REVISITING THE VIETNAM WAR: A CASE STUDY OF HERBICIDAL DAMAGE TO CAMBODIA Emily Lifs Map Area



Area damaged: over 173,000 acres Number of people affected: ~30,000

Value of crops affected (1969): \$12,200,000 Value of crops affected (2022): \$95,574,000 Compensation to Cambodia: \$0

Herbicides sprayed in 1968: 5,400 gallons Agent White, 4,000 gallons Agent Orange Agent Orange sprayed April-May 1969: 116,600 gallons

Westing's estimate: 77,000 pounds (8,950 gallons) of Agent Orange

Maximum percentage of drift from April-May 1969: 7.68% Maximum distance of drift from April-May 1969: over 30 km Context This map is an attempt to reconcile a 1972 report of herbicidal damage to the "Fishhook" area of Kampong Cham This map is important because, to the best of my research, Cambodia has never been compensated for the Province in Cambodia with the US Herbicide File from the Vietnam War era (HERBS database) to determine how damage observed by Westing. In 1969, the damaged area was a significant source of forest crops (tree plantations), mostly rubber, as well as other garden crops. On March 3, 1970, the US State Department informed the damage occurred. Westing that their investigation was in its final stages; just 15 days later, Prince Sihanouk was removed from The best account we have of the use of herbicides in Cambodia comes from Arthur Westing, who traveled to power in a coup d'etat and Cambodia devolved into a decades long period of violent political turmoil. The Cambodia in late 1969 after the government of Cambodia raised concerns over a large herbicidal attack. Westing \$12,200,000 estimated damages in 1969 is equivalent to \$95,573,536.78 in 2022 (using a cumulative rate of was able to determine where the damage occurred; assess the damage to animals, humans, and various types of inflation of 683.4%). This should be of interest to the Cambodian government, who are being asked by the US to vegetation, including different types of trees and crops; and conclude that the damage was most likely caused by repay outstanding food loans from the Vietnam War era.

Because no herbicidal missions aligned with the anecdotal reports from Westing's report, the HERBS database was searched for herbicidal missions during the timeframe (April-May 1969) near Cambodia's border. The results zoological effects that should be studied and addressed. Considering the extensive use of herbicides along were then compared to Westing's report and other studies of herbicides. The resulting map lends support to the Cambodia's borders, the environment of border regions should be tested. hypothesis that the damage to the area was caused at least in part—and perhaps mostly—by drift from Vietnam, something considered unlikely by contemporary scientists.

Wind Directions, April-May

Agent Orange and thus estimate the dosage applied based on the damage observed. The area where damage occurred and the amount of damage was verified by both the Cambodians as well as the US State Department. Both Westing and the US State Department thought the damage was caused partially by a direct application of herbicides and partially by atmospheric drift from across the border in Vietnam.

There are two other reasons to care about herbicidal damage, both related to the contamination of Agent Orange with TCDD. First, the damaged area was home to about 30,000 people, all of whom—if they survived the period of conflict in Cambodia—may have lasting health effects and effects that they may pass on to their children and grandchildren. An effort should be made to investigate possible intergenerational effects of TCDD in Cambodians as a matter of human justice. Second, and similarly, there may be long-lasting ecological and









Data Sources

Map of Damaged Area Westing AH (1972) Herbicidal Damage to Cambodia. In: Harvest of Death: Chemical Warfare in Vietnam and Cambodia. New York: The Free Press, pp. 177–205; Figure 4-1, p. 183. Herbicides used in Vietnam War

catalog.archives.gov/id/34922617 Cambodia shapefile The University of Texas at Austin GeoData — University of Texas Libraries

Forest cover in Cambodia (1973) OpenDevelopmentCambodia

Digital Elevation Maps (to create hillshade effect) downloaded from USGS Earth Explorer (SRTM 1 Arc-Second Global)

Herbicides Used in Vietnam

National Archives — Herbicide File OSD (Office of the Secretary of Defense) Revised Version, available at: https://

available at: https://geodata.lib.utexas.edu/catalog/stanford-mr193kj1077

available at: https://data.opendevelopmentcambodia.net/en/dataset/forest-cover-in-cambodia-1973-2014