Impasse on the Lower Salween/Thanlwin: is it resolvable? Alan Potkin

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Abstract

Throughout Myanmar, the Salween/Thanlwin basin is primarily inhabited by non-ethnic Burmese (i.e., *Bamar*) minority peoples; including *Shan, Mon, Kayin* (Karen), and *Karenni*. Their fierce resistance to external rulers predated the colonial era, with modern outcomes describable as "genocidal". Irrigation throughout Thailand's heartland —radically reducing the Chaophraya's dry season discharge, with the resultant pumped groundwater overdraft to service municipal and industrial (M&I) requirements— lowers metro Bangkok's surface elevation, with ensuing flood risks. Thailand's Royal Irrigation Department (RID) proposed an interbasin transfer *(IBT)* of waters from the Salween to the Chaophraya.

The volume required would be hundreds of *cumecs* (cubic meters per second = m3/sec) continuously for several months; entailing constructing at least one new reservoir; and ~100 km of tunnels, with ~180m of vertical lift; at an estimated energy demand of 200-300 MW (*megawatts* = 1,000 kilowatts kW, or 1,000,000 watts) throughout the three-month annual operational period: most practicably met by the prospective 1,300 MW Hat Gyi dam and reservoir: built entirely within Myanmar. (Myanmar's present total installed electric generating capacity is ~4,300 MW: on a per capita basis about 11% that of Thailand, and by far the the worst amongst the ASEAN countries!)

Intended in part to preclude Hat Gyi —and indeed, all other proposed mainstem Salween/Thanlwin hydropower schemes upstream towards Yunnan— separatists within Kayin (Karen) State had in 2018 "declared" the Salween Peace Park (SPP); encompassing c. 5,500 km2 under the complete authority of the Karen people, in perpetuity (as consistent with the UN's *Declaration of Rights of Indigenous Peoples*). The *Tatmadaw* (the Burmese national military) presently occupies the putative SPP in its quasi-entirety, and is unlikely to be forcibly removed. For the SPP to become an actuality —and an appropriate re-settlement area for the tens of thousands of internally- and internationally-displaced Karen refugees— would require a "grand bargain" agreeing to build Hat Gyi to provide electric power for the Salween/Chaophraya IBT; and in recompense, accepting almost all aspects of the SPP: of which only some 20-40 km2 of its proposed 5,500 km2 area would be occupied by the dam and reservoir.



Impasse on the Lower Salween in light of the Myanmar coup

A speculative "grand bargain" accepting the Thai Royal Irrigation Department's inter-basin transfer (IBT) scheme diverting Thanlwin/Salween waters into the Chaophraya.



The Salween is the largest, still-undammed major river basin in Southeast Asia. It originates in Tibet (China), enters into Burma/Myanmar for 300 km, then comprises the international border between Thailand and Myanmar for another 160 km, at which point it re-enters Myanmar and flows another 400 km before debouching into the Gulf of Martaban, below Molawmyine (formerly Moulemein).



Throughout Myanmar, the Salween/Thanlwin basin is primarily inhabited by non-ethnic Burmese *(i.e., Bamar)* minority peoples; including Shan, Kayin (Karen), Mon, and Karenni. Their fierce resistance to external rulers — notably including the Bamar majority— long predated the colonial era, with modern outcomes often describable as "genocidal".

Irrigation for multicropped rice in Thailand's heartland —radically reducing the Chaophraya's dry season discharge, with the resultant pumped groundwater overdraft to service municipal and industrial (M&I) requirements— lowers metro Bangkok's surface elevation, with ensuing flood risks. Thailand's Royal Irrigation Department (RID) proposed an interbasin transfer (IBT) of waters from the Salween to the Chaophraya: either directly or from its tributaries entirely within Thailand.



The volume required would be hundreds of *cumecs* (cubic meters per second = m3/sec) continuously for several months; entailing constructing at least one new reservoir; and ~100 km of tunnels, with ~180m of vertical lift; at an energy demand of 200-300 MW (megawatts = 1,000 kilowatts kW, or 1,000,000 watts) throughout the three-month annual operational period: most practicably met by the prospective 1,300 MW Hat Gyi dam and reservoir: built entirely within Myanmar.

