



DEPARTMENT OF

Geographical Sciences

BE GLOBAL

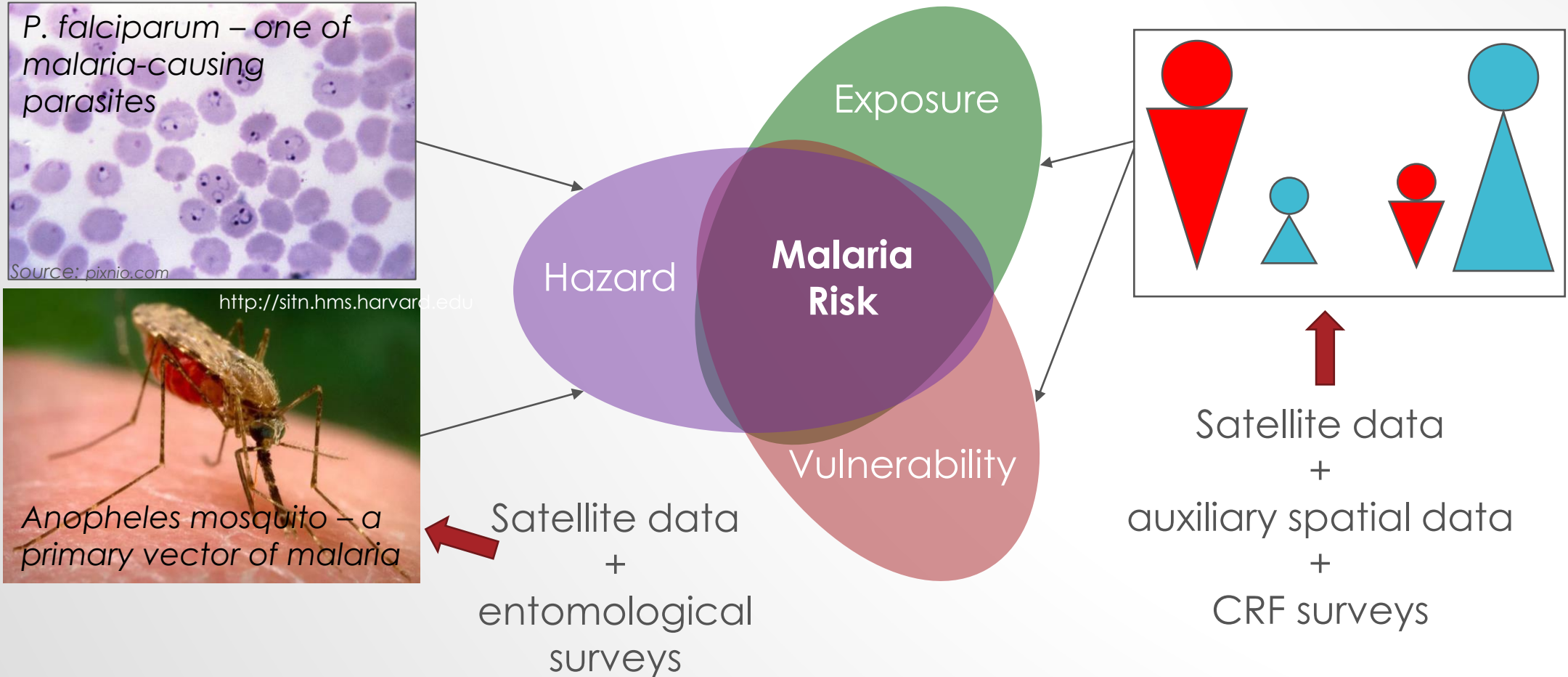
MYANMAR MALARIA EARLY WARNING SYSTEM (MMEWS)

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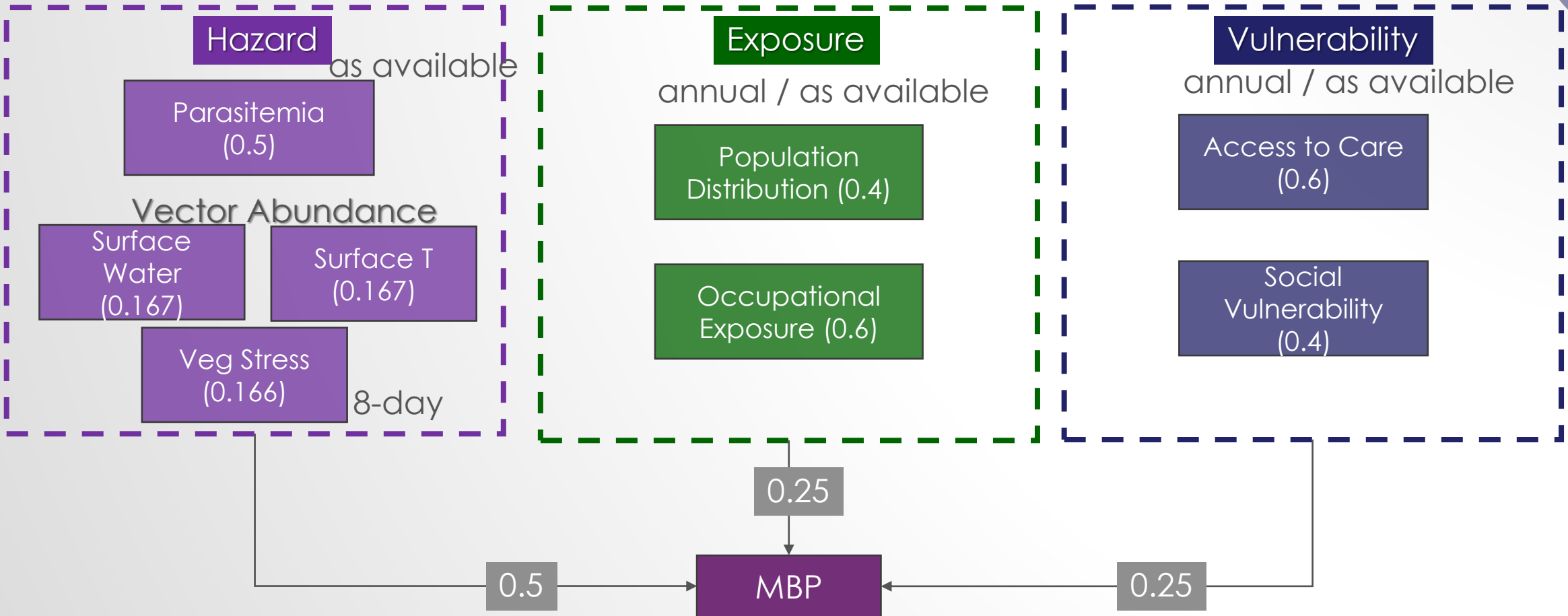
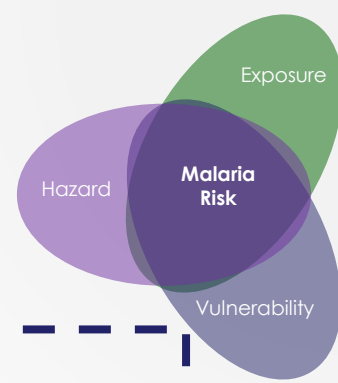
Christopher Plowe, Myaing Myaing Nyunt
Formerly Duke University

