Dam) 01 September 2015)

Forced labor represents a serious risk factor for the development of both physical and psychological distress, particularly if violence or abuse is experienced or witnessed in concordance with labor exploitation. Within a sample of 35 individuals who had been trafficked for labor exploitation in the United Kingdom, 57% reported one or more symptom of PTSD, and 81% reported one or more physical health symptoms (Turner-Moss, Zimmerman, Howard & Oram, 2014). A study by Kinzie, Fredrickson, Ben, Fleck, and Karls (1984) assessed the psychological health of 13 Cambodians who had spent between 2 and 4 years in Pol Pot's work camps. Of these 13 individuals, 9 displayed symptoms of a major depressive episode, 3 reported issues with anger and irritability, and 1 patient had not spoken in 6 years. The authors concluded that the experiences endured within the work camps had serious consequences on the psychological functioning of the survivors.

3. Harms Related to Forced Starvation

Another key harm identified by civil parties in cooperatives and worksites in Case 002/2 is harms related to forced starvation. Dr. Chhim's testimony highlighted the psychological impact of starvation, noting that the experience of perpetual hunger and famine is an event that overwhelms a person and exhausts one's ability to cope. This experience challenges one's sense of identity and belief system. During the Khmer Rouge regime the victims reported going to extreme lengths to get something to eat, including violating personal values and moral codes. Children witnessed their parents lose their strength and courage and watched their parents fall ill and suffer from hunger (Chhim Testimony, 2013).

The following statements and dialogues have been extracted from Civil Party Testimony to illustrate the harms related to forced starvation:

> *Q. Did you suffer from hunger while you were at Tram Kak? A. We were given gruel to eat. Q. Was such gruel sufficient for you to eat satisfactorily? A. No, it was not enough and also I had to leave some for my child as well, as my child did not have enough food to eat. Q. To be clear, Madam Civil Party, were you hungry throughout all those years? A. Yes, I was hungry and I did not dare to steal anything as I was afraid, so we had just to try to survive. Q. What were you afraid of? A. I was afraid that I would be taken away and killed so we did not dare to complain even if the food was not enough.* (E1/286.1 Ms. TAK Sann (Tram Kok) 01 April 2015)

> *The food ration was not equal. For Base People, they had more food. And as for us, we were New People, our food were [sic] less.* (E1/286.1 Ms. TAK Sann (Tram Kok) 01 April 2015)

Medical science demonstrates the long-term effects of starvation on human medical and mental health. Cambodia suffered severe famine from 1975-1979 during the Khmer Rouge period. Although limited research exists on effects of the starvation during this era, research on other famines has contributed to an increasing body of evidence that suggests that poor nutrition leads to large and long-term negative consequences for both mental and physical health (Roseboom et al., 2011).

Moreover, some victims in Case 002/2 reported experiencing harsh labor conditions and starvation while pregnant (e.g., 2-TCCP- 283 Mom Vun, 16 September 2016). Studies have shown maternal under-nutrition during gestation has lasting negative consequences for the offspring's health. For example, the well-studied six-month Dutch famine at the end of World War II had a profound effect on the general health of the population. In Amsterdam, the mortality rate in 1945 had more than doubled compared to 1939, likely due in large part to malnutrition. However, there were indications that maternal malnutrition during fetal life may negatively influence aspects of cognitive function in later life as suggested by lower performance on a Stroop-like task of men and women who were *in utero* during the famine (De Rooij, et al., 2010). Other studies have also shown that prenatal famine exposure is associated with affective psychoses and depression, though not all studies replicated this finding (Stein, et al., 1975).

The effects of famine appeared to depend on its timing during gestation, and the organs and tissues undergoing critical periods of development at that time. Early gestation appeared to be the most vulnerable period. People who were conceived during the famine were at increased risk of schizophrenia. People exposed during any period of gestation experience a greater rate of Type 2 Diabetes (Roseboom, et al., 2011). Another study found that exposure to famine during early gestation was associated with an increased blood pressure response to stress (Painter, de Rooij, Bossuyt, et al., 2006), and a striking increase in coronary heart disease in later life (Roseboom, van der Meulen, Osmond, et al., 2000). Despite some differences in individual findings between the different studies, the Dutch famine studies suggest that maternal nutrition before and during pregnancy play an important role in later disease susceptibility (Roseboom, et al., 2011).

One study on the prevalence of adult mental illness in persons who were in utero or in early postnatal life during the 1959-1961 Chinese Famine showed that compared with unexposed women born in 1963, women born during the famine years had higher General Health Questionnaire (GHQ) scores (increased by 0.95 points) and increased risk of mental illness. GHQ scores measure common mental health problems, including depression, anxiety, somatic symptoms and social withdrawal. Compared to men in the 1963 birth cohort, men born during the famine had lower GHQ scores (decreased by 0.89 points) and a non-significant decrease in the risk of mental illness (Huang, Cheng, et al., 2013).

4. Harms Related to Unlawful Imprisonment and Torture

The psychological effects of torture and imprisonment are profound. Civil Parties testifying in Case 002/2 identified harms related to the physical pain directly experienced during their torture and imprisonment, as well as the pain of witnessing the suffering of others.

Political imprisonment has serious and long-lasting psychological effects, including PTSD and dissociative disorders, depression, anxiety, substance abuse, and somatic symptoms (see Willis, Chou & Hunt, 2015 for a systematic review). Phobic disorders, including claustrophobia and social phobias, have also been found at high incidence rates among those who have survived political imprisonment, though PTSD is often the most commonly reported diagnoses (Maercher & Schützwohl, 1997). The combination of prolonged threats to life and derogation of psychological integrity makes political imprisonment a highly stressful and often traumatic experience (Maercher & Schützwohl, 1997).

Torture has been repeatedly correlated with PTSD, major depressive disorder, and organic brain damage across cultures (Basoglu et al., 1994; Bradley & Tawfiq, 2006; Burnett & Peel, 2001). In a meta-analysis comparing torture with other traumatic events, Steel and colleagues (2009) found that torture was the strongest predictor of PTSD. The authors also found that torture was significantly associated with depression. These results, which controlled for methodological factors, show the debilitating nature of this particular kind purposeful pain. Threats and/or harm to one's family resulted in significant increases in suicidal ideation (Lerner, Bonanno, Keatley, Joscelyne & Keller, 2015), indicating the importance of familial relationships in the desire to survive among torture survivors.

