

## **Ethnic Armed Organisations and Climate Change in Myanmar**

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This paper is commissioned by Search for Common Ground to promote peacebuilding in Myanmar by developing collaborative solutions to climate change and peacebuilding issues with the respective major stakeholders in Myanmar. The opinions reflected in this document are those of the author and do not reflect the official position of Search for Common Ground.

## **Executive Summary**

*The COP-26 Climate Conference last month in Glasgow focused attention on the importance of conserving old-growth forests. Myanmar's most extensive forests and internationally important biodiversity hotspots are located in areas under the control or influence of Ethnic Armed Organisations (EAOs). These natural resources have been sustainably managed by local communities for many generations. Indigenous people and EAOs have key roles to play in mitigating and adapting to climate change - not just in Myanmar, but globally.*

The roles of EAOs in relation to climate change are particularly important following the 1 February 2021 coup. The State Administrative Council (SAC) has issued new logging and mining concessions, threatening valuable forest and other natural resources at a time when the world is turning towards these assets to mitigate and adapt to climate change.

Globally, the roles of non-state armed groups (in Myanmar, known as Ethnic Armed Organisations) have been overlooked in relation to climate change. Several of Myanmar's larger EAOs control extensive territory, including some of the most important remaining forests in mainland Southeast Asia. The longer-established EAOs have developed extensive governance and service delivery systems in their areas of control or authority, including areas of 'mixed administration', shared or contested with the Myanmar government and Army. Organisations such as the Karen National Union (KNU) and Kachin Independence Organisation (KIO) have developed progressive forest management practices and policies.

Newer organisations, such as several state-based consultation and coordination councils, also have important roles to play. Given the illegitimate nature of the SAC junta, organisations such as the Karenni State Consultation Council (KSCC - to give one example) have emerged as credible governing entities since the coup, with strong claims to legitimate authority. The state-based bodies are inclusive and have strong claims also to be considered custodians of the remaining resources in Myanmar's ethnic homelands.

Addressing climate change is the global priority of our times, and thus a common interest shared by multiple stakeholders in Myanmar and beyond. Given the complex relationships between climate change, conflict and migration, these issues are relevant beyond the borders of Myanmar - impacting the security of neighbouring countries.

Given that climate change affects the identities and interests of a wide range of stakeholders, these issues may constitute common ground for possible future peacebuilding efforts in Myanmar. In the meantime, indigenous communities and EAOs play important roles in the global struggle to mitigate and adapt to climate change.

### The challenge

Following the coup, and the SAC's mishandling of 'third wave' of the Covid pandemic, Myanmar is facing unprecedented challenges. The impending impacts of climate change will make things worse, with potentially massive implications for food and human security, significantly

undermining the capacity and credibility of the central government. The window of opportunity to address these challenges is rapidly closing.

The peoples of Myanmar demonstrate great resilience in the face of natural and man-made disasters. This is due to and reflected in social bonds of mutual trust and solidarity, and participation in ethnolinguistic and faith-based networks (forms of ‘social capital’). This resilience is shared by EAOs and related civil society networks. Their capacities to absorb, cope with, and adapt to shocks is extraordinary. This includes equitable customary laws and practices, which help to conserve and protect unique habitats and eco-systems, and sustainable local livelihoods. Nevertheless, EAOs have been involved in logging, mining and other environmentally destructive practices - which in some places continue to this day. To be credible custodians of globally important forests and biodiversity hotspots, EAOs need to demonstrate improved governance and stewardship of natural resources, including where feasible moratoria on new mining and logging activities. Deforestation is a major driver of climate change, so EAOs must act responsibly, and adopt sustainable and transparent forestry practices.

### Mitigating climate change

According to Intergovernmental Panel on Climate Change member, Professor Paulo Artaxo Neto, there is “no cheaper, easier, and faster way to reduce CO<sub>2</sub> emissions than by reducing tropical deforestation.” Myanmar contains the largest forest reserves in mainland Southeast Asia, including parts of Kachin State in the north and Tanintharyi Region in the south, in areas under the control of the KIO and KNU. Other ethnic nationality states, from Rakhine and Chin to Shan, Karenni and Mon contain significant natural resources, including forests as well as marine ecosystems. Far from being peripheral or marginal regions, these ethnic homelands are at the forefront of the global struggle to address climate change.