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Formerly Duke Global Health Institute, Myanmar

MALARIA RISK

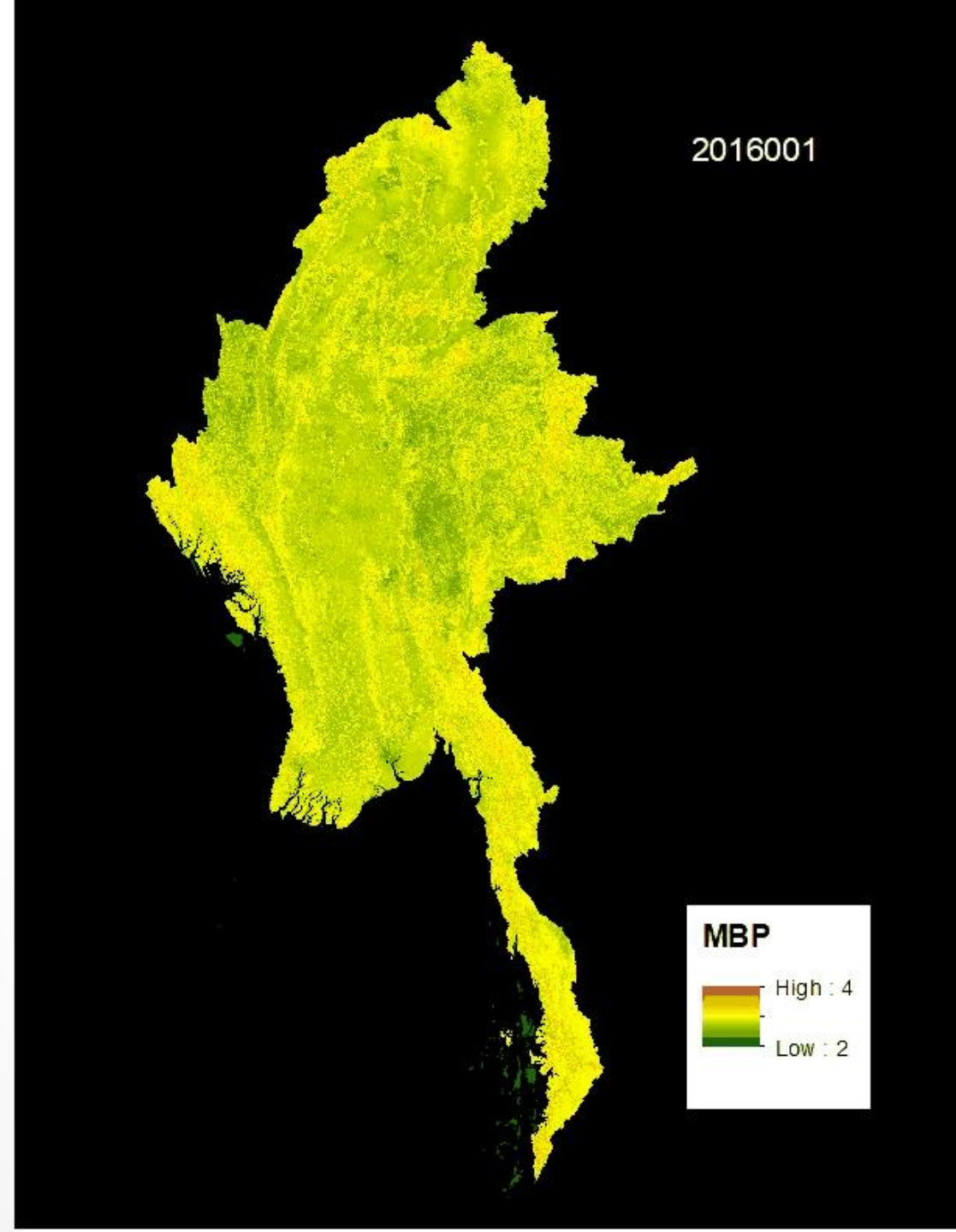


MALARIA BURDEN POTENTIAL (MBP) NEW



