UNODC
United Nations Office on Drugs and Crime

2018 Myanmar Opium Survey clarification

Yangon (Myanmar)/ Bangkok (Thailand), 27 February 2019 - We have reviewed recent statements made about the 2018 Myanmar Opium Survey and convey the following statement in response to the concerns raised: the Survey was conducted in-line with international standards (see below details about the applied methodology), and using state of the art technology UNODC undertook a very precise mapping and examination of poppy cultivation areas in Chin, Kachin, Kayah and Shan States. It is possible that minor changes may have occurred in some of the monitored cultivation areas since the last satellite images were taken in March 2018, and it should also be noted that the report does not aim to describe precise control of a particular area. However, the Survey provides accurate data and analysis which confirms the link between conflict and poppy cultivation. This conclusion reiterates similar findings observed in other countries. UNODC is committed to support the Government of Myanmar and other stakeholders in addressing the drug epidemic and related organized crime.

UNODC Opium Poppy Cultivation Area Estimation Methodology

The area estimation to monitor the extent of opium poppy cultivation in Myanmar was carried out by means of remote sensing techniques. Satellite imagery were acquired following two approaches (Map 5 in the report) – (1) A sampling approach (see '*Sample approach'* section in the report p-34) and (2) A full coverage approach (see '*Target area selection and Interpretation'* section in the report p-39).

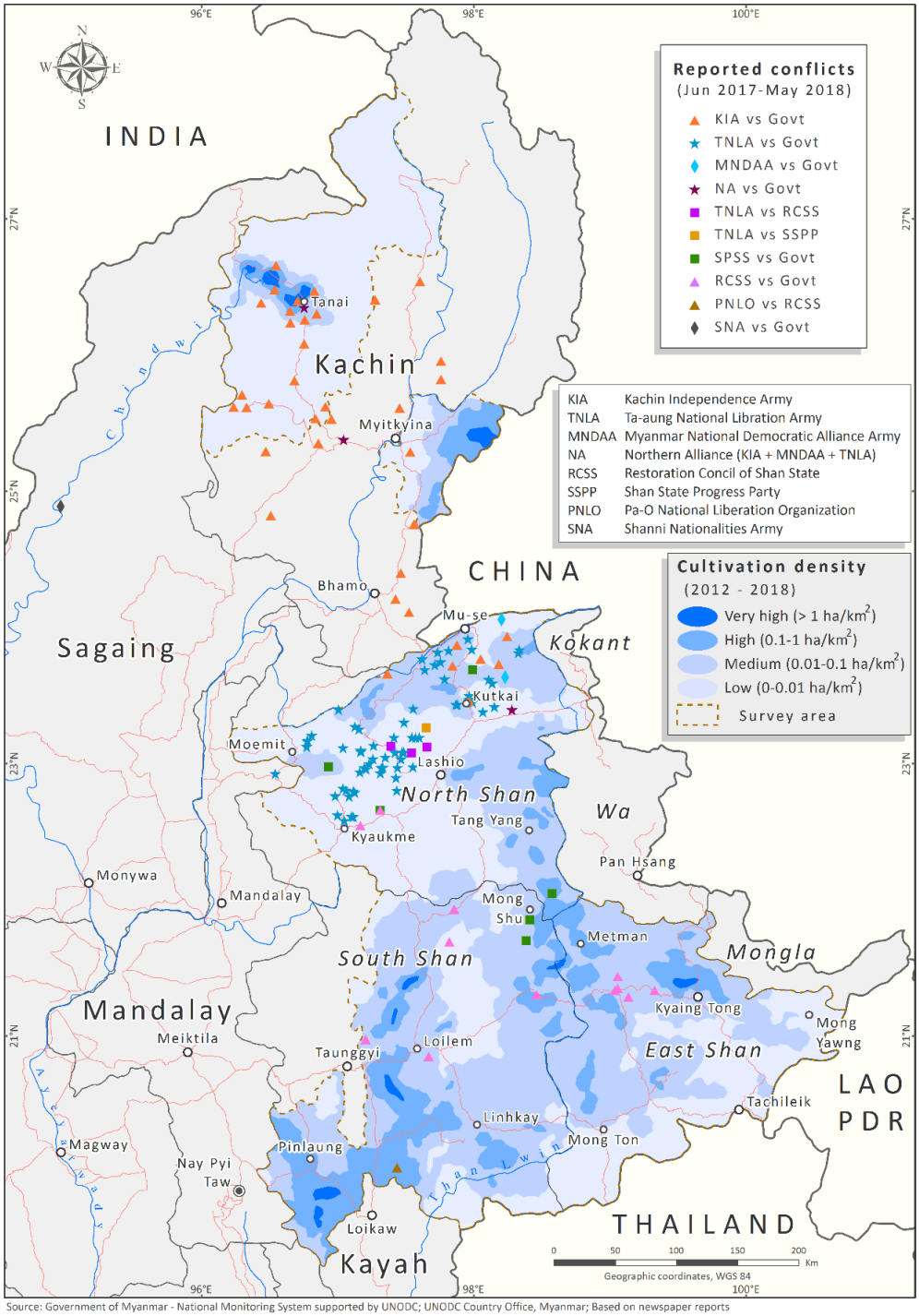
The images used for the sampling areas were Very High Resolution (VHR) satellite images, and a combination of VHR and High-resolution images were used for the targeted areas. For every location, two images were acquired with an approximate five-week interval; one image was taken in December 2017- January 2018 and the other in February-March 2018. These two dates correspond to the pre- and post-harvest periods of poppy, facilitating the identification and discrimination from other land cover classes. To determine the image acquisition dates, the regional differences between the crop calendars were considered.