Over many centuries, sustainable community forestry management has helped to maintain these natural resources. Local conservation efforts constitute a claim to sovereignty: these forests are ethnic homelands, and the heritage of the indigenous peoples who live there. In defending their homelands, EAOs (working in partnership with communities and local civil society actors) can demonstrate commitment to responsible forest governance, reinforcing their political legitimacy.

If sustainably managed, these forest resources can also contribute towards future income generation for communities and local authorities. This includes potential future revenues from biotechnology patents (and possibly ecotourism). It is important not to frame the value of Myanmar’s forest in purely monetary terms. However, the future financial benefits of forest resources for indigenous communities could be equivalent to oil wealth in the 20<sup>th</sup> century.

### Adapting to climate change

As political authorities, EAOs have responsibilities and opportunities to support communities in adapting to the impacts of climate change. As governance authorities, working in partnership with CSOs and technical experts, EAOs can take the lead in identifying future livelihoods, food/human security shocks and stresses, and locally appropriate adaptations.

A major challenge is to work with local farmers and other stakeholders to identify which crops and other adaptations are most suitable. This may include new types of agricultural production,

different varieties of rice and other crops, and technologies of planting and harvesting. In addition to climate change-adapted agriculture, key elements of future sustainability will include new off-grid solar and hydro-power technologies for local energy production, including boosting livelihoods. It will be important in these efforts to avoid reproducing large-scale (particularly monocrop) agricultural products; smallholder agriculture is the key to adaptation and flexibility.

With the right support, EAOs can be key actors in mitigating and adapting to climate change, acting locally with a global impact. In addition, EAOs can play key roles in fostering sustainable, 'zero carbon' local economies.

Although the policy and academic literatures on climate change increasingly take account of linkages with conflict (the 'Climate Change-conflict nexus'), the nature of this relationship is difficult to define, especially in relation to causality.<sup>1</sup> Nevertheless, engaging with EAOs and other relevant actors on climate change issues is essential to peacebuilding initiatives in the region, and limiting the impacts of climate change-driven migration on neighbouring countries.

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<sup>1</sup> K Peters, G Davies and K Holloway, *Addressing protection risks in a climate-changed world: challenges and opportunities* (Humanitarian Practice Group, London: Overseas Development Institute October 2021).

## **Ethnic Armed Organisations and Climate Change in Myanmar**

### **The ‘triple stressor’ - Covid, the coup and climate change**

Following the coup, and with the ‘third wave’ of the Covid pandemic, Myanmar is confronting unprecedented challenges.<sup>2</sup> The SAC is widely regarded as illegitimate and illegal. Its ability to function is deeply compromised, as anti-coup forces demonstrate their resilience and capacities to challenge a widely reviled regime. The impending impacts of climate change will make things worse. Never before has Myanmar faced such challenges.

On 9 August, the Intergovernmental Panel on Climate Change issued its sixth and starkest warning yet: the world is facing a grave crisis, the impacts of which will be particularly terrible in poor and conflict-affected countries.<sup>3</sup> It is unequivocally clear that climate change is driven by human actions, unprecedented (at least in the past 125,000 years), and in many aspects irreversible.<sup>4</sup> In the next two decades, global temperatures are likely to rise by more than 1.5°C above pre-industrial levels (breaking the goal set in the 2015 Paris Climate Agreement), threatening the world with further extreme weather patterns, including increased incidence of droughts and floods, and storms, and more intense and unpredictable monsoons in Southeast Asia<sup>5</sup>; rising sea levels will affect many countries for many centuries to come<sup>6</sup>. Low-income countries will be particularly hard hit, especially those already facing humanitarian disasters. These developments will drive crises in food security, in Myanmar and globally.<sup>7</sup>

Myanmar bears little responsibility for the climate crises affecting the planet. Historically, as one of the most under-developed countries in Asia, Burma has played a minor role in producing carbon dioxide emissions and in other factors driving climate change. However, there has been widespread deforestation in many parts of the country, over decades.