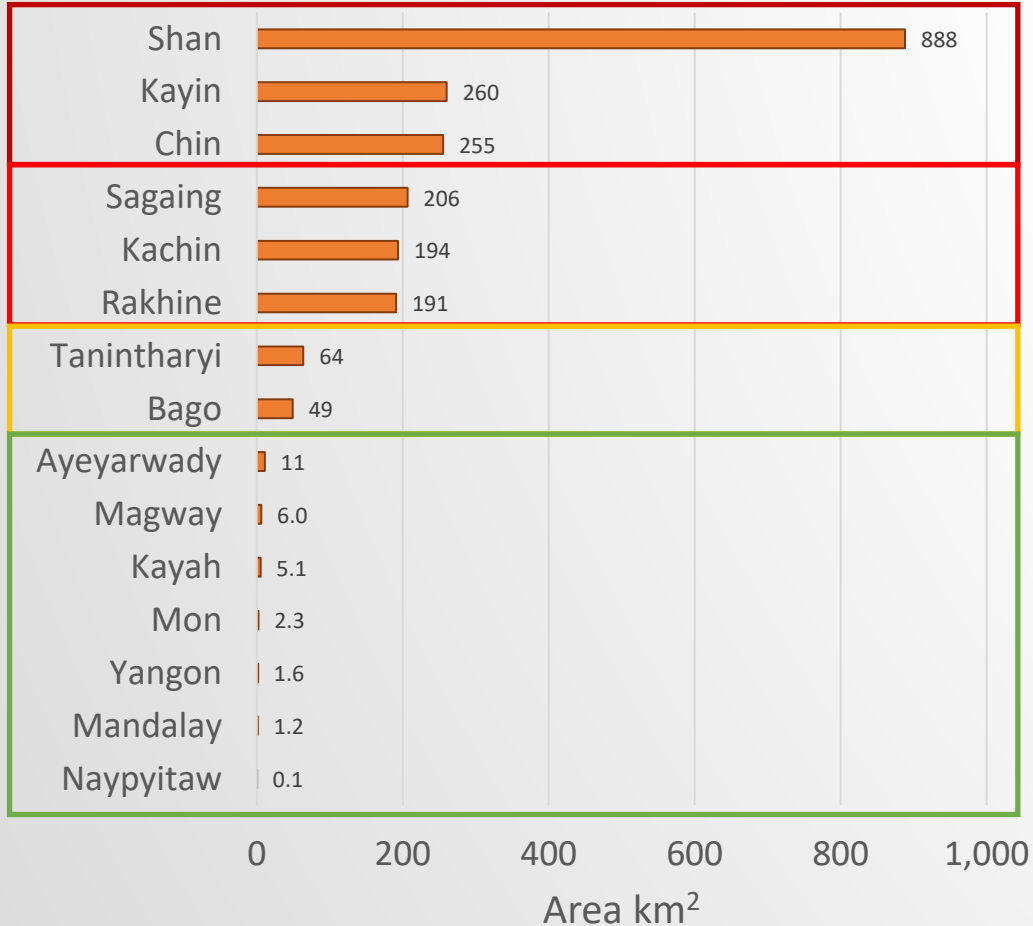
OPTIMIZED MYANMAR- WIDE MBP MODEL

- Wall-to-wall model of Malaria Burden Potential
 - 240 m resolution
 - 8-day update
 - 1 – 2 months forecast
- Executed: 2016 -2020