In a sample focusing on men, Carlsson, Mortenson, and Kastrup (2005) found that torture was a significant predictor of symptoms of PTSD, depression, and anxiety. In a sample of torture survivors from both Bosnia and Colombia, Alexander, Blake, and Bernstein (2007) found that 100% of Bosnians and 35% of Colombians endorsed clinically significant levels of depression. Similarly, Bradley and Tawfiq (2006) identified significant rates of PTSD, anxiety, and depression in Kurdish survivors of torture. The psychological effects of torture can persist long after the incidences have ceased. Momartin, Silove, Manicavasagar, and Steel (2004), found human rights violations to be associated with complicated grief (a disorder involving prolonged grief coupled with significant functional impairment) in a sample of Bosnian refugees residing in Australia. Experiencing complicated or unresolved grief was also predictive of depression in this sample (Momartin et al., 2004).

The following statements and dialogues have been extracted from Civil Party Testimony to illustrate the harms related to the physical pain directly experienced during their torture and imprisonment, as well as the pain of witnessing the suffering of others:

At that time, I saw a lanterns—the light came—coming out of a

lantern and I thought that that place was the killing site. There was a hall there. There was a hall there in the prison office and the hall wall was made out of wood. Ta Men (phonetic) was the prison chief. Ta Men unlocked the door and I was pushed into the cell. It was—sounds of people in the cell and the light was turned on—the lantern was turned on and shackles—shackles were brought in and I was shackled to both of my ankles. And there was an iron rod putting below the shackles and at that time, my hands were tied behind my back and I could not shackle myself and seeing that, they shackled me with the rod below it. And after I was shackled, my hands were untied. I felt very painful in my hands because I was tied behind my back. I was upset at that time. I did not commit any wrongs, however I was taken to be tortured. I was seriously tortured. Only if I had guilt, I would dare to accept and admit my guilt, however, as I said, I was not guilty. I was put there day and night without releasing to go anywhere else. I was put in that place for a period of three months. (E1/287.1 THANN Thim (Tram Kok) 02 April 2015)

They beat me one after another. After one was tired, another man came in to beat me until I passed out. After I got conscious, I was transported to—I was transported on a horse cart to Angk Roka and detained—I was detained there. (E1/287.1 THANN Thim (Tram Kok) 02 April 2015)

When I was detained within that place I was not beaten up. I was put in the cell in the prison and I was shackled. I was not beaten up. As for food rations—as for food rations, I had just a few grains of cold rice. Actually, they used the cold rice to cook gruel and I could have—I could have the gruel or meat out of a few rice grains only. (E1/287.1 THANN Thim (Tram Kok) 02 April 2015)

The pain inflicted upon me at that time was indescribable. I didn't think that I could survive. I suffered the pain physically and emotionally. We could not even relieve ourselves properly. And since I was born, I never experienced such pain until the time of the Khmer Rouge regime. We were put into row, feet to feet, and the female was placed on one row and the male prisoners were put on another row and there was a footpath in the middle. And it was very, very difficult

for us to relieve ourselves. There was a pot for us to relieve in and then we had to adjust ourselves and our ankles in order to be able to put the container underneath to relieve oneself. And as I just said, I thought I would die and in fact, one prisoner, who was nearby me, died from the lack of food and his body remained there for two nights and three days before it was removed. And he died as I said, due to hunger. His name was Pat (phonetic). He was just lying next to me before he died and that also made me think that my turn would come soon. (E1/287.1 THANN Thim (Tram Kok) 02 April 2015)

In that building, there were female prisoners and as I described, female prisoners were put into a row and we—the male prisoners—were put into another row and we were feet to feet and from my recollection, there were about 10 male prisoners and there were roughly about 10 female prisoners. There was another female prisoner. She was shackled and she had a young baby whom she breastfed and I did not know the reason for her detention. I could not imagine why she was detained there with her young baby. (E1/287.1 THANN Thim (Tram Kok) 02 April 2015)

The impact of Cambodia's killing fields is felt in present day. Mollica, Brooks, Tor, Lopes-Cardozo, and Silove (2014) report 76.2% of individuals interviewed living in Siem Reap, an important cultural community during the Khmer Rouge's reign, reported having suffered some type of torture, and only 2.6% reported no potentially traumatic experiences. The same participants indicated clinically-significant levels of depression (20.6%) and PTSD (49.5%). This level of symptom endorsement provides evidence of the chronic effects of the Khmer's rule and related traumas. The enduring impact of torture is summed up by Ly Hor, one of the Civil Parties from Case 001, in his testimonial: *"Since the collapse of the Khmer Rouge regime, I have lived in pain, with recurring memories of being tortured in prison"* (Chy, 2014).

The physical and psychological consequences of torture are not completely independent. In a study on chronic physical pain and psychological outcomes in Punjabi Sikh survivors of torture, Rasmussen, Rosenfeld, Reeves, and Keller (2007) found a relationship between physical pain severity and PTSD symptoms. Specifically, the results indicate that eleven years post-trauma, the relationship between torture and PTSD was mediated by chronic injury. The mediating effect was most pronounced for the relationship with one of the criteria for PTSD:

emotional numbing (described above). The authors suggest that chronic pain serves as a lasting reminder of the trauma inflicted by the act of torture (Rasmussen, Rosenfeld, Reeves & Keller (2007)).

C. Harms Related to Forced Marriage and Rape

Many survivors of the Khmer Rouge era experienced multiple forms of sexual and gender-based violence (SGBV) with deleterious outcomes.

1. Rape During the Khmer Rouge Regime

Although the Khmer Rouge publically denounced rape, and any kind of sexual relationship outside of marriage, the policy inadvertently promoted the use of extreme violence to cover up sexual crimes. Those who escaped rarely spoke of, let alone reported, offenses for fear of punishment from government forces and/or retaliation from the perpetrator (Anderson, 2004). The experience of sexual and other gender-based violence represents a significant risk factor for the development of chronic and severe psychological issues, including depression and PTSD (Morof et. al., 2014). Sexual assault is a destructive tool that causes terror and destabilization by undermining feelings of individual and community safety and security (Lee Koo, 2002).

