



Land zoning, planning, conversion and food security

Extended synopsis

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Overview

An irony in the land grabbing debate is that the 2008 food price spike that helped catalyse land deals has resulted in large scale investments in land that convert from food to non-food crops or other uses. Land conversion takes different forms in different areas. In peri-urban areas the concern is that highly productive paddy land is lost permanently to industrial, residential, and recreational uses. In upland areas, forests and complex swidden-based farming systems are converted to industrial crops. The potential of planning and zoning to temper this conversion places tensions between market-based land use choices and socially or politically determined land use strategies.

Key trends and dynamics

Conversion of land from forests to farms and from food production to industrial crops has a long history in the Mekong Region. Colonial estates converted land for rubber and coffee, for example, and both colonial and post-colonial regimes identified “wastelands” for conversion to commercial crops (Ferguson 2014; Hirsch and Scurrah 2015b). Conflict in Indochina and associated population movement is another part of the history of change in land use and land cover (Susumu 2019). Post-conflict land cover change in northwestern Cambodia since the 1980s has seen progressive loss of forest cover, with implications for downstream hydrology and hence food production over a wider area (Chim et al. 2019). Similarly in Myanmar, understanding land use as part of a “conflict resource

economy” helps explain the way in which land and natural resources are exploited, particularly in ethnic minority areas (Woods 2018).

Large-scale land acquisitions accelerated in the Mekong Region during the first decade of the current century. These coincided with concern of what has become termed a “global land grab”, as large-scale concessions have been granted to investors. In Kachin State alone, some 170,000 hectares of farmland and forest had been converted to banana plantations producing for the Chinese market (Hayward et al. 2020). Despite the fact that in some quarters these acquisitions were promoted or justified by the need to attract capital to the agricultural sector to enhance large scale food production, much of the land given over to such concessions has been for non-food crops such as rubber and biofuels, with adverse implications for local livelihoods and food security (Nanhthavong et al. 2021). Moreover, direct land use change and associated displacement of farmers also triggers indirect changes as those displaced seek out land elsewhere. In Cambodia, communes with economic land concessions (ELCs) were more likely to experience knock-on forest loss than those without (Magliocca et al. 2019). Similarly, ethnic minorities in the Central Highlands have been found to clear forest frontier land as a result of the coffee boom that has attracted outsiders to claim or purchase land that these minorities previously used for food production (Meyfroidt et al. 2013). Other examples of flow-on effects beyond the site of land conversion include the disruption of livestock rearing in northern Laos as rubber plantations institute penalties for damage by wandering cattle (Friis et al. 2016).

Conversion of land toward commercial crops is also driven not only by large-scale land concessions, but also by changes in smallholder production, for example in northern Laos (Hepp et al. 2019). Similarly, in northeastern Thailand, smallholders have converted paddy lands to rubber plantations even in sub-optimal areas as a result of policy-driven incentives and fundamental changes in livelihood systems (Sakayarote and Shrestha 2016). A study of wetland conversion in the Mekong Delta shows that a combination of poor tenure security, local desire for increased food production and external market-driven incentives can result in socially and environmentally detrimental forms of land use change among smallholders (Hoang Huu Nguyen et al. 2017).

Land conversion has involved more than the replacement of food crops by industrial and other commercial crops. Rapid urban growth has seen large swathes of land at the peri-urban fringe converted from agricultural to residential and industrial uses, as well as fragmentation of land uses that creates increasing challenges to the sustainability of existing agrarian practices (Han Quang Hanh et al. 2017). This often occurs at the expense of the affected farmers (Nguyen Thi Ha Thanh et al. 2016). Typically such land is among the most fertile and irrigable paddy land to be found in Cambodia, Laos, Myanmar, Thailand and Vietnam (Hirsch and Scurrah 2015a). As a result, expressions of concern over food security has been aired periodically and are often linked to tenure security (Holden and Ghebru 2016; Kenney-Lazar 2016). Infrastructure development is also an important cause of land conversion from food crops, often interacting with other sources of land pressure affecting displaced and otherwise affected farmers (Baird and Barney 2017). Moreover the indirect impacts of infrastructure are sometimes even more significant in terms of livelihood displacement and associated food security concerns (Dwyer 2020).