The Salween/Luam/Ping/Chao Phraya projects



The two main motivations for interbasin transfers are:

In hydropower engineering: to take advantage of the receiving stream's topography to significantly increase the hydrostatic head of the release from a reservoir in the original catchment, through a canal or tunnel to a generating facility in the receiving catchment that is much lower in relative elevation than would be practicable within the source basin. The result is a much higher energy yield, for a given dam + reservoir, with only a relatively minor increase in overall capital investment.

in water resources management, for better meeting both M&I (municipal and industrial) and irrigation demands: where the existing basin's aggregate discharge is insufficient to fulfill essential needs in dry-season or drought conditions. As seen in the Salween-Chao Phraya proposal, the energy requirements of interbasin transfer schemes of this category —where the source catchment is at a lower elevation than the receiving basin— may be quite extreme, but benefit/cost economics of pumping versus social/agricultural/industrial needs may still justify the investment.

Absence of binding co-riparian agreements

Unlike —as with the case of the "Mekong Compact", agreed by four of the six co-riparian countries (PRC/China is also a nonsignatory, but in recent years has formally agreed to a certain level of candor and cooperation with the MRC, and the other is Myanmar, though its actual significance to the Mekong's hydrology and future exploitation is relatively trivial)— which obligates that substantive changes to volumetric or temporal flow regimes as a result of water management/energy development projects proposed by Compact signatories be discussed and negotiated in advance (but notably, absolute veto power is not entailed). No such agreements are in force, nor —to our knowledge— even so far under serious consideration, for the three Salween Basin co-riparians: i.e., the PRC,Myanmar, and Thailand. Thus, at present Thailand has every right to implement grand-scale IBT as long as all the requisite infra-structure is completely with Thai territory, and the diversionary structures + pump intakes on the Thai side of where the Salween is the international border. Moreover, the energy requirements for such a project —while hypothetically capable of being met by building long-distance transmission lines from existing or new power plants within Thailand— would be much more practicably met by wheeling power from the proposed 1,300 MW Hat Gyi dam and reservoir on the Salween, which themselves would be located entirely within Myanmar's territory.

Fierce resistance by Myanmar's ethnic minority communities to large-scale hydropower development, irrigation and IBTs anywhere in the Salween Basin



Intended in large part specifically to preclude the development of the Hat Gyi project, and indeed all the other proposed Salween hydropower schemes upstream from Hat Gyi, separatist-leaning political and armed factions within Kayin (Karen) State have just in the past several years declared/promulgated the "Salween Peace Park" (SPP): encompassing some 5,500 km2 which would be under the complete authority of the Karen people, in perpetuity.





The events of the SPP's dedication ceremonies, and terms of acceptable land use and the specific geographic demarcation were determined with apparently no fore-knowledge of, nor participation by, the Union of Myanmar national government.

Given that the *Tatmadaw* (the Burmese national military forces) presently occupy the territory of the putative SPP almost in its entirety —and indeed within their constitutionally-delegated authority to do so— and are unlikely to be removed forcibly by the several Karen separatist armed factions, for the SPP to become an actuality and an appropriate resettlement area for the tens of thousands of internally and internationally-displaced Karen refugees would require negotiating a "grand bargain" amongst the key players.



MNY elevation transect







This would probably entail both allowing Hat Gyi to be constructed and used to provide energy for the Salween-Chaophraya IBT scheme; and in recompense, accepting almost all aspects of the SPP, of which only some 20-40 km2 of the proposed 5,500 km2 would be occupied by the Hat Gyi dam and reservoir. To our knowledge, no such proposals have been put forward by any of the contending parties and armed forces, and would likely be very widely opposed by all who are presently well-served to some degree by the status quo, or who may have unrealistic expectation of outcomes exclusively favoring their positions.