One female respondent in a survey conducted by the Cambodian Defenders Project described the trauma of her rape as follows: *"Every day, I still have physical pain. I have no power, I am weak, I have heart problems, and I get emotional. My vagina still hurts and just gets better once in a while when I take medicine. I feel very angry, painful and ashamed. I have tried to hide it for more than 30 years"* (Braaf 2014). Of the Civil Parties of the ECCC, over one quarter (28.4%) of respondents reported knowing someone who was raped during the Khmer Rouge regime, while 4.1% reported being raped themselves (Chhim, United Nations Women Funded Project 2013).

In the same study, 23% of participants knew someone who traded sex for food or privileges in order to survive (e.g., trading sex with a leader for extra rice, medicine, or a less difficult work assignment) (Chhim, United Nations Women Funded Project 2013). In addition, 14.4% knew of someone forced to undergo sexual acts with members of the Khmer Rouge on a regular basis, 19.8% witnessed or heard about someone being sexually mutilated (e.g., harming sexual organs by cutting them off or electrocuting them), and 23.9% knew someone who experienced other sexual abuse or humiliation (e.g., forced to be naked in front of others, unwanted sexual touching, sexual mocking or harassment, or forced to watch others being sexually abused). A smaller number of respondents reported

having been direct victims of these forms of violence: 1.8% reported having traded sex for food, 1% reported being sexually mutilated, and 7.7% reported being sexual abused or humiliated. 24.8% of respondents reported having witnessed or experienced other types of gender-based violence.

The following statements and dialogues have been extracted from Civil Party Testimony to illustrate the harms related to rape:

> *There were events that took place before the marriage day and it was painful. Two days before the marriage, at nighttime at around 7 p.m., a group of comrades called me to go to rice storage. There were five of them and it was about 7 p.m. and I could not see their faces. When I arrived there, I was told that in two days time, I would remarry and I was called to up into the rice storage. I did not go, but then my hand was pull to go up and they planned to mistreat me before the—the wedding day. There were five of them and they planned to rape me, one by one. And I was raped and the last one told me to leave after they committed the act. I could hardly walk. I wept and I could not identify them because it happened at nighttime. I bit my mouth and in order to survive and it's also for the sake of my children, I had to keep quiet about what happened to me.* (2-TCCP-283 MOM Vun 16 September 2016)

> *Q. When they called you to go there, did they threaten you? And you said that you were raped, how were you raped; were you raped and after they threaten you?*
>
> *A. They threatened me. They had a—a gun pointed at my head. I was ordered to take off all my clothes so that they raped me and they raped me, one by one. They threatened that if I—if I said anything, then I would be killed. I remain quiet about this until now. Q. And did you know those people who raped you or their age? A. I did not know their faces as it happened at night time; however, when they were close to me, I could see that—I could say that they were around 26 to 27 years old, though I could not recognize them and it happened in a—a rice storage house and it was dark.* (2-TCCP-283 MOM Vun 16 September 2016)

2. Forced marriage during the Khmer Rouge Regime

It is estimated that a quarter of a million Cambodian men and women may have been forced into marriage during the Khmer Rouge regime (Douglas, 1999). Couples were often married in group marriage ceremonies involving upwards of thirty other couples, and women were often "given" to Khmer Rouge cadre. Refusal was met with harsh punishment and often death. Consummation of the marriage was expected and marital rape occurred frequently (Douglas, 1999). Within the sample of 222 Cambodians participating as Civil Parties of the ECCC surveyed on the experience and impact of forced marriage and gender-based violence specific to the Khmer Rouge regime (Chhim, United Nations Women Funded Project 2013), over half (53.6%) of respondents reported being told to marry someone by the Khmer Rouge, and 29.7% reported being forced to have sexual intercourse after the wedding. For women who left forced marriages, many experienced social isolation and ridicule due to the stigma against women who are unmarried, but are no longer virgins (Ye, 2011).

Based on interviews with 106 Civil Parties to Case 002, De Langis, Strasser, Kim, and Taing (2014) highlight the psychological impact of the statewide forced marriages and enforced conjugal relations of the Khmer Rouge regime. The victims suffered physical and mental impact, including trauma, shame and social stigma that persist across generations. This impact is poignantly highlighted in the interviews of several participants from another survey. One female respondent, who had been forced into marriage stated: *"I have a sick headache every day. I can't think about what happened. The suffering has continued until now... As for my mental health, it can't be cured, even though I take medicines every day. I can't work daily." Another was simply incapable of voicing the trauma, stating: "I can say nothing as I am full of suffering"* (Braaf, 2014).

In addition, De Langis, Strasser, Kim, and Taing (2014) describe that refusal to comply with a marriage or conjugal relations would result in beatings, rape, sexual slavery, or death. Compliance resulted in psychological consequences for women especially. 24.5% of all forced marriages arranged by the Khmer Rouge are reported to have involved spousal abuse. The research suggests that forced marriage was a leading factor correlated with high rates of domestic abuse, increased desertion rates, polygamy, remarriage, and female-headed households. While some dissolved their forced marriages after the Khmer Rouge fell, many remained intact, 52.9% reporting spousal abuse. Those that still remain in abusive forced marriages report intergenerational trauma. Additionally, the forced marriage system resulted in social exclusion and discrimination for the women who were ultimately abandoned, divorced, in a polygamous marriage or widowed.

25.7% of respondents reported experiencing social problems, such as being shamed, because of the forced marriage. 12% of respondents reported that these social problems have an impact on the social acceptance and inclusion of their children. The majority (70.2%) of all study respondents reported ongoing mental health problems due to their forced marriage, reporting distress and anger toward the conditions of their forced marriage. Other reported long-term symptoms that include: being quick to anger, panic attacks, emotional trauma, and recurring nightmares of spousal rape. The trauma of the forced marriages directly impacted gender identity and valuation. Some victims of forced marriage still feel they cannot share their forced marriage experience with others. Of these individuals, 52.6% reported feelings of shame and 36.8% reported fear of stigma and discrimination. The findings suggest that the victims still are in need of long-term support and social services (De Langis et al., 2014). Braaf (2014) reports that many of the victims of forced marriage still express sadness that they were not allowed to have a traditional wedding or marry an individual for love.