Today, Myanmar is highly vulnerable to climate-related hazards. The new ab-normal includes global pandemics such as Covid-19.

The peoples of Myanmar demonstrate great resilience in the face of natural and man-made disasters. Deep bonds of mutual trust and participation in networks of ethnolinguistic/nationalistic and faith-based solidarity (forms of ‘social capital’) are key to community resilience. Indigenous peoples’ capacities to absorb, cope with, and adapt to shocks is extraordinary; over centuries, local communities have preserved unique habitats, eco-systems and sustainable local livelihoods (with relatively low levels of consumer consumption and less negative impacts on the environment). Nevertheless, local coping capacities may be stretched beyond a ‘tipping point’, making positive

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<sup>2</sup> Transnational Institute, *No One Left Behind? Covid-19 and the Struggle for Peace and Justice in Myanmar* (Myanmar Policy Briefing no.25, November 2021).

<sup>3</sup> IPCC, *Summary for Policymakers*, in: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou eds., Cambridge University Press - August 2021).

<sup>4</sup> IPCC, B.5 (ibid p.27).

<sup>5</sup> IPCC, B.3.2 (ibid p.25).

<sup>6</sup> IPCC, B.5.4 (ibid p.28).

<sup>7</sup> Fiona Harvey, *Global food supplies will suffer as temperatures rise - climate crisis report* (The Guardian 9-8-21).”

outcomes much harder to achieve. Furthermore, EAOs have not always acted as responsible stewards of the natural environment.

If Myanmar's EAOs can position themselves as protectors of the forest, they can move away from negative associations with income generation through destructive resource extraction. Most EAOs do not have sustainable revenue streams. Only by developing sub-national economies, in their roles as de facto local governance administrations, can EAOs develop a financial base allowing them to move away from revenue sources such as mining and logging activities. One key strategy in supporting EAOs' roles as responsible climate change actors should be helping to develop sustainable local economies (and tax bases). There is a great opportunity to work with EAOs and relevant CSOs, to develop sustainable and decentralised green economies.

Nevertheless, with the 'triple stressor' of Covid, the coup, and climate change, indigenous communities and governance authorities (including EAOs) may struggle in the future, particularly in the more disastrous climate change scenarios, which just a few years ago were at the outlying ends of projections but now seem more likely. Loss and damage as a result of climate change can occur not only because of limited capacities to cope (through absorption and adaptation) but also due to the increasingly severe and unpredictable nature of hazards, exacerbated by the violence, greed and mismanagement of the Myanmar military junta.

According to Milton Friedman, "Only a crisis ... produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around."<sup>8</sup> Myanmar has in the past two years experienced two massive crises, with the impacts of climate change still mostly to come. These disruptive junctures have introduced a political and governance landscape in which it is possible to think about the roles of EAOs in new ways.

### **Myanmar's 'Rebel rulers'**

Ethnic Armed Organisations have played key roles in combating the Covid pandemic and opposing (although sometimes supporting) the junta. They can play important roles in mitigating (reducing the scale of) and adapting to climate change.

Having emerged in the context of armed conflict and underground political economies, EAOs face challenges in establishing themselves as responsible governance actors. Although they enjoy significant legitimacy among the communities they seek to represent, the political credibility of EAOs also needs to be demonstrated to domestic and international stakeholders through responsible natural resources and environmental governance. The risk otherwise is that EAOs may be accused of contributing towards deforestation, indirectly driving global warming.

Myanmar's EAOs range in size from a few dozen people to the 25,000-strong United Wa State Army (UWSA).<sup>9</sup> Several groups control extensive territory and project influence into adjacent areas of 'mixed administration'. These contested areas include zones of ongoing armed conflict

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<sup>8</sup> Milton Friedman, *Capitalism and Freedom* (1982, Preface).

<sup>9</sup> Many of Myanmar's 1000 or so non-state armed groups are local militias with strong economic interests, often including criminal activities and drugs trade; such groups generally have deep ties of patronage and control to the Myanmar Army. Nevertheless, some militias provide basic services to communities under their control (and/or act as local powerbrokers, dispensing state patronage). Somewhere between EAOs and local militias are Border Guard Forces (EAOs which were more-or-less forcibly re-structured under Myanmar Army control in 2010).