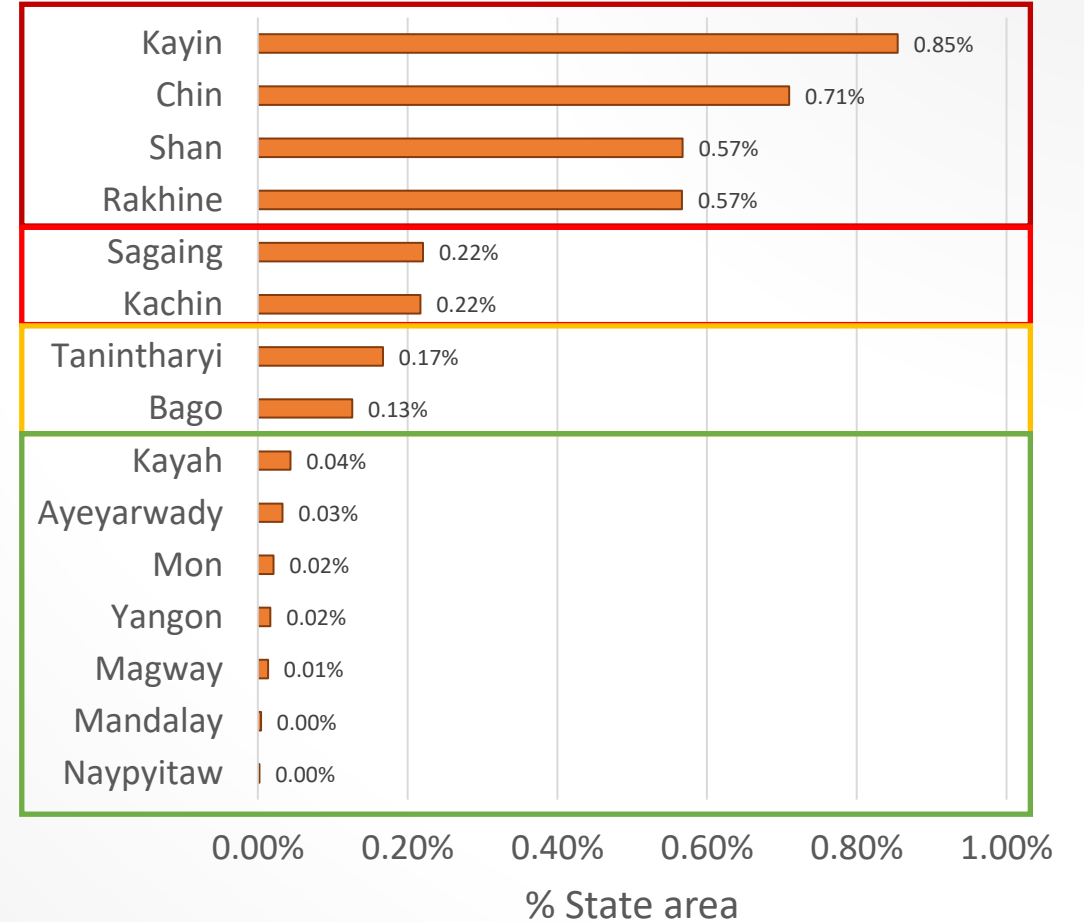


THREAT REPORTING/HISTORICAL RUNS

Mean daily area under "High" risk



Percent area under "High" risk



* Numbers based on a 5-year mean assessment

By area km²

By % state

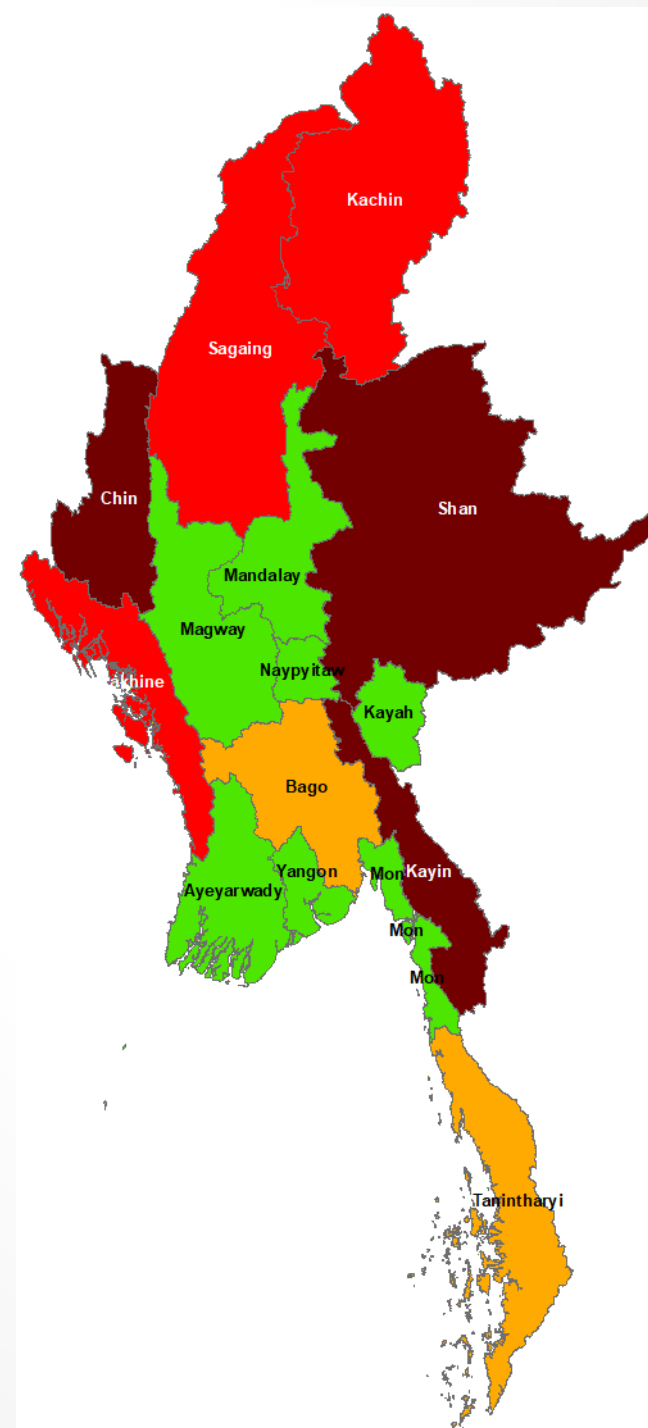
1. Shan	1. Kayin
2. Kayin	2. Chin
3. Chin	3. Shan
4. Sagaing	4. Rakhine
5. Kachin	5. Sagaing
6. Rakhine	6. Kachin
7. Tanintharyi	7. Tanintharyi
8. Bago	8. Bago
9. Ayeyarwady	9. Kayah
10. Magway	10. Ayeyarwady
11. Kayah	11. Mon
12. Mon	12. Yangon
13. Yangon	13. Magway
14. Mandalay	14. Mandalay
15. Naypyitaw	15. Naypyitaw