The 2013 Women's Hearing with the Young Generation published testimonies of survivors of SGBV during the Khmer Rouge regime. These personal accounts expand our understanding of violence in conflict and the experiences of women and girls. They also give insight to the longevity of pain and suffering caused by those who perpetrate such crimes. Mom Vun, is one of the many who spoke about the impact of her experience:

> *I was forced to get married. They said to me, 'You must get married'. I didn't know my husband, not the name nor what he looked like. Sixty couples were married on that wedding day. Then the Khmer Rouge militia pointed a gun at us and said we must have intercourse. They said, 'You must lie down and let him f**k you. Why is it so difficult?' They just stood there until we had intercourse. Then they said, 'They already f**ked, let's go'. They came on six nights to make sure we had intercourse. We had to do as they told us in order to survive. The gun was there pointing at us all the time. If we refused we could have gotten killed. Someone was killed because she refused in the same situation. In order to survive we agreed to have sexual intercourse even with four people watching. When I got pregnant, they separated me from my husband; they didn't let us live together. I felt very embarrassed and it was a fateful moment in my life. This is very painful and I will remember it until my dying day. I never told this story to anyone because I am embarrassed. I continue to struggle. I try to make sure*

> *that I earn a living and raise my children and ensure that they are not living in suffering.* (B.Y., 2011).

The following statements and dialogues have been extracted from Civil Party Testimony to illustrate the harms related to forced marriage:

> *I felt so sorrowful that I could not marry my fiancé, who I loved and I wanted to live with her for life. It was like the fruit was about ripe, and then it was picked and taken away from me, and I had no right to protest against that. I felt heavy pain in my chest. And even now when I think about it, it's beyond belief. I scolded myself: how come I was born during such a terrible period of time? And that I have to have her as a wife, but as separated from her. My love for her could not be described for her. We used to go everywhere together [...] but in the end, I lost her. Although later on I was married, I still had feelings for her, and I was wondering why I was so unfairly treated. Even though I was forcibly married, I did not love my wife.* (2-TCCP-232 anonymous Civil Party 25 August, 2016)

> *Q. Civil party, earlier you said that before your forced marriage you first refused to get married once and then you were raped by five people in the night two days, I believe, before your marriage. And I think that you made a link between this rape and the fact that you refused to get married. So on what do you base yourself to make this connection between the fact that you were raped and the fact that you refused once first to get married? A. They came to rape me and after they raped me, my marriage was arranged. And the rapists said to me that people married to a woman who already had sex with others. I felt so painful to hear this. I wanted to commit suicide but I tried to restrain myself from doing so. So that's why I concluded that they had a relationship with each other.* (2-TCCP-283 MOM Vun 16, 20 September 2016)

> *I was also forced to get married. Two days before my marriage, five people took me away and raped me. That is also my suffering. And after the rape, I was asked to get married with my husband, and I was forced to consummate my marriage with my husband. It is a shame for me. I bear all the suffering and pain in my heart, and I did not*

> *disclose that suffering and harm, pain before, but now I am telling the Court about the suffering, about the mistreatment that I went through. It is a shame, as I said. After the marriage, I was forced to consummate my marriage. I was—I had been raped. I was looked down by others. I had suffering in my life. Nothing could compare. Even I die, I still remember about the injury and the mistreatment that was inflicted upon me.* (2-TCCP-283 MOM Vun 16, 20 September 2016)

Some of these statements reflect the concept discussed by Dr. Peg Levine of "ritualcide", or the systematic destruction or alteration of traditional ritual practices and their sequencing. This includes, but is not limited to the Khmer Rouge's disruption of the normal marriage process through the implementation of forced marriage (Levine, 2010). During her expert testimony at the ECCC, Dr. Levine suggested that forced marriage was a "crime against culture." She went on to describe "because ritual is so much a foundation in culture, micro-cultures as well as macro-cultures, but I was looking at macro-cultures here, the breakdown of that foundational ritual and the access to that at particular developmental stages in one's life—that's important too. Yes, I claim that that is a crime against culture..." (Levine, 2016).

3. Additional SGBV Crimes and Outcomes

The vast majority of those who were exposed to, or who experienced, this panoply of SGBV crimes were without resources to address the deleterious effects of such traumas; within the sample surveyed by Dr. Chhim, only 13.5% reported having received support for the sexual violence experienced during the Khmer Rouge regime. Testimonies of the six survivors at the 2013 Women's Hearing with the Young Generation on Gender-Based Violence during the Khmer Rouge Regime demonstrate the lasting psychological damage caused by gender-based violence. All survivors experienced at least one instance of rape and some others additionally experienced sexual torture and humiliation. The survivors, even more than 30 years after the trauma, reported feelings of embarrassment, shame, strong emotions, anger, pain, unhappiness, stress, isolation, and suffering from memories of the gender-based violence (Chhim, United Nations Women Funded Project 2013). Most reported struggling today to forget and to move on (Ye, 2014).

Similarly, Braaf (2014) reports on a study conducted by the Cambodian Defenders Project on sexual violence against ethnic minorities during the Khmer Rouge regime within a sample of 105 men and women of Vietnamese, Khmer Krom, Khmer Islam and Cham and other ethnic backgrounds who survived the Khmer Rouge. Ethnic minorities experienced sexual violence through rape, forced marriage, sexual slavery, and survival sex. According to the victims' testimonies, instances of these forms of sexual violence were widespread in communities. Though sexual violence was common, it was not often discussed, as the perpetrators of the violence were able to craft a culture of silence surrounding the crimes. Braaf (2014) notes that some victims of sexual violence continue to suffer from physical injury and pain, but that psychological damage is much more common among survivors. The majority of respondents in the study experienced post-trauma psychological issues such as overwhelming anger, grief, fear, nightmares, depression, and suicidal thoughts, all of which made working difficult.