(for example, in much of Karenni, Chin, Shan and Kachin States, where the junta is waging brutal warfare against local communities and EAOs, driving humanitarian crises and large numbers of IDPs). They also include ceasefire areas, the existence of which is formally or informally negotiated with the Myanmar Army. In many parts of the country, the situation (pre-coup, at least) could be characterised as a ‘negative peace’, with outright and explicit violence mostly ended, but with many underlying structural issues driving decades of conflict yet to be resolved.

Since Burmese independence in 1948, hundreds of EAOs have sought to represent the grievances and aspirations of a wide range of ethnic nationality communities. Since the end of the Cold War and the decline of internal conflicts in most Southeast Asian countries in recent decades, EAOs in Myanmar had become increasingly marginalised. Although most EAOs remained undefeated militarily, the Myanmar Army had the upper hand in the country’s protracted and complex armed conflicts. Already at the time of the coup, the peace process initiated in 2012 was stalling - with little indication that the Tatmadaw or (previous) NLD-led government was willing to make concessions on key issues, like the delivery of significant federal-political arrangements to end decades of armed conflict.

Following the 1 February 2021 coup, the 2015 Nationwide Ceasefire Agreement (NCA) seems dormant - at best - with most EAOs unwilling to recognise the legitimacy of the SAC as an interlocutor. Nevertheless, junta leaders have said they want to maintain the NCA, and some EAOs signatory groups see political benefit in maintaining engagement with the regime, and/or feel they have little choice in complying. In the meantime, given the territory they control and their political legitimacy, EAOs have a relatively high degree of political capital, for example in negotiations with the National Unity Government (NUG), set up to oppose the SAC junta. For larger EAOs, this credibility is enhanced by the extensive humanitarian and development services they and partner CSOs deliver to vulnerable communities on the ground.

Far from being exclusively (or in some cases, in addition to being) warlords motivated by self-interest, several of Myanmar’s EAOs have developed credible political agendas and demonstrated long-standing provision of services and governance authority in their areas of control. With the collapse of credible and legitimate government and governance across much of Myanmar since the coup, many EAOs have become the sole providers of severely under-resourced health and education services. For example, the KNU’s Karen Education and Culture Department administers some 1500 schools, while the Karen Department for Health and Welfare and runs over 100 clinics (including quarantine centres). Other EAOs have established similarly impressive governance administration and service delivery systems (e.g. the KIO, UWSA, New Mon State Party, Restoration Council of Shan State, Karenni National Progressive Party, and increasingly the Arakan Army).

For many EAOs, consolidating control in their zones of authority is equally if not more important than overthrowing the junta. This is understandable, given the long-standing aspirations of many ethnic nationality leaders and indigenous communities for self-determination.

The themes of self-determination and climate change action come together in locally-managed conservation initiatives, sometimes referred to as Indigenous Conserved Areas (or ICCAs). The most well-known, and politically (and environmentally) significant ICCA in Myanmar is the Salween Peace Park, which received the UNDP 2020 Equator Prize. This 5500 km<sup>2</sup> conservation area in the highlands of northern Karen State (in the KNU Mudraw District, or 5 Brigade) is based on the Karen indigenous *kaw* land governance system, the KNU and the Karen Environmental and

Social Action Network (a Karen CSO). The Salween Peace Park “promotes peace, cooperation, cultural preservation, and environmental and natural resources conservation through a bottom-up, people-centred approach... The project also aims to expand the conversation around ‘governance’ in Burma beyond mere management of resources, but to address issues of militarization, conflict, displacement, resource capture, and destructive development, and through this contribute to conflict transformation.”<sup>10</sup>

Such forms of ‘hybrid governance’ can be seen as the building blocks of federalism in a new Myanmar. Federalism has long been considered an important tool for resolving the country’s protracted state-society and centre-periphery conflicts, and achieving self-determination for ethnic nationality communities. Flexible and asymmetrical federalism arrangements may emerge out of the present crisis, building from the bottom up to establish a federal union composed of sovereign ethnic nationality states. An important part of this locally-driven approach to federalism will be establishing appropriate policies and practices to mitigate and adapt to climate change.