Land conversion has been documented in many ways. Remote sensing and associated land conversion matrices show significant moves away from staple crops toward industrial crops, and

from natural toward plantation forest, with implications for food production and ecology (e.g. Wang et al. 2019). Village level studies have taken more qualitative approaches to understanding the implications of land conversion for those who previously farmed the land, for example in Koh Kong in southwestern Cambodia (Drbohlav and Hejkrlik 2018). Cross-scale approaches such as tele-coupling link locality-specific land use change to remote decisions, for example in the case of palm oil and energy companies whose decisions impact on local land use in Tanintharyi in southern Myanmar (Lundsgaard-Hansen et al. 2018).

A fundamental dilemma for all the countries concerned is that governments are firmly wedded to market-based development, which limits the extent to which regulatory measures are able to direct land uses beyond what markets and ownership structures tend to dictate. Conversion from subsistence-oriented farming to commercial boom crops occurs as access to markets is facilitated by roads and other infrastructural development (Castella 2021). Planning and associated zoning of agricultural land has nevertheless been implemented in the name of food security, but under very limited circumstances. Farmers in Laos tend to see food security in terms of overall livelihood opportunities rather than simply in terms of having sufficient land to produce their own food (Keovilignavong and Suhardiman 2020). Urban areas where horticultural gardens have been converted into residential developments have seen farmers turning to selling food as an alternative to producing it, for example in Hanoi's Tay Ho district (Vansintjan et al. 2019)

Zoning within the overall project of land use planning has also become a widespread part of government policy to sedentarise agriculture and to establish fixed boundaries around upland village communities. This is particularly the case in the context of land and forest allocation in upland Laos (Ducourtieux et al. 2005) and in mountainous areas of Vietnam (To Xuan Phuc and Tran Huu Nghi 2014). Zoning of fixed percentage targets for (re)conversion to forest cover under protected area status also has significant implications for livelihoods (MRLG 2019). While such zoning is often seen as a top-down means of control over livelihoods and a circumscribing of villagers' access to resources, institutional arrangements can also be locally specific and rely on community-level processes, for example in Houaphan Province of northeastern Laos (Suhardiman and Scurrah 2021).

Key actors, interests

There is a range of public, private, and civil society actors involved in promoting, regulating and resisting land conversion from food production to other uses. Outcomes are often the product of interaction between multiple actors, exemplified by the complex political economy of both rural and urban land conversion in Vietnam (Wells-Dang et al. 2016).

Private actors include concessionaires such as Hoang Anh Gia Lai and the Vietnam Rubber Group, which have converted large swathes of territory in northeastern Cambodia and southeastern Laos to rubber plantations (Kenney-Lazar 2012; Thuon 2018). They also include property developers in peri-urban Vietnam (Labbe and Musil 2013). Industrial estates such as the Eastern Seaboard development in Thailand also have direct and indirect implications for land use, given their demand not only for land but also for water resources (International Commission of Jurists 2020).

State actors include planners, local authorities, and industrial estate authorities. In Laos, state agencies are often working at cross-purposes in the granting of concessions involving land

conversion (Hett et al. 2020). In the same country, land use planning serves the competing interests of different government departments rather than working toward a well-integrated vision for optimal land use to fulfil national and/or local objectives (Suhardiman et al. 2019). In Vietnam, as in China albeit with differences in land tenure arrangements, the state retains a significant role in setting the boundaries of land conversion from rural to urban uses, employing the notion of “market socialism” to retain the authority of the state within an increasingly market-driven set of land governance arrangements (Hoang Linh Nguyen et al. 2018). Debonne et al. (2018) demonstrate the agency of policy makers to govern land use transitions in the case of Lao PDR.

Civil society actors work closely with rural communities threatened by dispossession in the name of land conversion for large scale infrastructure, industrial and urban projects. In the case of Dawei special economic zone, affected communities are emboldened by such support (Sekine 2016). NGOs such as Land Watch in Thailand, Landa in Vietnam, and Licadho in Cambodia work with local communities, but in an increasingly constrained civil society space. Women are often excluded from land use planning and associated zoning, even where nominal participatory processes are instigated (Somphongbouthakanh and Schenk-Sandbergen 2020).