In the study by Dr. Chhim, 17.6% reported that the gender-based violence experienced during the Khmer Rouge regime still affects their physical well-being, 43.7% reported that it still affects them psychologically/emotionally, and 34.7% reported that it affects their social life within a Cambodian community (Chhim, United Nations Women Funded Project 2013). An additional 5.5% reported that being a victim of SGBV under the Khmer Rouge affected their sexual functioning "quite a bit" or "extremely". 78.8% "agreed" or "strongly agreed" that they worry about what others think about them and 85.6% reported having had to keep feelings about the rape/forced marriage to themselves because they made others feel uncomfortable. 39.7% responded "agree" or "strongly agree" to feeling ashamed for having been raped/forced to get married, and 40.5% to feeling guilty for having been raped/forced to get married. 40.5% felt that because of the rape/forced marriage, their reputation as a Cambodian woman is now destroyed, and 32.4% reported feeling that because of the rape/forced marriage, they are no longer respected members of Cambodian society. Without retribution or even social validation for this offense, the symptoms are often left untreated and have intergenerational effects (Clifford & Slavery, 2008).

The psychological consequences specific to sexual trauma throughout the world have been well documented in scientific literature. In cases of sexual violence, sense of safety is undermined while the individual victim is held captive and is rendered powerless to control what is happening to her/his own body. This effect may become a chronic state. A sense of safety and security is a basic human need that is essential for individuals to perform their daily functions and to engage in activities that promote growth and development (Maslow, 1943). When an individual does not perceive that she or he is safe, basic daily activities such as feeding, sleeping, and self-care are undermined and dysregulated. When this occurs, higher-level pursuits—such as taking care of others, gaining employment,

and pursuing an education—are also threatened and rendered more challenging, if not impossible. In addition, acts of mass rape impact the development and functioning of the individual and the community across multiple generations (Reid-Cunningham, 2008; Seifert, 1994; Wax, 2004). The resulting myriad of individual consequences includes psychiatric disorders such as PTSD, depression, and anxiety (Heim, Shugart, Craighead & Nemeroff, 2010; DSM-III; DSM-IV; DSM-5). Outside of these named mental health diagnoses, individuals suffer from abject feelings of hopelessness (Muhwezi et al., 2011), spiritual degradation (Messina-Dysert, 2012), heightened suspiciousness, persistent confusion, and fear (Kilpatrick, Resick & Veronen; 1981). Victims of trauma see themselves as vulnerable, view the world as lacking meaning, and view themselves as lacking worth (Janoff, Bulman & Frieze, 1983).

Specific diagnoses are associated with sexual assault, with PTSD being one of the most common (Holmes & St. Lawrence, 1983). The National Comorbidity Study indicated that among women, rape is the most commonly associated index trauma with PTSD (not including an "other" category; Kessler et al., 1995). If women had experienced rape as their only lifetime traumatic experience, or if they named rape as their most distressing trauma out of many, 45.9% developed PTSD at some point in their lifetime (Kessler, et al, 1995). There is ample evidence within the psychiatric and psychological literature that links sexual assault to PTSD and related disorders.

Rape victims experience a significantly greater number of anxiety symptoms and specific phobias as well (Kilpatrick, Resick & Veronen, 1981). Ellis, Atkeson, and Calhoun (1981) published congruent results. Mood disorders are a common outcome for rape survivors (Steketee & Foa, 1987). Major depressive disorder or depressive symptomology is associated with a history of sexual abuse (Becker-Lausen, Sanders & Chinsky, 1995; Beitchman, Zucker, Hood, DaCosta, Akman & Cassiva, 1992; Gold, 1986; Kendall-Tackett, 2007; Morof et al., 2014; Trickett, Noll & Putnam, 2011). The National Comorbidity Study results indicate that 39.3% of women who were sexually abused as a child developed depression (Molnar, Buka & Kessler, 2001). In a sample of 3,001 women in a follow-on study (the National Comorbidity Study-Replication), 22% of women who were raped experienced a major depressive episode (Zinzow et al., 2012). Female survivors of rape are 5.46 times more likely to experience a major depressive episode compared to non-sexual assault victims (Zinzow et al., 2012).

4. Physical Consequences of SGBV

The physical consequences of rape and sexual assault involve immediate and

enduring bodily damage. These consequences encompass major harm to reproductive and ano-rectal physiology, unwanted pregnancy, and damage to bone and muscle tissues. Nausea, stomach problems, muscle tension, and headaches are also common. Damage to female reproductive physiology generally effects the labia minora, hymen, posterior fourchette (part of the vulva), and navicularis (Sommers, 2007). Among female rape victims ages 16-48, Bowyer & Dalton (1997) discovered tears in the perineum, hymeneal, and posterior vaginal wall. Cuts and bruises were also found on the fourchette, labia majora, vagina, and anus. In preadolescent children who experience sexual assault and related traumas, ano-gential injuries frequently include bleeding, anal abrasions, and tears in the anus, hymen, and posterior fouchette (Heppenstall-Heger et al., 2003). Sexual violence victims are likely to sustain additional injuries as well. In one sample of 83 women who reported being raped, 80.9% reported some form of injury to the arm (50.6%), neck (26.5%), face/head (18.1%), breast/chest (20.5%), knee (16.9%), upper leg/thigh (43.4%), calf/lower leg (19.3%), buttock (8.4%), hand (15.7%), and/or shoulder (16.9%).

Rape causes long-lasting and potentially irreparable harm to the female reproductive system. Gynecologic fistula (major tissue destruction in the vagina and bladder and/or anus) and chronic pelvic pain are well-documented medical outcomes of rape (Bastick, Grimm & Kunz, 2007; Dossa, Zunzunegui, Hatem & Fraser, 2014; Mukanangana, Moyo, Zvoushe & Rusinga, 2014). Rape and sexual assault are also associated with genital burning, painful intercourse, menstrual irregularity, and loss of sexual interest and/or pleasure. The psychological suffering of rape survivors is compounded by the extent of their physical injuries (Golding, 1996; Roush, 2009). Many women experience social rejection as a result of infertility due to fistulas, or the presence of sexually transmitted diseases including HIV/AIDS. These women often find themselves marginalized by spouses, family members, and communities (Bastick et al., 2007; Hynes, 2004).