Very
High

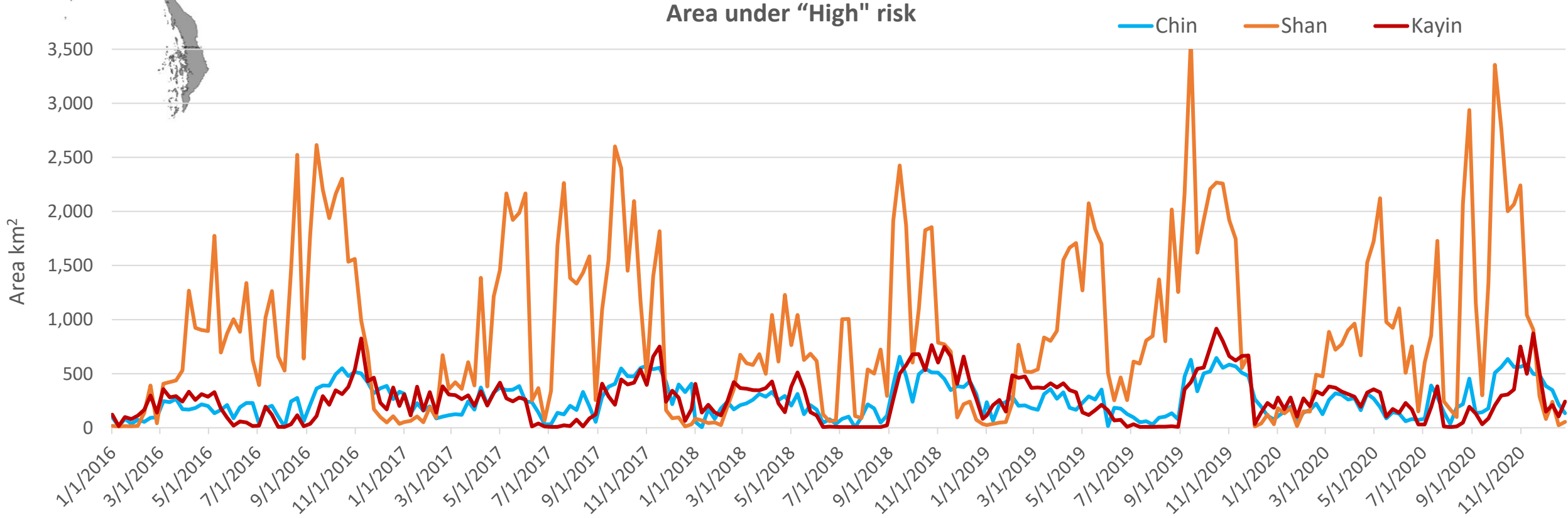
High

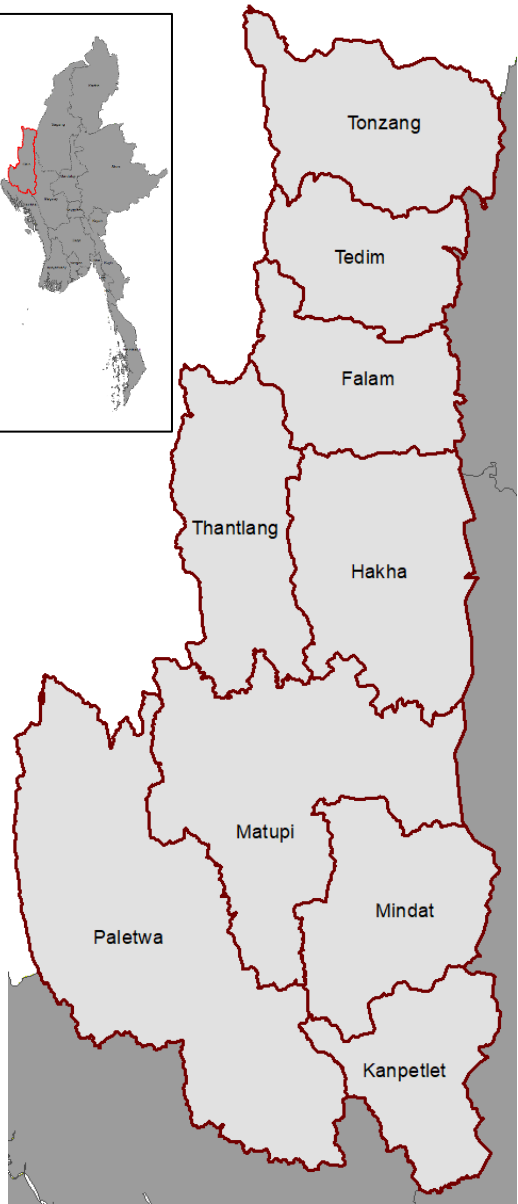
Moderate

Low



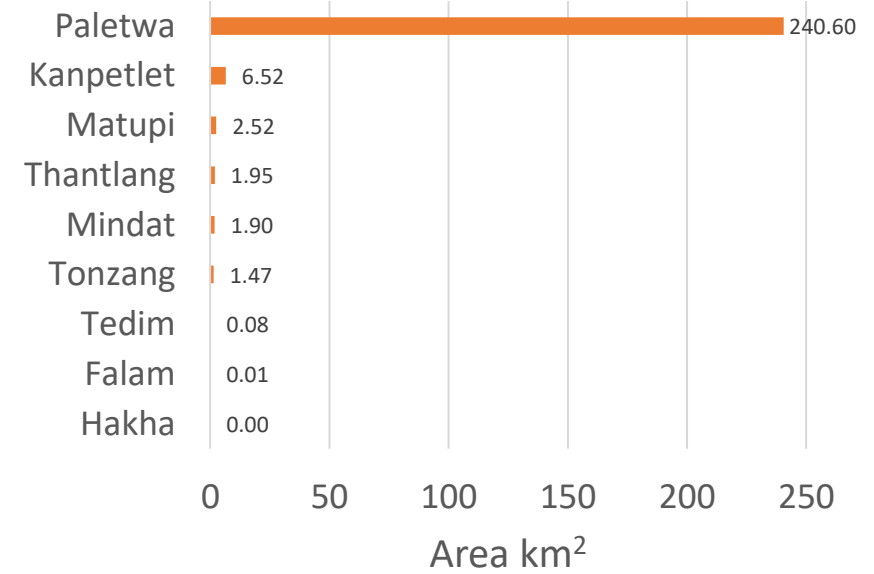
Very High Risk States



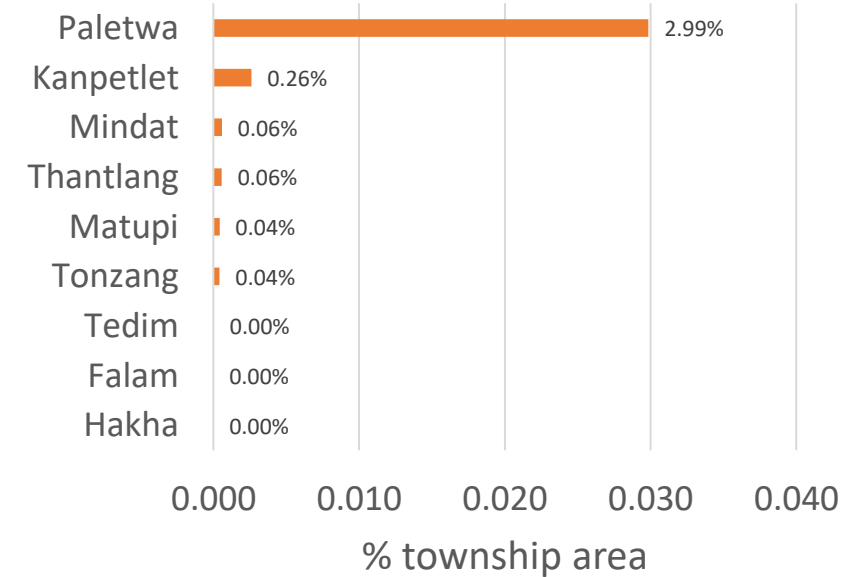