Key contestations and debates

In rapidly industrialising Southeast Asia, market imperatives combine with national policy to take some of the most productive farmland out of cultivation in favour of higher value uses. In Vietnam in particular, this is a key area of policy debate, one that is driven through ideologies of modernisation (Labbé 2016). There is a basic incompatibility between land use planning based on crop designation, on the one hand, and market imperatives on the other, which is exacerbated in part by the residual socialist approach to land use planning set within a neo-liberal economic framework. There are also tensions between a production target approach to food security and one based on household entitlements, capabilities, and diverse livelihoods. In northern Laos, market-driven conversion of smallholdings and of forested areas for maize cultivation in the context of demand and trading networks from Vietnam have seen conversion that is at odds with forest conservation objectives (Vongvisouk et al. 2016).

Land use planning and associated formalisation have been applied in the name of a more rational or considered means to achieve social, economic and environmental ends than a more laissez-faire approach, but the power that this puts in the hands of authorities at various levels has resulted in poor social and environmental outcomes at the community level (Broegaard et al. 2017). A review of land use planning in Laos since 2009 reveals that, despite the intentions of stabilising and improving livelihoods and tenure arrangements, the net effect has often been to constrain access to land and other resources and hence to weaken overall livelihood security (Ling 2017).

Compensation is often a key issue of debate, challenge and resistance when land is re-purposed toward higher value uses and expropriated under “eminent domain” provisions. This is particularly the case where developers are given land formerly classified as agricultural and compensation fails to take account of current market values. In the case of infrastructure that is partly financed by such arrangements, resistance may be stronger than anticipated, particularly in peri-urban areas where the land has already been acquired by wealthier and less acquiescent interests, for example in the case of the 450 year road in Vientiane (Pathammavong et al. 2017). Another key point of debate is

whether monetary compensation can provide proper recompense for loss of livelihoods, or whether it in turn triggers fundamental livelihood ruptures in social relations as well as livelihoods (Green and Baird 2016).

Key differences and commonalities among Mekong countries

While land conversion, associated dispossession and implications for food security is an issue across the region, it tends to manifest in different ways in each country. Vietnam's extreme land shortage and rapid urbanisation that encroaches on some of the country's most fertile farmland tends to bring peri-urban development to the forefront of concerns. While Laos and Myanmar also see conflict over peri-urban development, most of the land conversion contestations have been in the uplands. Cambodia has seen heavy handed dispossession associated with land conversion in both peri-urban and upland areas. In Thailand, a major exporter of food, national level food security does not register as a concern associated with land conversion to the same extent it does in neighbouring countries. In terms of forest land conversion, both Vietnam and Thailand have seen increases in tree cover, whereas Cambodia, Laos and Myanmar have seen significant declines over the past two to three decades. In Thailand, the increase has in part been driven by land abandonment in marginal areas such as Phetchabun (Leblond 2019).

Key links and interactions across borders and across scales

Land conversion in upland areas remains closely tied to investment in plantations, some of which is driven by foreign direct investment. More generally, regional markets in maize, rubber and other boom crops mean that influence is not constrained within borders. Peri-urban land conversion tends to be more for domestic residential and industrial expansion. It occurs on the edges of cities whose growth is driven by globalisation and associated processes of gentrification shaped by norms, trends and economic processes with transnational influence (Steel et al. 2017).

A significant scalar issue in land use planning is the extent to which it is driven from the top down or ground up. Participatory land use planning programs have been implemented in all countries of the region, but the terms under which such planning occur are set by national level programs. Poor coordination between national land policy and associated land use plans, on the one hand, and the realities faced by rural producers facing market pressures on the other, mean that land use planning often remains on paper rather than reflecting or governing the reality of land use decisions on the ground. Poor inter-ministerial coordination often means that foreign investment supersedes zoning in the management of urban growth (Vongpraseuth and Gyu 2015).

Key reform issues and strategic openings

- Identification of key food producing areas for agricultural zoning. Recognition of the loss of farmland to urban, industrial and infrastructural development has the potential to help shape land use planning through a more coordinated zoning approach. However, poor coordination between related agencies continues to make this an uphill battle in most countries of the region.
- Better alignment of national food security objectives and household-level food security strategies. The stark inequalities in wealth and related access to basic necessities in all countries of the region means that achieving food security at a national level may do little to provide food

security for poor households. Indeed, in some cases prioritisation of national food staple production may result in policies that further dispossess the rural poor.