The following is a story that helps depict the particularly cruel administration of SGBV under the Khmer Rouge: *Net Savoen is 55 years old and today she is a farmer in Svay Rieng Province and has three children. Ms. Savoen is the sole survivor of 30 women who were taken into the forest to be raped and killed by the Khmer Rouge. One evening in 1979, Ms. Savoen was among 30 women who were selected for their strength to carry large sacks of salt from the forest back to the village. The group was led into the forest by ten local militants, aged around 17 or 18 years old. While walking through the forest the men stopped and tied up the women. Some women were crying and resisted but they were beaten until they complied. They kept walking until they came to a big hole dug in the ground; a mass grave. The men stopped and ordered the*

women to stand in a circle around the grave. The men grabbed the women one by one, tore off their clothes, beat them and raped them. Once a woman had been raped by at least two men, they beat her with an axe and finally cut her throat and pushed her into the ditch. Some women were raped by three to four men before they were killed. Ms. Savoen was the last person alive. She was paralyzed with fear. She was beaten and cut with a knife many times. The men raped her with the knife and verbally tormented her. She was raped by two men and hit in the head with an axe three times before she lost consciousness. When she regained consciousness she was in a ditch surrounded by the bodies of the other 29 women. She was naked, bleeding heavily and barely alive. She checked among the other women to try to find survivors but they were all dead. (B.Y. 2011).

Sexual violence can devastate not only the victim, but also the victim's family and the community (Clifford & Slavery, 2008). The violent and dehumanizing nature of sexual violence, often compounded with shame and fear of disclosure, make it a significant risk factor for severe and persistent psychological distress. Indeed, the experience of gender-based violence during the Khmer Rouge period, both directly and indirectly, has been shown to have serious implications for the physical and psychological health of survivors.

D. Harms related to Killings and Disappearances

Some of the crimes allegedly perpetrated by the Khmer Rouge regime include extermination, murder, and the enforced disappearance of people. Civil Parties in Case 002/2 identified harms related to losing family members through murder or disappearance. This testimony is consistent with the survey literature of other survivors. A large study of 775 Khmer Rouge survivors demonstrated the common finding that most had lost family through murder and enforced disappearance. Moreover, the study demonstrated mental health harm, finding that many survivors with lost family members went on to suffer with "prolonged grief disorder" as well as symptoms of anxiety and depression three decades later. Loss of spouse or children was a higher predictor of mental health symptoms than loss of more distant relatives (Stammel, 2013).

The following statements and dialogues have been extracted from Civil Party Testimony to illustrate the harms related to killings and disappearance of loved-ones and family:

> *My mother was taken away and killed together with my siblings and other relatives totaling eight. I felt so terrible and so pity for them. They took care of me since I was born, and suddenly, I lost them all. I was told she was crying, she was shouting when they took her away. I*

> *wept so hard when I heard that news. I felt so pity for that and, as a result, I lost more than 10 family members and I am by myself.* (E1/394.1 Mr. KUOY Muoy (Treatment of Vietnamese) 1 March 2016)

> *I am still feeling pain every day. Every time there is a ceremony or celebration, and when I have to pray, I feel so painful that I had to pray for the lost souls of my mother, my father, and my siblings. I am by myself, without parents and siblings, and there is nothing that could compare to the loss of my family members.* (E1/394.1 Mr. KUOY Muoy, 1 March 2016)

> *I lost many family members, including my father and relatives 11 totaling 17 altogether. I also lost my nieces and nephews during 12 the period. And that gave me much pain, and the pain and the suffering stayed with me at the present time.* (E1/393.1 Mr. MEU Peou 29 February 2016)

> *I don't want to claim for anything else but I want to claim for my husband. I want my husband to be back. My husband and my lost child.* (E1/286.1 Ms. TAK Sann (Tram Kok) 01 April 2015)

E. Harms related to Persecution on Political, Religious, or Racial Grounds

Civil party testimony in Case 002/2 identified harms related to persecution on political grounds, religious grounds, and racial grounds. The following statements and dialogues have been extracted from Civil Party Testimony to illustrate the harms related to persecution (i.e. Religious Persecution of Cham & Buddhist, Racial Persecution of Vietnamese):

> *He was so afraid that his children—that is, us, would be raped before we were killed. I was so terrified upon hearing that from my father, and I was afraid that, one day, my turn would come, that I would be taken away because I was half Vietnamese blood. And that thought was with me all the time. (E1/394.1 Ms. SIENG Chanthy (Treatment of Vietnamese) 1 March 2016)*

> *Other people, other workers, did not even dare talk to me because they*

knew that I was half-blood Vietnamese, and if they talked to me, maybe they would be implicated. They fear that they were indicated with me and they would be killed, so I had to work alone, by myself. And of course, every time I recall it, the fear comes back to me. (E1/394.1 Ms. SIENG Chanthy 1 March 2016)

Father died because he was a Cham person who adhered to his religious practice, and he didn't abandon his religion when he was forced by Angkar. They forced him to eat pork, but he refused, so Angkar gave him a last warning that he had to eat pork. And if he could not eat pork, then there would be nothing for him to eat. My father refused to eat pork, and he only drank water. And he had to find tree leaves in the forest to eat, and that was terrible for him, living in such a situation. I would think that it would be better if he—if they were to kill him and not to allow him to suffer such a terrible circumstance. (E1/393.1 Mr. MEU Peou T., 29 February 2016)

Q. When you saw the pagodas being destroyed and when you saw the statues that were shattered, what did you feel? A. I was absolutely torn because this was a sacred place and there were no longer any monks there and in the past there used to be celebrations, ceremonies but there were no longer any religious practice so I felt that I was completely deprived of any psychological base. (E1/288.1 Mr. BUN Sarouen (Tram Kok) 03 April 2015)

When I lost my family members and relatives, my own father named Uch Sunli, who was a clergyman at the pagoda, also died. He was killed because the Khmer Rouge witnessed that he practiced the Buddhist religion and someone came to tell me that your father was so much—believed in religion and that's why he was arrested and sent to meet Buddha. I would like to tell the Chamber that even lighting the incense to pay respect to Buddha, he was arrested for that simple reason. (E1/394.1 Mr. UCH Sunlay 1 March 2016)

Beyond the physical dangers and discomforts of imprisonment, the experience of persecution on political grounds represents a serious threat to the individual's ability to maintain a sense of agency and identity (Barudy, 1989). The persecuted group to which the prisoner belongs serves to provide meaning and security to

their existence. Without a structure to support self-esteem strivings, the individual is vulnerable to existential insecurity and despair.

