

HARVARD UNIVERSITY
THE BIOLOGICAL LABORATORIES
16 DIVINITY AVENUE
CAMBRIDGE, MASSACHUSETTS 02138

12 August 1971

General Creighton Abrams
Commanding General, MACV
Headquarters MACV
APO San Francisco 96222

Dear General Abrams,

You will recall that on November 12, 1970 I sent to you a copy of a report to Ambassador Bunker on crop destruction in Quang Ngai province. (For your immediate reference, a copy is enclosed.) In response to our report Ambassador Bunker has kindly forwarded to me a memorandum prepared some time ago by someone at MACV. (A copy is enclosed.) I am writing to ask if MACV has conducted any further study or analysis of this subject which could be made available to me.

I am spending most of my time this summer preparing the final report of the AAAS Herbicide Assessment Commission. It will be published as a book sometime next year.

In our final report I want to be as accurate as possible in our discussion of the crop destruction program. In this connection I enclose an exchange of correspondence published in the New York Times. I am also enclosing for your possible interest an article which Dr. Constable and I prepared at the request of the Sierra Club Bulletin. We took the opportunity to express once again our gratitude for the superb assistance we received last August from MACV, the Embassy, and the Government of Vietnam, notwithstanding the rather reluctant attitude of the Department of Defense in Washington.

I hope this letter finds you well.

With kind regards,

Sincerely yours,

Matthew Meselson

Matthew Meselson
Professor of Biology

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Enclosures:

Report to Ambassador Bunker of November 12, 1970
Article in Sierra Club Bulletin of April 1970
Letters from the New York Times of July 12, 1971 and 4 August 1971
MACV Memorandum

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

AAAS HERBICIDE ASSESSMENT COMMISSION

BOTANICAL MUSEUM, HARVARD UNIVERSITY
CAMBRIDGE, MASSACHUSETTS 02138, U.S.A.

MATTHEW S. MESELSON, CHAIRMAN

ARTHUR H. WESTING, DIRECTOR

12 November 1970

The Honorable Ellsworth Bunker
American Ambassador
Saigon, Republic of Vietnam
APO San Francisco, California 96243

Dear Ambassador Bunker,

On behalf of the Herbicide Assessment Commission of the American Association for the Advancement of Science, we wish to express our appreciation for the generous assistance provided by the Embassy during our recent tour of the Republic of Vietnam.

We are now preparing our report for presentation to the AAAS at the end of December and will send a copy to you as soon as it is available. Before that time, however, we wish to relay some observations that we believe merit your more immediate attention because they challenge the basis of the current chemical crop destruction program.

On August 21 and 28 we overflew an area in Quang Ngai province where chemical crop destruction operations had been conducted a few days before. The responsible chemical operations staff officer accompanied us on one of the overflights, and we spoke at length with other officers and civilian officials on the scene. It was explained to us that the targets were VC/NVA crop production areas and that most of the food destroyed would otherwise have been consumed by enemy forces. The reasons given for this assessment were that

1. The target area had only a very low population density.
2. The area under cultivation had expanded strikingly in recent years.
3. The cultivated area was much larger than that needed to support the small indigenous population.
4. The existence of numerous terraced rice fields indicated the influx of VC/NVA food production units, since the Montagnards who comprise the native population do not practice terracing.

Our observations are sharply at variance with all four of these points.

Background information. One of the target areas is shown in photograph 1. Three C123 aircraft sprayed herbicide along the Song Re river valley from map coordinates BS 3455 to BS 3543. The photograph was taken near the latter coordinate, looking northward up the valley. The spray swaths are generally visible as brown streaks. Spraying was conducted continuously for a distance of about ten miles, resulting in coverage of approximately 1000 acres. Photographs 2 and 3 show the ground more closely. Numerous craters have been caused by the preparatory laying down of maximum suppressive fire, including the application of 300 per cent saturation with cluster bomb units, a measure required by the Seventh Airforce to protect the slow-flying C123's against hostile ground fire. Many dwellings may be seen in both close-ups, especially in photograph 3. The site of each of the photographs is indicated on the accompanying 1:50,000 scale U.S. Army map.

Population density. The map shows a high population density throughout the target area. In the twenty-seven 1 km² grid boxes through which the spraying passed, there are more than 900 dwellings, indicated as small black squares. Detailed comparison of the map with photographs 2 and 3 suggests that the number of dwellings in the target area is at least as great as it was in 1965, the year in which the map was last revised. Assuming, for example, an occupancy of six persons per dwelling, the population in the sprayed area would be approximately 5,000. This corresponds to 180 persons per square kilometer, hardly a low population density.

Expansion of cultivated area. The boundaries of cultivated fields on the enclosed map (and also on a matching 1:20,000 scale pictomap) agree well with the boundaries seen in our photographs, offering no evidence for any major expansion of crop production since 1965. Also, the fields seen in the photographs look well established and not of recent origin.

The question of surplus. The amount of land under cultivation in the target area may be estimated from the map to be approximately 800 hectares, about one hectare for each dwelling. Contrary to the view that a large surplus of food was being grown in the valley, one hectare of mountain land is just about enough to sustain a family unit.

Significance of terraced fields. Authoritative DoD publications on the Montagnard peoples as well as knowledgeable officials in Saigon state that the Montagnards of Quang Ngai, the Hre, have long grown rice on terraced fields.

We realize that this particular crop destruction mission may have been atypical. However, it was cited by the chemical staff officer and other officials as being particularly effective and well planned.

Moreover, our observations lend additional weight to several official studies done in Vietnam which have concluded that nearly all of the food destroyed by the chemical crop destruction program would normally be consumed by civilians, not by enemy soldiers.

As to the scale of the present crop destruction program, we were distressed by the implications of an analysis prepared by the GVN at the province level estimating the quantity of rice and other crops marked for chemical destruction under the 1970-71 herbicide program. Including missions requested by U.S. elements as well as those requested by the Vietnamese themselves, the total quantity of food scheduled for destruction is placed at 14,575 metric tons in Quang Ngai and Quang Tin provinces alone. This should be enough to sustain some 50-70,000 persons for a year. The targets are located mainly in upland regions where Montagnards are the traditional population. The Special Commission for Highland Affairs estimates the total Montagnard population of the two provinces as just under 70,000. Therefore if the areas we inspected are any indicator, the destruction of so much food or even of any substantial fraction of it would have devastating consequences for the Montagnard peoples of Quang Ngai and Quang Tin and for indigenous peoples in other provinces where similar conditions may prevail.

While we were in Quang Ngai province we had several occasions to interview Montagnard refugees whose lands had recently been sprayed with herbicide. We were impressed with the way in which they perceive the use of the chemicals. Apparently when the land is effected by herbicides, the Hre people consider it to be the manifestation of an evil spirit, and according to their tradition will abandon such land in the belief that it has fallen under a curse. Thus the folk beliefs of the Hre may intensify the effects of the crop destruction program on their lives.

Before leaving Vietnam we made a preliminary report of our observations to General Abrams and to Mr. Stephen Winship and Mr. Terence Grant of the Embassy Political Military section. Upon our return, one of us was requested to present a briefing at the State Department in Washington. The briefing took place on October 19 before a working level group consisting mainly of personnel from the Bureau of East Asian and Pacific Affairs and the Bureau of Intelligence and Research. We are also sending copies of this report to Secretary Rogers and to General Abrams.

We strongly hope that our observations can make a positive contribution toward bringing under review a program which seems to us very much in need of it.

Sincerely yours,

Matthew Meselson

John Constable