- Assessment of the existing food producing role of lands defined officially as wastelands. In upland areas in particular, shifting cultivation systems leave areas fallow and subject to official definition as “wastelands” open to expropriation in favour of land concessions. Awareness of the significance of fallow systems for upland food production is hence a priority.
- Better identification of non-agricultural employment options for those displaced by land conversion for non-agricultural uses in densely populated areas. In peri-urban and other areas where farmers are displaced in favour of higher value land uses, it is often unrealistic to plan for re-establishment of farming livelihoods given land shortages and the very high cost of land in relation to the compensation payments received. Attention needs to be given to realistic identification and assessment of livelihood options beyond the farm sector.

References

- Baird, Ian G. and Keith Barney. 2017. “The Political Ecology of Cross-Sectoral Cumulative Impacts: Modern Landscapes, Large Hydropower Dams and Industrial Tree Plantations in Laos and Cambodia.” *Journal of Peasant Studies* 44(4):884–910.
- Broegaard, Rikke Brandt, Thoumthone Vongvisouk, and Ole Mertz. 2017. “Contradictory Land Use Plans and Policies in Laos: Tenure Security and the Threat of Exclusion.” *World Development* 89:170–83.
- Castella, Jean-Christophe. 2021. “Rural Roads Are Paving the Way for Land-Use Intensification in the Uplands of Laos.” *Land* 10(3):1–19.
- Chim, Kosal, Jon Tunnicliffe, Asaad Shamseldin, and Tetsuji Ota. 2019. “Land Use Change Detection and Prediction in Upper Siem Reap River, Cambodia.” *Hydrology* 6(3).
- Debonne, Niels, Jasper van Vliet, Andreas Heinemann, and Peter Verburg. 2018. “Representing Large-Scale Land Acquisitions in Land Use Change Scenarios for the Lao PDR.” *Regional Environmental Change* 18:1857–69.
- Drbohlav, Petr and Jiri Hejkrlik. 2018. “Social and Economic Impacts of Land Concessions on Rural Communities of Cambodia: Case Study of Botum Sakor National Park.” *International Journal of Asia Pacific Studies* 14(1):165–89.
- Ducourtieux, Olivier, Jean-Richard R. Laffort, and Silinthone Sacklokham. 2005. “Land Policy and Farming Practices in Laos.” *Development and Change* 36(3):499–526.
- Dwyer, Michael B. 2020. “‘They Will Not Automatically Benefit’: The Politics of Infrastructure Development in Laos’s Northern Economic Corridor.” *Political Geography* 78:102118.
- Ferguson, Jane M. 2014. “The Scramble for the Waste Lands: Tracking Colonial Legacies, Counterinsurgency and International Investment through the Lens of Land Laws in Burma/Myanmar.” *Singapore Journal of Tropical Geography* 35:295–311.
- Friis, Cecilie, Anette Reenberg, Andreas Heinemann, and Oliver Schönweger. 2016. “Changing Local Land Systems: Implications of a Chinese Rubber Plantation in Nambak District, Lao PDR.” *Singapore Journal of Tropical Geography* 37(1):25–42.
- Green, W. Nathan and Ian G. Baird. 2016. “Capitalizing on Compensation: Hydropower Resettlement