Moreover, some of the killings of Vietnamese and Cham minorities in Case 002/2 are alleged to be an act of genocide, a term defined by the United Nations Convention on the Prevention and Punishment of the Crime of Genocide as a range of criminal acts undertaken with the intent to destroy (in whole or in part) a group of individuals based on their nationality, race, ethnicity, or religion. The long-term consequences of genocide range from increased symptoms of post-traumatic stress, psychological symptoms such as anxiety and depression, and impaired cognitive functioning (Barel, IJzendoorn, Sagi-Schwartz & Bakermans-Kranenburg, 2010). In a study comparing different groups of Holocaust survivors, those who were tattooed with an identification mark (and thus were presumed to have been exposed to more potentially traumatic events) evidenced a greater endorsement of post-traumatic stress, intrusive memories, avoidance of behaviors that reminded them of the experience, and hypervigilance, when compared to those not subjected to concentration camps (Kuch & Cox, 1992). In another study of Holocaust survivors, participants reported an increase in pain level, the number of places where pain existed, symptoms of depression, and use of medical services (Yaari, Eisenberg, Adler & Birkhan, 1999). These comparison studies were completed years after the Holocaust, an event that took place at least thirty years before the Khmer Rouge rose to power. It is safe to assume that similar outcomes as a result of genocide may be found in survivors of Khmer Rouge.

F. Additional Harms Suffered by Children and Vulnerable Populations

Mistreatment and torture of children and separation of children from their family are alleged harms suffered under the Khmer Rouge. It is well established that children's exposure to war is a risk factor for PTSD and other adjustment problems. According to most studies, more than half of children exposed to war meet the criteria for PTSD. In 1984, 50% of Cambodian children who had been exposed to war and genocide during the Pol Pot regime met the diagnostic criteria for PTSD (Kinzie et al., 1986). Follow-up studies found PTSD rates of 48% and 38% in 1987 and 1990, respectively (Sack et al., 1993). The more general children's trauma literature indicates that children exposed to violent trauma, such as witnessing murders, are particularly vulnerable to post-traumatic stress reactions (Horowitz et al., 1995; Pynoos & Eth, 1985). Indeed, war exposure involves multiple traumatic events, including experiencing or witnessing violent acts (e.g., killings, rape, torture) or the results of violent acts (e.g., seeing dead bodies or bombed buildings). One study looked the trauma experience and response of 791

children aged 6 to 16 involved in the 1994 siege of Sarajevo. In this sample, 41% of participants had clinically significant PTSD symptoms.

Children in particular are adversely affected by exposure to both violent and nonviolent war-traumas. Additive effects of violence and deprivations during war may overwhelm the coping skills of children and leave them vulnerable to externalizing and internalizing adjustment difficulties and symptoms of PTSD (Allwood et al., 2002). One study examined the relationship of violent war experiences to children's trauma reactions and adjustment in a group of children from Bosnia. The study found that direct exposure to violence, such as being in threatening situations (including being threatened with being killed) and witnessing killings and injuries, was significantly related to teacher-reported delinquent behaviors and anxiety/depression. Witnessing killings and other injuries was also significantly related to teacher-reported attention problems, whereas being in threatening situations was also significantly related to somatic complaints. As expected, witnessing killings was related to teacher-reported aggressive behaviors (Allwood et al., 2002).

The following statements and dialogues with Civil Parties illustrate the harms related to the mistreatment and torture of children and separation of children from their families:

> *After they arrested me, they beat me up and that happened for the first time and then for the second time, and for the third time, I became seriously ill. I had a very high temperature, it was a bad fever. It happened day and night and I sought permission to rest but I was not allowed to rest. And I went to seek for some medicine and I was not given any except just a powder from cassava and then my mother gave me some boiled—some boiled water from tree leaves. And then I was caught again by another person for not working but drinking that traditional herb. Then I was arrested, tied against a tree and beaten up and I—at that time there were 20 young children there. I was beaten up while I was seriously ill. And they not only used their hands to beat me up, they used bamboo clubs with nails attached to beat me up physically and there are scars remained on my body. I was tied up to the tree until the morning and when the morning came, I saw blood all over my body. I felt so pity for myself. When I was in this trouble I wanted the comfort of my parents but they were nowhere near me. I shouted asking for my parents but nobody came to help me, only those who actually mistreated me were there.* (E1/288.1 Ms. OUM

Vannak (Tram Kok) 03 April 2015)

> *Q. When you sought permission not to visit your family, was your request actually granted? A. No, it was not. I was not allowed to go. So I did not see my family members. At that time, because I recently separated from my parents, at night time, I wept. And I—they joked at me that I could just continue weeping and maybe I wish that I would see my family members.* (E1/287.1 Ms. YEM Khonny (Tram Kok) 02 April 2015)

> *I said to him, "So my father still alive?" and then he said, "Yes, he was living about 100 meters from Krang Ta Chan". I then asked my mother and other people to go to Krang Ta Chan and when we arrived there, I saw my father carrying water to the vegetable plots and that made me sad. I was crying. He was so thin that I could not even recognize him. He was wearing under drawers and I saw him from a distance and I had a hard time recognizing him. We were hiding, of course, when we were watching him. I almost asked if I could come see him and Uncle Ran said, "No, no, don't do so because it's very dangerous. If you want to go there, you have to speak to me first." And it is especially dangerous for him, we risked endangering him. So I decided not to go to talk to him. So all we could was weep. So we stayed with Uncle Ran for one night. We didn't dare come close to Krang Ta Chan and we would hear cries, I don't know if he was being tortured. We were completely broken.* (E1/288.1 Mr. BUN Sarouen (Tram Kok) 03 April 2015)

> *I missed my mother. I had no information about my mother and siblings. I did not know at that time where they were living. I was living in an open field with no houses surrounding and I did not know at that time the name of that location where I was living.* (E1/339.1 Ms. NUON Narom (1st January Dam) 01 September 2015)