### **Climate change realities in Myanmar**

Climate change will likely have massive impacts on food and human security in Myanmar and the region, significantly undermining the capacity and credibility of the already deeply compromised central authorities. This disruption may drive the disarticulation of the state, which was never particularly effective or perceived as legitimate by many ethnic nationality citizens, especially those living in conflict-affected areas.

The previous NLD-led government had at least signed up to some of the main global standards, commitments and instruments to address this crisis.<sup>11</sup> The impacts of climate change are not taking a break during the coup, and Myanmar is one of the most vulnerable countries in the world.

Data from the (previous) government’s Department of Meteorology and Hydrology indicates that between 1981 and 2010, average daily temperatures in Myanmar increased by about 0.25°C per decade, while daily maximum temperatures went up by 0.4°C. By the middle of the century, temperatures are expected to increase by 1.3°C to 2.7°C above historical levels. Despite some progress at the recent COP-26 conference, it seems unlikely for now that these disastrous scenarios will be avoided.

Changes in rainfall patterns are also expected, although these vary by region and season, with projections related to sea-level rise in Myanmar ranging from 20 to 41 cm by mid-century (and potentially much more than this by 2200). The monsoon duration over the last 50 years (1955-2008) reduced significantly, from 140-150 days in the mid-1950s to less than 120 days in 2008. The late arrival of the rains and the early ending of the monsoon have been particularly evident since 1977, when the duration of the rainy season dropped below 130 days. Overall, the duration of the southwest monsoon duration has shortened by about three weeks in northern Myanmar and by one week in other parts of the country.

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<sup>10</sup> See <https://kesan.asia/salween-peace-park-initiative/>

<sup>11</sup> On 12 July 2021 the NUG Ministry of Natural Resources and Environmental Conservation submitted a report (drafted under the previous NLD government) on Myanmar’s Nationally Determined Contributions to cutting emissions, stating that “the recent coup has exacerbated the vulnerable situation of the country into a severe crisis.”



According to the UN Food and Agriculture Organization, the agricultural sector accounts for 37.8% of Myanmar's GDP, employs 70% of the labour force, and generates 25-30% of total export earnings. Current agricultural practices and policies do not prepare or support smallholder farmers to face the challenges of climate change. With limited savings and often high debts, smallholder farmers cannot afford to maximize the utilization of land, causing exposure to vulnerable climatic and financial conditions, and possible 'tipping points', beyond which resilience may break down.<sup>12</sup>

Despite these hazards, the unique habitats and eco-systems in many EAO-controlled or -influenced areas present opportunities and resources for mitigating and adapting to climate change, by working with and supporting indigenous communities (including women's and youth groups). There are also opportunities to work with new actors, such as state-level coordination and consultation bodies. So far, these have been established in Kachin (the first), Mon, Karenni and Chin States, and among the T'ang community in Shan State. These committees, or councils, are more inclusive than previous sub-national governance bodies in Myanmar, including strong participation on the part of EAOs, CSOs and political parties, as well as People's Defence Forces (local armed groups which have emerged since the coup to oppose the SAC regime). The sub-national committees and councils have nominated cabinet members in the NUG, and increasingly are involved in local governance (as well as defence of vulnerable communities). Grounded in local political and civil society, they have significant claims to political legitimacy, and sovereignty.

Before the coup, many donors and aid agencies preferred to work through a central government which had failed to engage constructively with EAOs despite the existence of a deeply contested peace process. It is essential following the coup that international development partners re-double efforts to engage on these important issues with EAOs, and associated CSOs and communities, and inclusive local governance authorities. This engagement should be extended beyond the NCA signatory groups which were mostly favoured by donors and diplomats before the coup, to include EAOs and other groups with a credible commitment to democracy and human rights.

If EAOs do not get the support they need to develop their roles as responsible natural resource managers, some may feel they have little choice but to adopt less sustainable and accountable practices. Without international encouragement and (technical and financial) support, EAOs may have limited choices beyond returning to revenue streams such as destructive logging and mining practices. Therefore, it is in the international community's interest to protect Myanmar's forests, many of which are under EAO control. These are globally significant carbon sinks, with an incredible value for the world in terms of biodiversity.