- and the Commodification and Decommodification of Nature-Society Relations in Southern Laos." *Annals of the American Association of Geographers* 106:853–73.
- Han Quang Hanh, Hossein Azadi, Thomas Dogot, Vu Dinh Ton, and Philippe Lebailly. 2017. "Dynamics of Agrarian Systems and Land Use Change in North Vietnam." *Land Degradation and Development* 28(3):799–810.
- Hayward, Daniel, U Ko Lwin, Bin Yang, and U Htet Kyu. 2020. *Chinese Investment into Tissue-Culture Banana Plantations in Kachin State, Myanmar*. MRLG, Vientiane.
- Hepp, Catherine M., Thilde Bech Bruun, and Andreas de Neergaard. 2019. "Transitioning towards Commercial Upland Agriculture: A Comparative Study in Northern Lao PDR." *NJAS - Wageningen Journal of Life Sciences* 88:57–65.
- Hett, Cornelia, Vong Nanhthavong, Savanh Hanephom, Anongsone Phommachanh, Bounnong Sidavong, Ketkeo Phouangphet, Juliet Lu, Annie Shattuck, Micah Ingalls, Rasso Bernhard, Souphaphone Phathitmixay, Chanthavone Phomphakdy, Andreas Heinimann, and Michael Epprecht. 2020. *Land Leases and Concessions in the Lao PDR: A Characterization of Investments in Land and Their Impacts, Based on Field Data of 2014-2017*. Centre for Development and Environment (CDE), University of Bern.
- Hirsch, Philip and Natalia Scurrah. 2015a. *The Political Economy of Land Governance in the Mekong Region*. MRLG, Vientiane.
- Hirsch, Philip and Natalia Scurrah. 2015b. *The Political Economy of Land Governance in the Mekong Region*. MRLG, Vientiane.
- Hoang Huu Nguyen, Paul Dargusch, Patrick Moss, and Ammar Abdul Aziz. 2017. "Land-Use Change and Socio-Ecological Drivers of Wetland Conversion in Ha Tien Plain, Mekong Delta, Vietnam." *Land Use Policy* 64:101–13.
- Hoang Linh Nguyen, Jin Duan, and Guo Qin Zhang. 2018. "Land Politics under Market Socialism: The State, Land Policies, and Rural–Urban Land Conversion in China and Vietnam." *Land* 7(2):1–17.
- Holden, Stein T. and Hosaena Ghebru. 2016. "Land Tenure Reforms, Tenure Security and Food Security in Poor Agrarian Economies: Causal Linkages and Research Gaps." *Global Food Security* 10:21–28.
- International Commission of Jurists. 2020. *The Human Rights Consequences of the Eastern Economic Corridor and Special Economic Zones in Thailand*. Geneva.
- Kenney-Lazar, Miles. 2012. "Plantation Rubber, Land Grabbing and Social-Property Transformation in Southern Laos." *Journal of Peasant Studies* 39(3–4):1017–37.
- Kenney-Lazar, Miles. 2016. *Linking Food and Land Tenure Security in the Lao PDR*. Vientiane.
- Keovilignavong, Oulavanh and Diana Suhardiman. 2020. "Land Use Policy Linking Land Tenure Security with Food Security: Unpacking Farm Households' Perceptions and Strategies in the Rural Uplands of Laos." *Land Use Policy* 90:104260.
- Labbe, D. and C. Musil. 2013. "Periurban Land Redevelopment in Vietnam under Market Socialism." *Urban Studies* 51(May):1146–61.
- Labbé, Danielle. 2016. "Critical Reflections on Land Appropriation and Alternative Urbanization Trajectories in Periurban Vietnam." *Cities* 53:150–55.