> *The only thing that I recall is the suffering and the loss of my family members. If I could see them together, I would feel warm. But they had all gone and I could not depend on anyone.* (E1/287.1 Ms. YEM Khonny (Tram Kok) 02 April 2015)

My main suffering is the loss of my parents and the loss of my siblings. I feel so saddened when I look at other people. They have their families, they have their parents and their siblings. For me, I am by myself. And I try to work hard in order to survive until the fall of the regime. (E1/287.1 Ms. YEM Khonny (Tram Kok) 02 April 2015)

I am still recalling the event and the loss of my mother and the loss of my brothers and sisters. And every time I recall that, it is still painful for me. E1/288.1 Ms. LOEP Neang (Tram Kok) 03 April 2015

And as far as I understood and I learnt, my relatives obtained salt in exchange of a wrist watch. And I asked the Base People there how my relatives were killed. And I was told that my elder sister and her husband were chained to an ox cart, the three year-old-child was also chained and they dragged her crossing the forest. How terrible it was for a three-year-old child. If they were to kill them, why did they have to torture them by chaining them and dragging them behind an ox cart? How terrible it was for my elder sister and her child before they died. I myself upon hearing that almost fainted. All my hopes and expectations disappeared. My knees trembled and became weak. And those people told me that I better leave quickly otherwise I might have been implicated. I didn't stay there for one day as authorized. So I returned. I feared that I would be implicated. I was afraid that they saw me weeping and I was accused, so I returned. (E1/339.1 Ms. CHAO Lang (1st January Dam) 01 September 2015)

Damage to child psychology is well established and documented in the science literature from conflicts throughout the world. Studies of Bosnian children who faced separation from family, bereavement, close contact with war and combat, and extreme deprivation found that almost 94% of the children met DSM-IV criteria for post-traumatic stress disorder (Goldstein et al., 1997). Approximately 40% reported witnessing the violent injury or death of parents or siblings. Significant life activity affecting sadness and anxiety were reported by 90.6% and 95.5% of the children, respectively. High levels of other symptoms surveyed were also found. Children who had witnessed the death, injury, or torture of nuclear family members; children of an older age; and those who came from a large city reported more symptoms (Goldstein et al., 1997). Another study examined trauma exposure and psychological reactions to genocide among 3030

Rwandan children who had been exposed to extreme levels of violence in the form of witnessing the death of close family members and others in massacres, as well as other violent acts. More than two-thirds of the sample actually saw someone being injured or killed, and 78% experienced death in their immediate family, of which more than one-third of these children witnessed the death of their own family members. The study clearly showed that exposure was related to the degree of intrusive memories and thoughts, as well as instances of hyper-arousal. (Dyregrov et al., 2000). Other studies associate exposure to violence with cognitive impairment (Arroyo & Eth, 1985; Diehl, Zea & Espino, 1993).

G. Addressing Mental Harm in Victims of the Khmer Rouge Regime

Victim redress in the form of access to psychological and psycho-social rehabilitation is necessary to address the mental health outcomes connected to the traumatic events experienced under the Khmer Rouge regime. Forms of psychological rehabilitation include education, social services, and culturally appropriate therapeutic interventions to address the psychological consequences and psychiatric disorders that result from exposure to extreme violence.

Psychological treatment and psycho-social interventions have been proven effective rehabilitation measures for the mental health symptoms commonly suffered by survivors of violence (Regehr, Alaggia, Dennis, Pitts & Saini 2013; Resick et al., 2002; Foa, Rothbaum, Riggs & Murdock, 1991; Frank et al., 1988; Nishith, Resick & Griffin, 2002; Resick & Shnicke 1992; Rothbaum, Astin & Marsteller, 2005; Clark, Rizvi & Resick, 2008). Effective, evidence-based interventions (i.e., interventions whose efficacy has been demonstrated) include cognitive-behavioral therapies such as cognitive processing therapy and prolonged exposure treatments (Regehr, Alaggia, Dennis, Pitts & Saini, 2013; Foa, Rothbaum, Riggs & Murdock, 1991; Resick & Shnicke, 1992). Also, mental health treatment and psychosocial interventions can take many forms and should be tailored to cultural and contextual needs and values. Psychological rehabilitation requires the identification of those in need of psychological support as well as measures to reduce barriers to care, including efforts aimed at reducing stigma around mental health difficulties. Reparations for the crimes alleged in the Khmer Rouge situation could include access to culturally-sensitive mental health interventions with the primary aims of (1) promoting psychological healing and growth and (2) restoring and improving daily functioning and quality of life.

In Cambodia, public health care represents the least utilized sector of Cambodia's pluralistic health care system, with most residents not achieving access to care or choosing traditional care (Somasundaram, van de Put, Eisenbruch

& de Jong, 1999). There are also significant concerns with access to care within the public sector. Government hospitals are under-resourced in both materials (i.e. drugs) and personnel (i.e. doctors), making it difficult to adequately address a diversity and multitude of needs. Most Cambodian mental health professionals agree that resources for mental health treatment are under resourced financially (Van Schaack, Reicherter & Chhang, 2011).

Physical and psychological rehabilitation all involve and require educational campaigns. In particular, efforts to provide education about the impact of the harms alleged in Case 002/2 can help to reduce stigma and improve understanding of the physical damage, the psychological consequences, and the material needs of victims, their families, and their communities. Educational and informational campaigns can help to reduce blame that may be directed towards victims. Educational campaigns can also be used to provide and reinforce guarantees of non-repetition and to provide symbolic public acknowledgment of the crimes.

H. Conclusion

The mental health damage caused by the crimes of the Khmer Rouge are well understood and well documented in the medical/psychiatric and psychological sciences. These harms are similar to those caused by violence throughout the world and are consistent with the established science of trauma psychology. This Report demonstrates how the atrocities of the Khmer Rouge damaged the mental health of survivors. Clear links were made between specific alleged crimes of the Khmer Rouge and the mental health harms that these crimes caused. The statements of Civil Parties provided specific examples of the impact of crimes on individuals in the context of psychological suffering. It is hoped that this Report may aid in laying the groundwork for comprehensive reparations addressing ongoing victim impact related to mental harm.

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