If some such agreement was not negotiated, and the Myanmar government unilaterally moved forward with developing the Hat Gyi project in the near term, it would not be far-fetched to suggest a quasi-genocidal military campaign by the Tatmadaw —like those launched several decades ago against the Shan and Karen— would result. Also, if Hat Gyi were built, the flood-gates —so to speak— might be opened wide for major mainstem dam construction all the way up the Salween/Thanlwin to the Chinese border; and maybe into Yunnan as well.





The Shan, who have already been on the receiving end of a semi-genocide in the 1990s over their resistance to the prospective loss of their extraordinary waterfalls and broad valleys above the Nam Pang/Salween confluence would be very

deleteriously and disproportionally impacted by the 7,100 MW Tasang/Mongtan hydropower project, but they would gain therefrom no such major benefit at the scale of those potentially flowing from the SPP.

Meanwhile —operating, as always, within a state of moral over-reach— the UN has just awarded its 2020 Equator Prize to the SPP, although not only is the Union of Myanmar government a nonparty to that plan, the legally constituted Kayin/Karen State government in Hpa An isn't either! The SPP is too easily dismissible as a noble figment of the dominant Karen separatist factions' imaginations.

What credible national administration anywhere in the world would agree to turning over ~5,500 km2 —already militarily occupied by its armed forces— to an unrecognized local ethnic minority shadow regime?

In my view, since the accession in 2016 of Daw Aung San Suu Kyi (DASSK) as State Counsellor, Myanmar cannot be properly characterized as under "military rule"; and arguably, not even as an "authoritarian political regime"! Certainly, the present constitution which empowered her rise to the *de-facto* prime ministership allocates disproportionate influence to the Tatmadaw: which has not infrequently been exercised brutally; given the military's free hand under that constitution in areas of armed separatist or anti-national uprisings and border conflicts.

Daw Suu Kyi is treading an extremely narrow and difficult path, and her recent multiple de-platforming and un-personing by woke academics (e.g., the revoked Oxford U. honors) —especially in response to the ugly situation in Rakhine State vis-a-vis the Rohingya, which I believe to be essentially demographics-driven— is a virtue-signaling cheap shot. One of the potential positive outcomes of the speculative Salween Peace Park (SPP) Grand Bargain is that the constitutional legitimation of the Tatmadaw's occupancy of the SPP would no longer exist. (Some of the visualizations underpinning her fall from grace were breath-takingly offensive!)



This is the point at which the original presentation paper ended, and so begins here the addenda now required:

Obviously, the 1st February 2021 coup by the *Tatmadaw* which initially entailed detaining DASSK and also an indeterminate number of high-ranking officials of the Nay Pyi Daw government and of her National League for Democracy (NLD) political party radically changes the equation:

Elicting —originally on the *Water Dissensus* list-server— the phenomenal risk she had borne vis-a-vis the Tatmadaw; and describing her critics (largely outside of Myanmar, although the ethnic minority states were already much disenchanted) in rather vituperative, and perhaps too-ideologically-laden terms, what I was evoking there, less than explicitly, was that as DASSK's star power had so precipitously collapsed in the West —largely at the behest of her overseas moral and intellectual betters whose vicious and insulting critiques generally came at zero physical and material risks to themselves—that if it opted to defenestrate her and her government, the Tatmadaw would have effectively less and less to fear from great waves of her erstwhile supporters rushing to her adamant defense.

The immediate rationale for the coup was that the 9th November, 2020 Myanmar election outcome, which gave the NLD an 83% majority of votes cast and counted, was seriously tainted. This was unquestionably the case as polls were never opened in several minority states, notably Rakhine and Shan, due to extreme local civil unrest. Problematical nevertheless were claims that the results were so flawed as to cast doubt on the general legitimacy of the electoral outcome. To critics of the coup, the assertions of a failed election were conveniently associated with similar, supposedly "debunked", claims by the losing side in the US presidential election of just a week earlier: given the largely negative view of the Trump administration amongst *bien pensants* everywhere.