### **Mitigation – limiting climate change**

Myanmar's forests are crucial to mitigating climate change in the region and globally, helping to reduce the risk of massive future temperature changes. The IPCC co-author Professor Paulo Artaxo

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<sup>12</sup> On historical and possible future climate change impacts in Karen State, and analysis of community-based and other local (including CSO and EAO) coping mechanisms and response strategies, see Ashley South and Liliana Demartini, *Towards a Tipping Point? Climate Change, Disaster Risk Reduction and Resilience in Southeast Myanmar* (ActionAid Myanmar 2020; full report in English, with summary/briefing paper in English, Burmese, Sgaw Karen and Pwo Karen).

Neto has stated that there is “no cheaper, easier, and faster way to reduce CO2 emissions than by reducing tropical deforestation.”<sup>13</sup>

Myanmar contains the largest forest reserves in mainland Southeast Asia, including in Kachin State (temperate forests) and Tanintharyi Region in the south (semi-evergreen, montane and coastal rain forests). Under the stewardship of local communities and responsible EAOs, these are globally important biodiversity hotspots.<sup>14</sup> Nevertheless, over the years, damage has occurred even in some of the most remote areas due to unregulated logging and mining activities.<sup>15</sup>

Forest cover in Myanmar is currently under 50% (48% in 2014, having lost about 19% of forested areas between 1990-2010). The rate of deforestation seems to have declined slightly under the previous semi-civilian governments.<sup>16</sup> There is a great risk that the cash-strapped SAC junta will seek to maximise short-term revenues by recourse to logging and mining in the country’s remaining forests. This is already happening in Sagaing Region and Kachin State<sup>17</sup>, and in Tanintharyi Region.<sup>18</sup>

Some EAOs have been relatively good forest managers, in a context where indigenous communities have long been custodians of nature. Sustainable community forestry management practices and traditions have played a key role in maintaining Karen, Kachin, and other forests. This local agency includes an implicit claim to sovereignty. For the KNU, for example, forest governance is expressed through the policies and practices of the KNU’s Kawthoolei Forest Department (KFD).<sup>19</sup> Working with CSOs and communities, the KFD has developed a range of people-centred natural resource and environmental conservation policies and strategies. This constitutes an example of the KNU acting as a responsible government in its areas of authority, protecting the forest and supporting community-based development and livelihoods, in the face of an aggressive and militarised state, with many crony companies seeking to exploit the ethnic homelands (including under the previous NLD-led government).

One of the greatest challenges facing Myanmar’s EAOs is to focus on conserving the natural environment and supporting sustainable local livelihoods, rather than cashing in on natural resources while they can (so-called “natural resource fatalism”). If Myanmar’s EAOs can position themselves as protectors of the forest, they can move away from negative associations of EAOs as primarily interested in income generation through resource extraction (the proceeds of which often

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<sup>13</sup> Forest Trends, *Resilience Dispatch* (August 2021): *Cocoa in a climate newsletter?*

<sup>14</sup> For an overview of indigenous forest governance in Burma, see *Protecting Myanmar’s Forests* (<https://kesan.asia/resource/protecting-myanmars-forests/>). This short film was presented at the COP-26 Climate Conference (in the Indigenous Peoples Pavilion) on 5 November 2021. It shows how Karen and Kachin indigenous peoples protect Burma’s forests against the military junta and other threats. This inspiring film features Dr Tu Hkawng (National Unity Government, Minister for Natural Resources and Environmental Conservation) and Saw Paul Sein Twa (KESAN, the 2020 Goldman Prize Winner).

<sup>15</sup> As noted by International Alert in 2019, “The KNU’s KFD now presides over the most high-value conservation forests in southeast Asia, which the Myanmar government does not have access to.” Stephen Gray, *Forestry management and peacebuilding in Karen areas of Myanmar* (November 2019).

<sup>16</sup> “Myanmar Forest Information and Data” (mongabay.com).

<sup>17</sup> The Irrawaddy, *Myanmar Junta’s Coup Gives Greenlight to Timber Traffickers* (17-8-21).