The images covering the Tanai area in Kachin state were acquired between January and February 2018 by RapidEye satellites, with 6.5 metre nominal ground resolution or 5 meter resolution for orthorectified products. It provides five spectral bands, ranging from blue to near infrared colours. A few VHR Pleiades images were acquired for the same areas, to correct for interpretation errors caused by the lower spatial resolution of the RapidEye images. By interpreting both image types

independently, a factor was determined that provides the difference in area estimates from a RapidEye image compared to Pleiades images. This factor was applied to the fields that were only covered by the RapidEye images, to correct for the differences in spatial resolution.

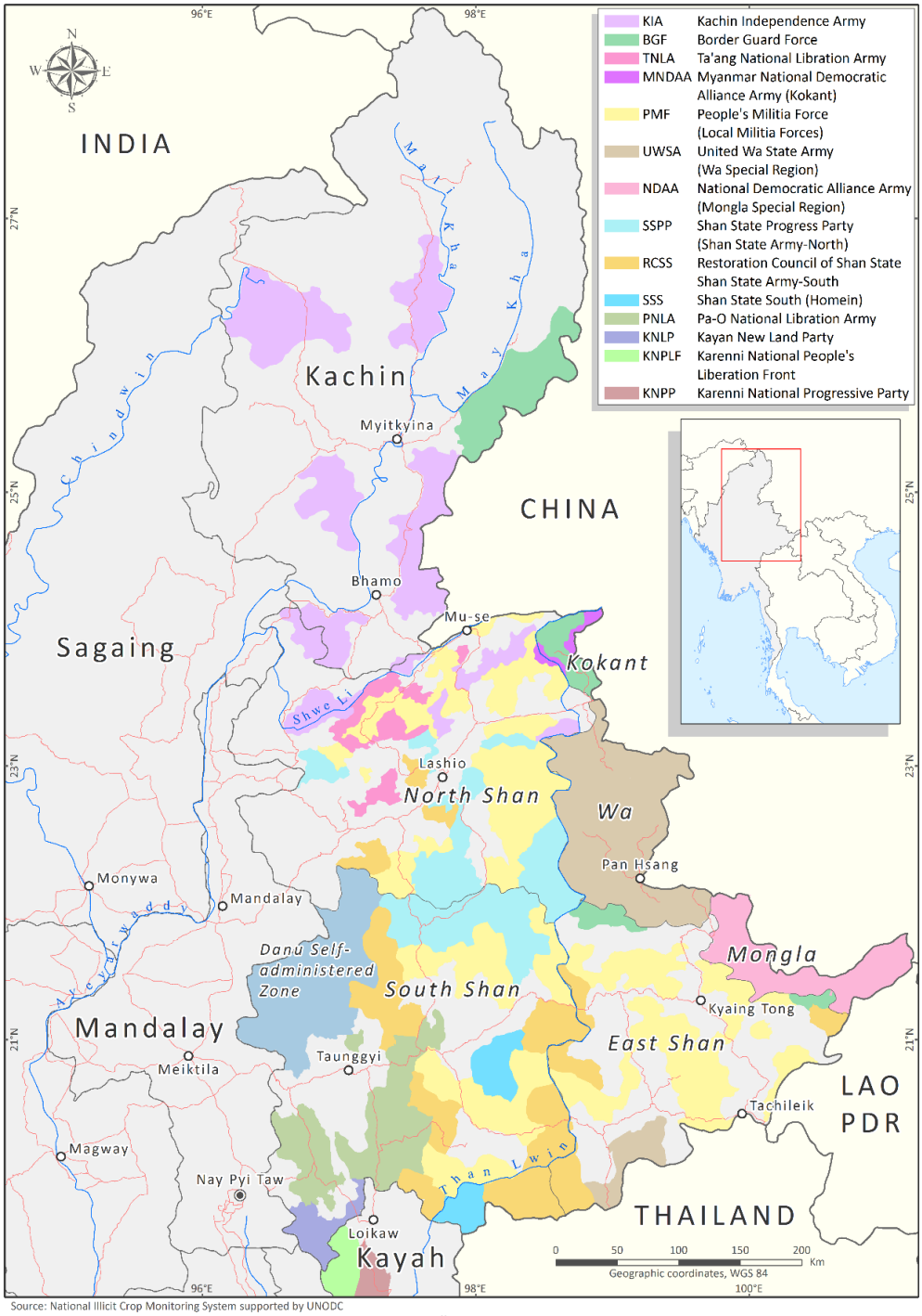
Due to ongoing conflicts and the unstable security situation ground truthing could not be conducted in these parts of Kachin state (see *'Ground truth data collection'* section in the report page-36) early 2018.

Cultivation density map (2013-2018) with reported conflicts in Myanmar, June 2017- May 2018



Source: Government of Myanmar - National Monitoring System supported by UNODC; UNODC Country Office, Myanmar; Based on newspaper reports
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Armed groups in Myanmar, 2017-2018 opium poppy growing season



Source: National Illicit Crop Monitoring System supported by UNODC