From Maize to Haze



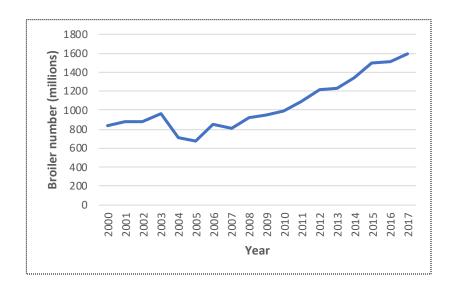
Daniel Hayward, Chiang Mai University 29th July 2020

AIMS

- Look at the dynamics of maize production in Thailand
- Relate this to:
 - Land use trends in northern Thailand
 - Haze and associated issues
 - The role of farmers and the private sector

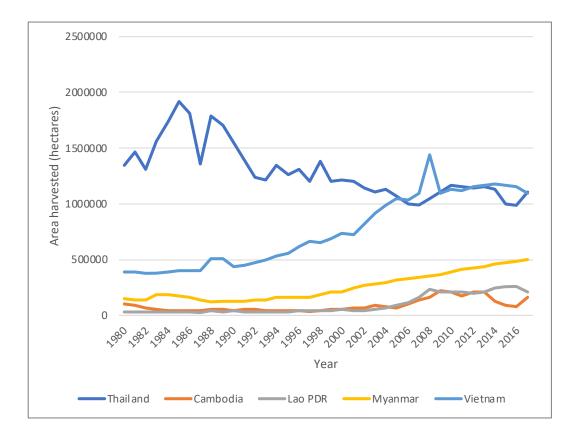
MAIZE PRODUCTION IN THAILAND

- 95% domestic production for animal feed
- Thailand is the fourth largest exporter of poultry products globally
- Numerous multinationals involved
- CP
 - Largest global producer of animal feed



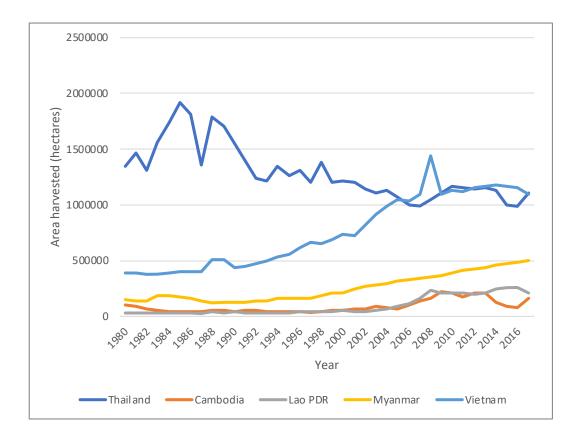
Broiler production in Thailand (Data source: Thai Feed Mill Association)

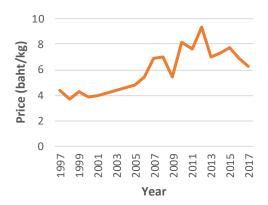
LAND USE FOR MAIZE IN THAILAND



Area harvested (in hectares) for maize production in selected Southeast Asian countries (Data Source: FAOSTAT)

LAND USE FOR MAIZE IN THAILAND



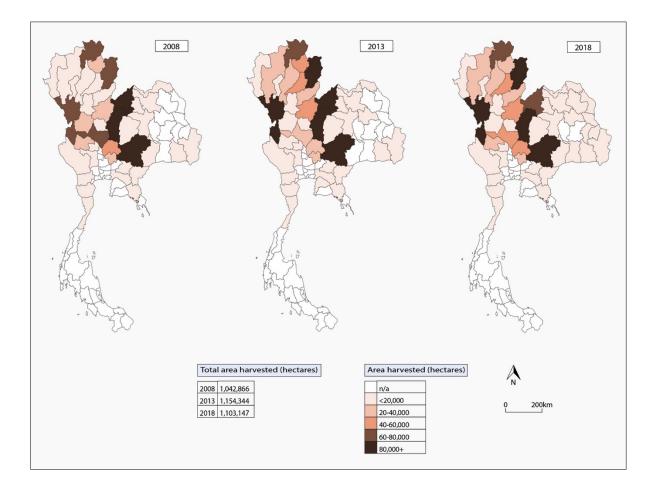


Average price of maize in Thailand (baht/kg) per growing season (June-May)

(Data source: Office for Agricultural Economics)

Area harvested (in hectares) for maize production in selected Southeast Asian countries (Data Source: FAOSTAT)

LAND USE IN THAILAND



Land use in maize production (as area harvested) by province in 2008, 2013 and 2018 (data source: OAE, 2020; vector map acquired courtesy of Free Vector Maps.com)

FROM MAIZE TO HAZE

- Clearing land for new plantations
- Burning stubble for a new growing season
- Greenpeace Southeast Asia. (2019). A haze-free ASEAN by 2020 are we there yet?
 - December 2018- May 2019
 - 6,879 fire hotspots within maize plantations in Upper Northern Thailand
 - 14,828 hotspots within plantations in Shan State, Myanmar

ASSOCIATED ISSUES

1. DEFORESTATION

- Narrative against farmers from military, urban middle-class environmentalists, Buddhist activists, royalist think tanks
- Junta forest reclamation policy 2014-19
 - Rise to 40% forest cover
- 2. CROSS-BORDER HAZE



'Bald' mountains in Nan Province (photo credit Mohigan)



Star power shines on campaign promoting reforestation efforts

national May 23, 2016 01:00 By PRATCH RUJIVANAROM, SANTICHAI 4,366 Viewed



Illegal clearing in Nan attributed to farmers growing lucrative maize crop.

A DEMONISED SMALLHOLDER

- Land squeeze
- Corporate push
- Lack of technical support

WHAT ABOUT THE PRIVATE SECTOR ROLE?

Hit by 'bald mountain' claims, CP vows "to make everything right"

28 Mar 2016 at 10:46 1 domments WRITER: TERRY FREDRICKSON ORIGINAL SOURCE/WRITER: PENCHAN CHAROENSUTHIPAN Level switch:



This photo combo (slightly edited) has been featured on social media, part of a massive storm of criticism of the "bald mountain" policies of CP Group's corn-growing and buying policies. (Photos via Facebook, Suchart ShutterBike)

Embattled Charoen Pokphand (CP) Group will launch a social enterprise in Nan province to encourage farmers to grow cash crops other than maize.



Please join us on our Facebook page http://www.facebook.com/bangkokpostlearning

Agro-giants 'must own up to North haze'

Locals get blame for hazard, Bio Thai says

Bangkok Post 10 Apr 2015 PARITTA WANGKIAT

WHAT ABOUT THE PRIVATE SECTOR?

- Domestic policy response
- Sustainable greenwashing
- Regional extension and expansion



Organic coffee project in Ban Sop Khun, Nan Province





An infographic from CP on their maize traceability scheme

Newly prepared soil for maize planting has been turned over to avoid a need for burning, Banlang Sub-District, Khorat Province

WHAT TO DO? – OPPORTUNITIES

- Corporate face matters
- Support farmers
 - Use of stubble as biofuel
 - Crop relaying (with legumes)
 - Improved land tenure rights
 - Proper technological support

THE MAE CHAEM MODEL – A CAUTIONARY TALE

- Centre of deforestation and hotspots
- Multi-stakeholder program on land use, resource management and forest conservation
 - District officials, academics, local communities, private sector
 - Significant drop off in burning by 2015
- New local authorities moved to zero-tolerance policies
 - Return of the burn