<sup>18</sup> Mongabay, *Deforestation surge continues amid deepening uncertainty in Myanmar* (23-8-21).

<sup>19</sup> *Towards equitable and sustainable land governance in Southeast Myanmar* (Covenant Consult and Bread for the World, October 2021).

go to private individuals, rather than the organisations in question). In this way, EAOs can move along the spectrum from warlords towards responsible local governance actors.

Furthermore, if sustainably managed, forest resources can contribute hugely towards future income generation for Karen communities and authorities, including through the potentials of biotechnology and ecotourism, and as internationally important carbon sinks. These goods are likely to become increasingly valuable commercially, as global forest cover decreases, and temperatures rise in the coming years.

The natural resource governance role of EAOs is acknowledged in the NCA (Article 25 on ‘Interim Arrangements’.<sup>20</sup>) However, the previous government’s climate change responses and architecture tended to be top-down and technocratic, with only limited consultation of local stakeholders - whether EAOs, CSOs or indigenous communities. This centralised and state-centric approach reflects Myanmar’s authoritarian political culture and the historical marginalisation of ethnic nationality communities. The current crisis in Myanmar presents new opportunities for ‘building back better’. In this dramatically changed context, it is important to engage with EAOs and other stakeholders, beyond the framework of the NCA.

### **Adaptation - building back better**

Beyond (but not excluding) climate change mitigation lie the challenges of adaptation. These include working with communities (and particularly farmers) to identify and adopt climate change-adapted agriculture. As responsible governance authorities, working in partnership with CSOs and appropriate technical experts, EAOs can take the lead in identifying future livelihoods, food/human security stresses, and locally appropriate adaptations. The challenge then is to work with local farmers and other stakeholders to determine which crops and other adaptations are most suitable. This might include new types of agricultural production: different varieties of rice and technologies of planting, as well as new crops (as outlined in the Recommendations).

The most profound challenges are those of ‘Deep Adaptation’<sup>21</sup>: what material, socio-cultural and technological assets can be conserved or adapted, in the context of the potentially massive negative impacts. Climate change can be an opportunity (or ‘critical juncture’) to re-define power relations and re-imagine the kind of world we live in. The disruptions caused by climate hazards, and the opportunities presented in responding, potentially allow vulnerable and marginalised communities (and their representatives, such as EAOs and CSOs) to participate more equitably in development processes through adaptive technologies and innovative approaches.

‘Building back better’ should include the transformation of social and political-economic relations through supporting indigenous community and women’s leadership, and the roles of EAOs as climate change governance actors. These resilient ethno-linguistic and faith-based networks will be key to the survival (adaptation and rehabilitation) of local communities, especially in conflict-affected parts of the country.

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<sup>20</sup> Myanmar Interim Arrangements Research Project, *Between Ceasefires and Federalism: Exploring Interim Arrangements in the Myanmar peace process* (Covenant Consult 2018).

<sup>21</sup> Deep Adaptation (Jem Bendell 2018) is premised on the assessment that climate change will lead to societal collapse. For a discussion in the Myanmar context, see Ashley South, *Climate change and deep adaptation in Myanmar* (Frontier Myanmar 12-7-2019).

As Paul Sein Twa of KESAN says,

“The ‘ICCA – Territories of Life’ approach [exemplified by the Salween Peace Park] is a radical attempt to decolonize environmental conservation. This is climate justice in action. It is also an opportunity for EAOs to build their legitimacy, by recognising and promoting indigenous peoples’ contributions to climate change mitigation and adaptation. As indigenous peoples’ rights become increasingly prominent internationally, EAOs would do well to champion such initiatives.”<sup>22</sup>

Internationally, there are strong arguments for the decentralisation of Disaster Risk Reduction activities, of the sort that will be necessary in responding to climate change. In the case of Myanmar, decentralisation of disaster response can be an important step in developing an effective federal system of disaster response and governance.