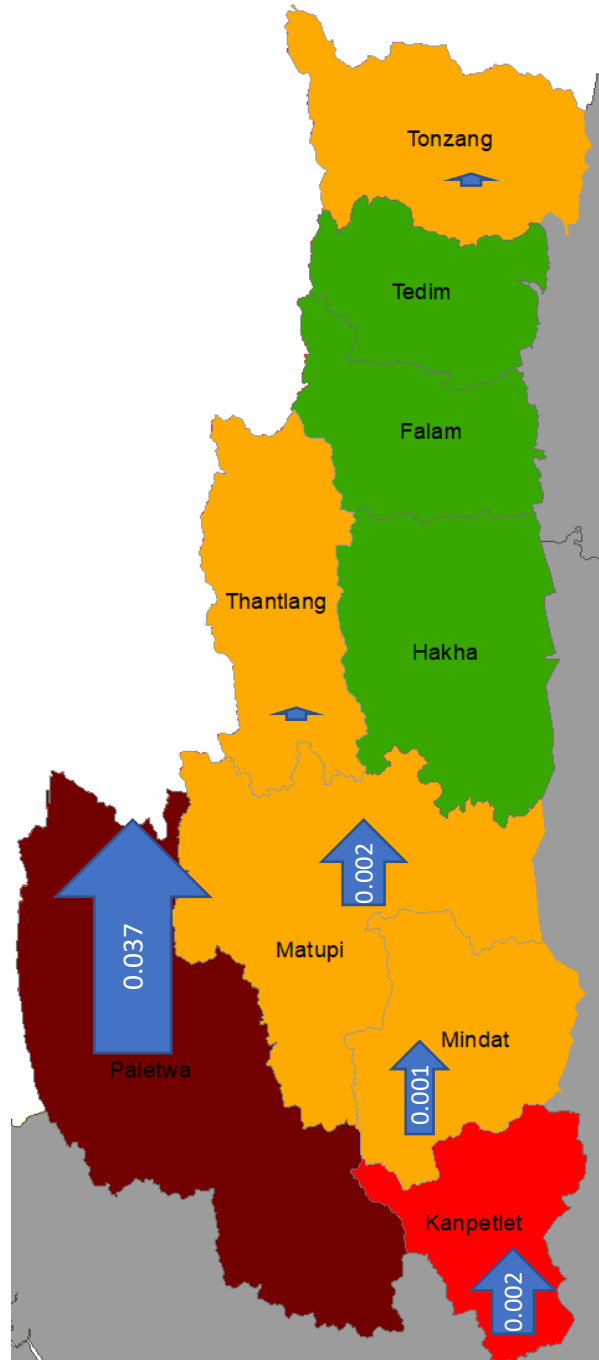
By area km2	By % township
1. Paletwa	1. Paletwa
2. Kanpetlet	2. Kanpetlet
3. Matupi	3. Mindat
4. Thantlang	4. Thantlang
5. Mindat	5. Matupi
6. Tonzang	6. Tonzang
7. Tedim	7. Tedim
8. Falam	8. Falam
9. Hakha	9. Hakha