The morning after the 1st February coup, I posted onto several Myanmar-centric websites (and later reposted twice more at least), the following:

"Can anybody familiar with the enlistment/recruitment/conscription criteria for the Tatmadaw advise me as to whether the urban elite/intellectuals/middle class/civil disobedience movement (CDM) protesters now at the forefront of the 'resistance' to the coup are likely to have had any first-hand, insider experience or personal familiarity with the institutional values, morale and motivation of the Myanmar military leadership and its rank-and-file soldiery?

"Following my own first-hand experiences as an infantry grunt in Eye Corps [the northernmost provinces of the former Republic of Viet Nam] at the height of the debacle, thence having lived and worked for years inside the three post-revolutionary countries on the winning side of the Second Indochina War, I've been considering the dreadful consequences of the antiwar movement of the 1960s-1970s and the military forces of the US and our erstwhile allies having had nearly zero shared perceptions of what was going on there and why."

To date I have received no useful, or even pointed responses. Other than what came in on 26 February:

"This is a time when you have to choose which side you are on. Your choice will define you, Alan. Make it carefully."

Further on the resistance to the Myanmar coup mimicking in part the resistance to, and thence the successful electoral deposing of the Trump presidency, this view of street art (literally) on Yangon's Sule Pagoda Road was posted, without specific reference to the well-known prototype put up by Washington, D.C.'s mayor during the anti-Trump demonstrations there a year or two ago.



"We reject the military coup"

"Black Lives Matter

In respect to "choose which side", I believe the Myanmar coup civil disobediants might well underestimate the strength of post-electoral opposition in the USA to Black Lives Matter ideology, and maybe they themselves should be choosing more carefully. From closely following the right-leaning American blogosphere (the dominant "progressive" media here universally detests the Tatmadaw takeover nearly as much as it detested the previous US administration), it is notable that

to my knowledge, only one lengthy reference to the Myanmar coup has so far appeared in conservative journalism, and it too detested the "(Dis)United Imperial States".



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About 11,000,000 results (0.82 seconds)		
	Number of military personnel	
Army Active Duty	479,785	
Army National Guard	336,392	
Navy Active Duty	332,528	
Air Force Active Duty	327,878	

It's been nearly two years since I've last spent any time with ongoing fieldwork in Myanmar, but while I'm quite removed from current events there, I do have some in-depth knowledge of what's going here in the USA during these most unsettled times. So I wouldn't hold my breath on the request of these scarily-tattooed protesters for the Americans to deploy to set things straight there; but I'd note firstly that the US Army's current strength is roughly the same as the Tatmadaw's, and happening right now —evidently at the Pentagon's initiative— is the unprecedented web-crawler search through every active service member's social media footprint to detect and presumably discharge (dishonorably?) all those determined to be politically suspect. By way of comparison, Nay Pyi Daw can mobilize ~500,000 well-armed —and thus far, reasonably well-disciplined— military and police personnel.



Add to this —apart from the question of the legitimacy of his holding the constitutional office of Commander-in-Chief of the US military— the barely-hidden lack of confidence in President Biden's mental capacity (and not only on the part of the 75 million Americans who had just voted for Trump) puts him in an extremely weak position to rally either the troops or the civilian population towards rising to our "responsibility to protect"; to use the high-minded terminology popularized by the

ex-Obama administration officials now prominent again in Biden's cabinet. Even if somehow given authority to do so by the UN Security Council, which would never happen without being vetoed by China and/or by Russia.





Police officers (apparently all, or mostly all women) in Myanmar's Kaya State professing their loyalty to the Civil Disobedience Movement

Further to those considerations, a mutiny, which is an open rebellion of armed forces or police personnel in the face of an opponent (or especially their actively joining such opponents) is ordinarily punished extremely harshly; perhaps even more severely than desertion.

This appalling image below —which was widely distributed by anti-coup activists had left unadressed why the young man — whose head was evidently just blown apart by national security forces' gunfire— had a stash of bricks and paving stones at his feet. Are these commonly found strewn in the streets of Mandalay, and was it just coincidental their appearing in the same heart-breaking photo? Or was he about to (or had he already) weaponized them? And if so, where lies the culpability for his tragic death?