### **Migration and climate change – the climate change-migration-conflict nexus**

Supporting EAO climate change adaptation strategies in this time of crisis in Myanmar will also limit the spread of instability to neighbouring countries. If 30 million or more people in neighbouring, low-lying and crowded Bangladesh are displaced, some may have little choice but to flee east.<sup>23</sup> By 2021, there were already some 10 million ‘climate refugees’ in Bangladesh (mostly rural to urban migrants), plus 1 million Rohingya who had been violently expelled from Myanmar. The Rohingya refugees living in camps along the Myanmar border (or on the island of Bhasan Char) are highly vulnerable to flooding and cyclones.

Local and global actors can work in partnership on the conflict-migration-climate change ‘nexus’, limiting the impact on neighbouring countries, by helping to reduce the drivers of forced migration within Myanmar and across its borders. This is particularly important in relation to refugees and IDPs - the victims of past and present armed and state-society conflicts. It seems inevitable that, in the future, more people will be forced to flee within and beyond Myanmar’s borders because of the impacts of climate change, and state violence. Now is the time to begin planning for such contingencies. It is also essential that climate change issues be taken into account, when considering any refugee or IDP return and resettlement projects - which seems unlikely in the short-term, given the devastating impact of the coup in Myanmar, with widespread violence and insecurity.

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<sup>22</sup> Paul Sein Twa interview (13-11-21).

<sup>23</sup> A 2018 US government report estimates that 90 million Bangladeshis (56% of the population) live in “high climate exposure areas”: Mubashar Hasan and Geoffrey Macdonald, *How Climate Change Deepens Bangladesh’s Fragility* (United States Institute for Peace 13-9-21).

## **Recommendations**

- Donors and international development partners should support EAOs, state-level coordination and consultation councils, indigenous communities and partner CSOs' climate change mitigation efforts (including through sustainable forest governance), and adaptation strategies.
- Help establish sustainable revenues for sub-national governance administrations (to replace revenues otherwise derived from mining and logging activities).
- Options for EAOs and partners:
  - Agriculture:
    1. Develop middle-to-long term support to rural livelihoods, based on analysis of likely climate change scenarios, and impacts on agriculture.
    2. Work with farmers and technical experts to identify and develop climate change-adapted agricultural strategies and techniques.<sup>24</sup> Such support activities need to be adapted in conflict-affected areas, to take account of local insecurity and survival mechanisms. Coordinate with CSOs.
    3. Recognise and support roles of women and youth (including through CSOs). Respect and strengthen indigenous and customary rights, forest governance practices and protected areas, to ensure security of tenure, local ownership and benefits.
    4. Focus on local food sovereignty (for local consumption), as well as high-value commercial production.
    5. Back (invest in) a range of initiatives and activities; expect many to fail. Adaptive programming: identify 'positive deviance' and support local innovations.
  - Energy<sup>25</sup>:
    1. Explore the options and support small-scale hydropower projects - based on existing best-practice in a number of ethnic areas.
    2. Explore the options for, and support new solar technologies, and decentralised (off-grid) electricity generation - based on existing best-practice in a number of ethnic areas.

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<sup>24</sup> Where adequate water and land are available, this can include new rice varieties and techniques - e.g. System of Rice Intensification.

<sup>25</sup> In 2018 only 40% of households had access to electricity, with much of the power generated in Myanmar exported to neighbouring countries. According to the Ethnic Nationalities Affairs Centre, "Myanmar's current energy export priority results in focusing on largescale projects in border areas... However, if Myanmar prioritized energy production for local consumption and development, then smaller energy production projects would logically replace these large mega-projects. These smaller plants, which would include those using new renewable energy, would provide cheaper, more efficient electricity and can be built faster and closer to the people they serve": *Challenging Myanmar's Centralised Energy Model* (July 2020).

3. These power generation technologies can potentially support decentralised (small and medium scale) industries, beyond the under-capacitated national grid.
  4. Integrated approaches to supporting climate change mitigation and adaptation should take account of livelihoods needs (now, and in the future), including the provision of relevant vocational training, and Community Forest Enterprises.
- Forests:
1. Future incomes, for example from potential biotechnology patents, should be safeguarded and generated through conserving and protecting the natural environment and resources (biodiversity). The advantages and risks of pursuing carbon credit and trading opportunities should be carefully examined, with local consultation.
  2. Where feasible, EAOs should establish a moratoria on new mining and logging activities in forest areas.