Mean daily area under "High" risk

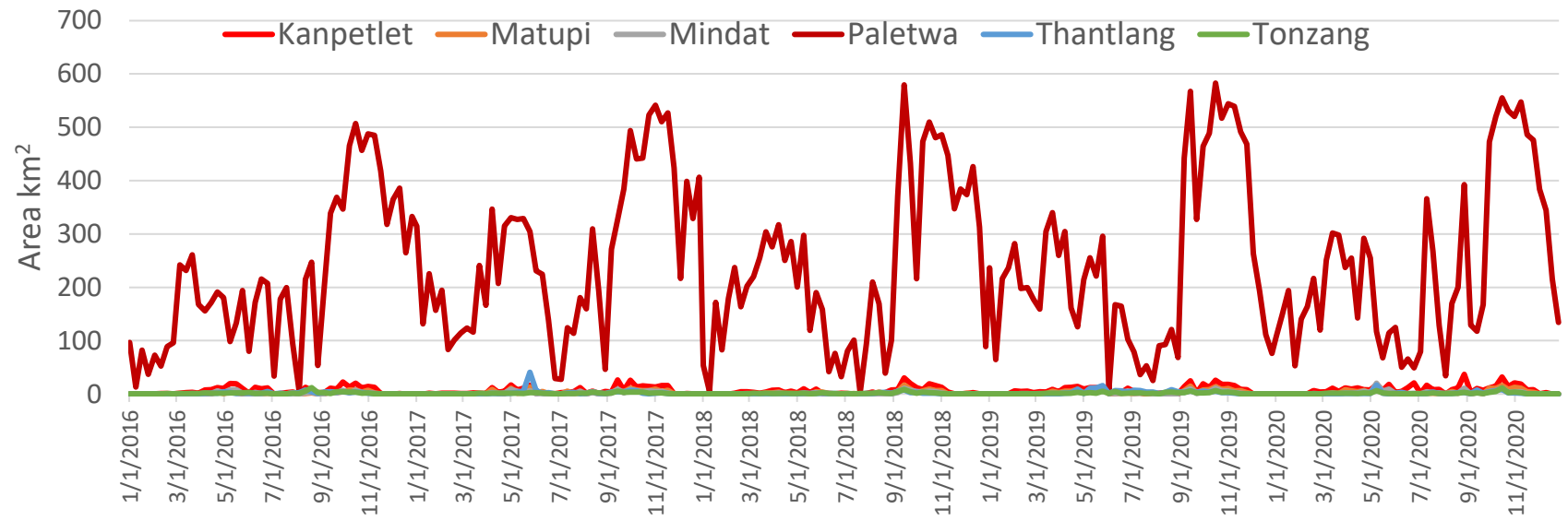


Percent area under "High" risk

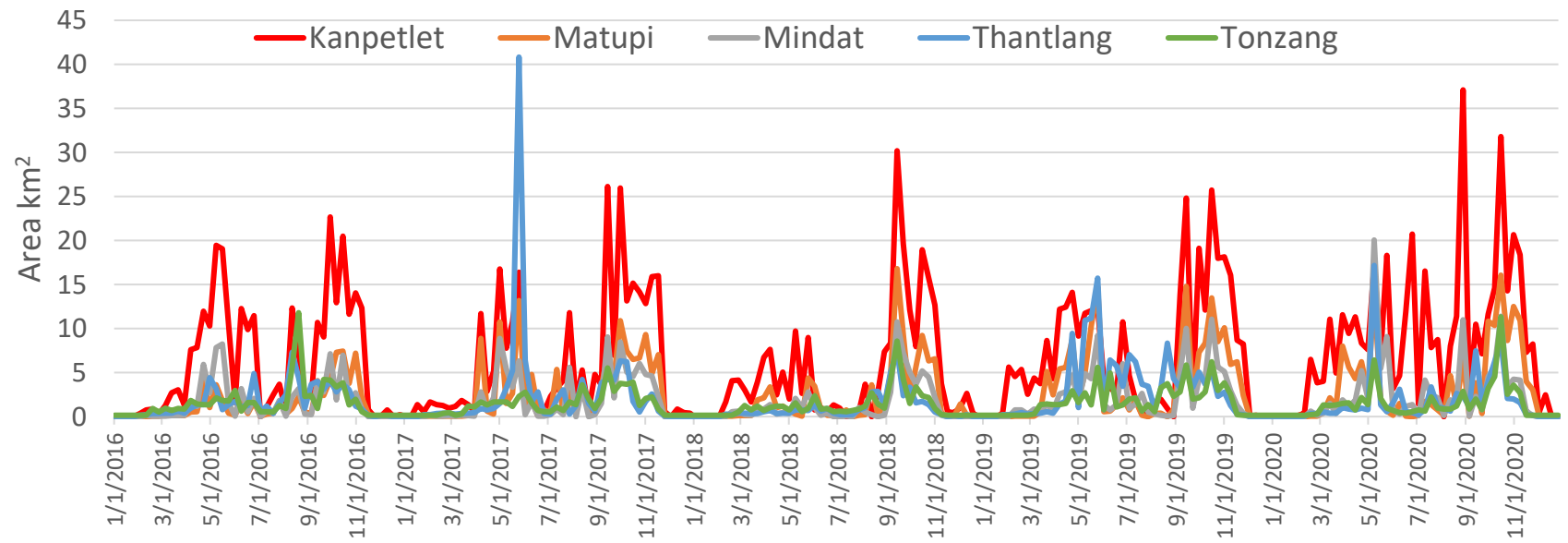




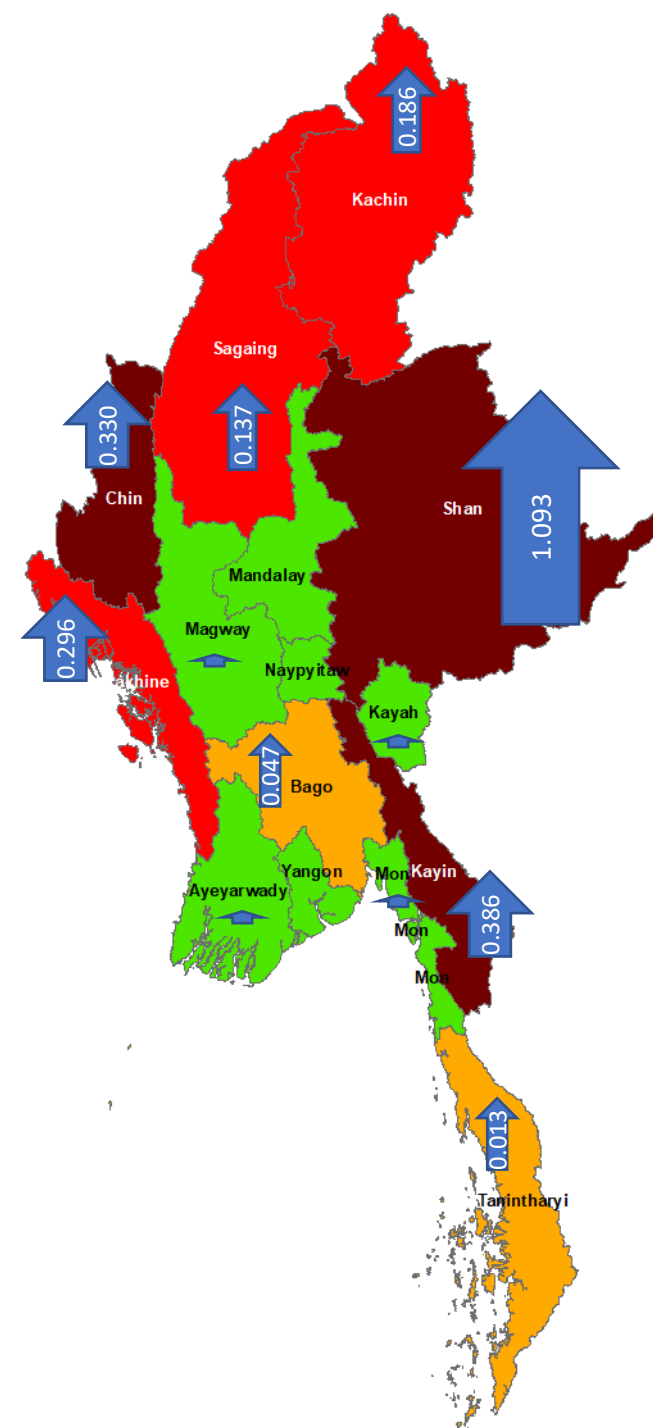
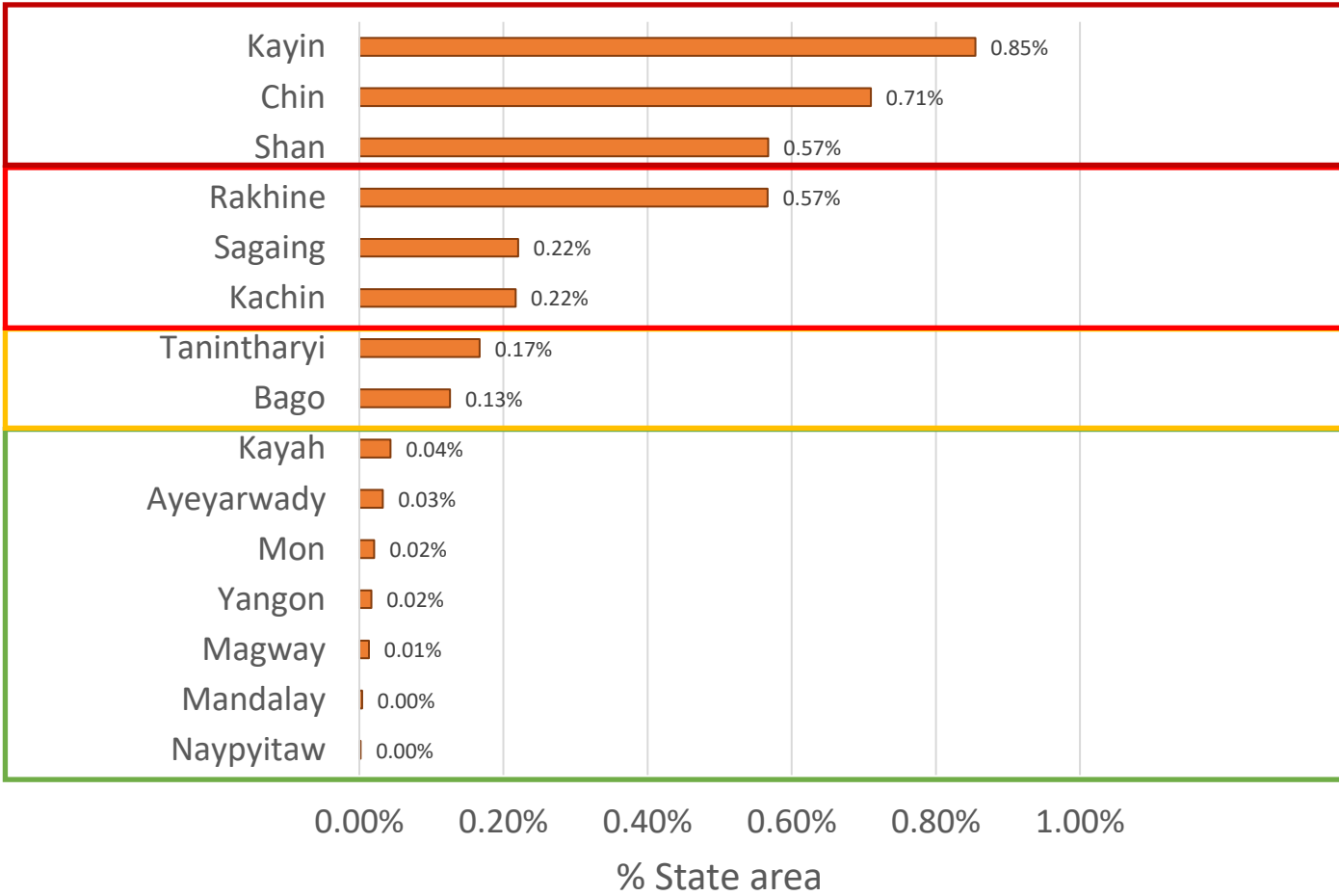
Area under "High" risk (top 6 townships)



Area under "High" risk



Percent area under "High" risk



COVID19 + POLITICAL CONTEXT + PARTNERS

- Unable to travel to meet and work with stakeholders
- Stakeholders are fully engaged in COVID response



Unable to complete text-reporting system development

Unable to complete testing, verification, and operational deployment

FINAL STATUS

- Starting ARL 1
- Final ARL 7: Functionality Demonstrated

QUESTIONS?