- Leblond, Jean-Philippe. 2019. "Revisiting Forest Transition Explanations: The Role of 'Push' Factors and Adaptation Strategies in Forest Expansion in Northern Phetchabun, Thailand." *Land Use Policy* 83:195–214.
- Ling, Stuart. 2017. *Developments in Land Use Planning in Lao PDR Since 2009*. Land Information Working Group (LIWG), Vientiane.
- Lundsgaard-hansen, Lara M., Cing Don Nuam, Katharina Nydegger, New New Tun, Aung Myin Tun, Win Myint, and Flurina Schneider. 2018. "Voices of Land from Southern Myanmar: Ein Da Rar Zar – A Karen Village in Yebyu Township about Land Use Change and Wellbeing." 1–30. Centre for Development and Environment (CDE), University of Bern.
- Magliocca, Nicholas R., Quy Van Khuc, Evan A. Ellicott, and Ariane de Bremond. 2019. "Archetypical Pathways of Direct and Indirect Land-Use Change Caused by Cambodia's Economic Land Concessions." *Ecology and Society* 24(2).
- Meyfroidt, Patrick, Tan Phuong Vu, Viet Anh Hoang, Vu Tan Phuong, and Hoang Viet Anh. 2013. "Trajectories of Deforestation, Coffee Expansion and Displacement of Shifting Cultivation in the Central Highlands of Vietnam." *Global Environmental Change* 23(5):1187–98.
- MRLG. 2019. *Land Tenure Security in "70 Percent Forestland Policy" of the Lao PDR*. MRLG, Vientiane.
- Nanhthavong, Vong, Christoph Oberlack, Cornelia Hett, Peter Messerli, and Michael Epprecht. 2021. "Pathways to Human Well-Being in the Context of Land Acquisitions in Lao PDR." *Global Environmental Change* 68:1–28.
- Nguyen, Thi Ha Thanh, Van Tuan Tran, Quang Thanh Bui, Quang Huy Man, and Timo de Vries Walter. 2016. "Socio-Economic Effects of Agricultural Land Conversion for Urban Development: Case Study of Hanoi, Vietnam." *Land Use Policy* 54:583–92.
- Pathammavong, Bounnhong, Miles Kenney-Lazar, and Ek Vinay Sayaraj. 2017. "Financing the 450 Year Road: Land Expropriation and Politics 'All the Way Down' in Vientiane, Laos." *Development and Change* 48(6):1417–38.
- Sakayarote, Kanda and Rajendra P. Shrestha. 2016. "Policy-Driven Rubber Plantation and Its Driving Factors: A Case of Smallholders in Northeast Thailand." *International Journal of Sustainable Development & World Ecology* 1–12.
- Sekine, Yukari. 2016. "Land Confiscations and Collective Action in Myanmar's Dawei Special Economic Zone Area: Implications for Rural Democratization." Pp. i–iii, 1–16 in *Global governance/politics, climate justice & agrarian/social justice: linkages and challenges*. International Institute of Social Studies (ISS).
- Somphongbouthakanh, Phetsakhone and Loes Schenk-Sandbergen. 2020. *Women and Land Rights in Lao PDR: Rural Transformation and a Dream of Secure Land Tenure*. Land Information Working Group (LIWG), Vientiane.
- Steel, Griet, Femke van Noorloos, and Christien Klaufus. 2017. "The Urban Land Debate in the Global South: New Avenues for Research." *Geoforum* 83(July 2016):133–41.
- Suhardiman, Diana, Oulavanh Keovilignavong, and Miles Kenney-Lazar. 2019. "The Territorial Politics of Land Use Planning in Laos." *Land Use Policy* 83:346–56.
- Suhardiman, Diana and Natalia Scurrah. 2021. "Farmer's Agency and Institutional Bricolage in Land

- Use Plan Implementation in Upland Laos." *Land Use Policy* 104:1–13.
- Susumu, Nakatsuji. 2019. "Land Use and Land Cover Changes during the Second Indochina War and Their Long-Term Impact on a Hilly Area in Laos." *Southeast Asian Studies* 8(2):203–231.
- Thuon, Ratha. 2018. "Holding Corporations from Middle Countries Accountable for Human Rights Violations: A Case Study of the Vietnamese Company Investment in Cambodia." *Globalizations* 15(1):152–67.
- To Xuan Phuc, and Tran Huu Nghi. 2014. *Forest Land Allocation in the Context of Forestry Sector Restructuring: Opportunities for Forestry Development and Upland Livelihood Improvement*. Forest Trends.
- Vansintjan, Aaron, Nguyen Hong Van, Le Quynh Chi, and Nguyen Thanh Tu. 2019. "Adaptation Strategies Used by Low-Income Residents Affected by Land Use Changes in Hanoi, Vietnam." *Journal of Science and Technology in Civil Engineering (STCE) - NUCE* 13(1):78–88.
- Vongpraseuth, Thanousorn and Chang Gyu. 2015. "Globalization, Foreign Direct Investment, and Urban Growth Management: Policies and Conflicts in Vientiane, Laos." *Land Use Policy* 42:79–99.
- Vongvisouk, Thoumthone, Rikke Brandt Broegaard, Ole Mertz, and Sithong Thongmanivong. 2016. "Rush for Cash Crops and Forest Protection: Neither Land Sparing nor Land Sharing." *Land Use Policy* 55:182–92.
- Wang, Jun, Lichun Sui, Xiaomei Yang, Zhihua Wang, Dazhuan Ge, Junmei Kang, Fengshuo Yang, Yueming Liu, and Bin Liu. 2019. "Economic Globalization Impacts on the Ecological Environment of Inland Developing Countries: A Case Study of Laos from the Perspective of the Land Use/Cover Change." *Sustainability* 11(14):1–21.
- Wells-Dang, Andrew, Pham Quang Tu, and Adam Burke. 2016. "Conversion of Land Use in Vietnam through a Political Economy Lens." *Journal of Social Sciences and Humanities* 2(2):131–46.
- Woods, Kevin M. 2018. *The Conflict Resource Economy and Pathways to Peace in Burma*. United States Institute of Peace.