Article

Are Countries Ready for REDD+ Payments? REDD+ Readiness in Bhutan, India, Myanmar, and Nepal

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Abstract: The Paris Agreement recognized the significant role of forests in climate change mitigating and adapting. It also emphasized the importance of the Reducing Emissions from Deforestation and forest Degradation (REDD+) mechanism as a vital tool for achieving the goal of limiting global warming to 1.5 °C above pre-industrial levels. This study aims to assess the REDD+ readiness of Bhutan, India, Myanmar, and Nepal in preparation for effectively implementing REDD+ at the national level. A total of 57 indicators across five categories were used to evaluate readiness: overall readiness, technical readiness, institutional readiness, financing readiness, and strategy and safeguard readiness. The indicator-based questionnaire was administered to government officials, NGOs, private sectors, and academics. The results showed that Nepal was slightly more advanced in overall readiness, owing in part to the longer readiness period of the World Bank-supported Terai Arc ER-P. India scored highly in technical readiness and has several sub-national programmes for REDD+ implementation. Bhutan had strong ratings for strategy and safeguard readiness but lower scores for institutional and financing readiness. Myanmar had consistent ratings across readiness areas, but a lower score for technical readiness. However, political and governance situations pose significant challenges to the effective implementation of REDD+ in Myanmar.

Keywords: REDD+; readiness; indicators; strategy; safeguards; finance

1. Introduction

It has been over two decades since the inception of the Reducing Emissions from Deforestation and Forest Degradation (REDD+) policy approach and its positive incentives for avoiding deforestation and forest degradation (D&D). Meeting the ambitious goals of the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC) will be impossible without reducing D&D, improving forest restoration, and reducing agricultural emissions. As a result, the UNFCCC has recognized the need to provide developing countries with results-based payments (RBPs) to demonstrate that they have reduced emissions against a national emissions baseline. Conservation of forest carbon stocks, sustainable forest management, and carbon stock improvement through natural forest restoration and various tree plantation measures are activities that qualify for the REDD+ process (usually in the form of reforestation, afforestation, or agroforestry systems). The overarching aim of REDD+ is to encourage developing countries to contribute to climate change mitigation by reducing greenhouse gas emissions (GHG) through slowing, halting, and reversing forest loss and degradation; and removing GHGs from the Earth's atmosphere through conservation, management, and expansion of forests [1].

Many countries have thus initiated national REDD+ programmes (NRPs), primarily with financial support from the World Bank Forest Carbon Partnership Facility (FCPF) and/or the UN-REDD programme [2]. The development of NRPs is divided into three phases: readiness, implementation, and results-based payments [3,4], as illustrated in Figure 1.
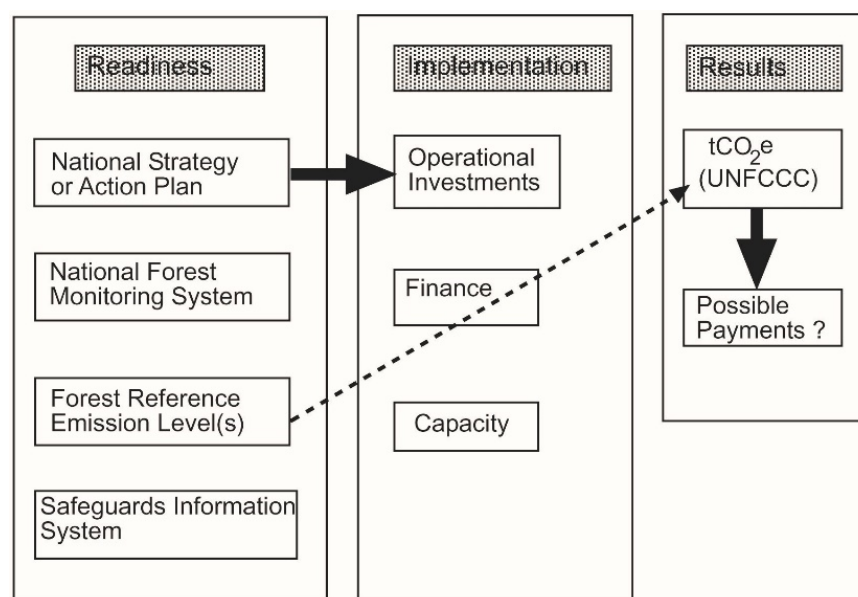
Figure 1. Showing different phases countries are required to transition through before becoming eligible to receive REDD payment. (Lee, D., 2017) [5].

According to the Cancun Agreement, readiness comprises four aspects in which countries need to prepare. Countries need to develop their national strategies or action plans for guiding REDD+ implementation. These strategies and plans are based on national circumstances so that country-specific D&D drivers are addressed through policy reforms and other policy interventions [6–8]. These include policies and measures (PAMs) or strategies and actions (S&A) to counteract D&D. In order to be ready for REDD+ implementation, countries must also demonstrate that they have a national forest monitoring system (NFMS), which is mainly used for reliable and accurate data on forests, including monitoring, reporting, and verification (MRV) functions [9,10]. To show the addition of REDD+ intervention, countries must establish a baseline in the form of forest reference emission levels (FRL/FREL). These form the basis for quantifying emissions from D&D, enhancement of carbon stocks, and removals through sustainable forest management [11]. Countries must also comply with Safeguard Information System (SIS) that aims to protect or enhance the "Cancun" social and biodiversity safeguards [12], considering that a large portion of the population in developing countries is forest-dependent, and any REDD+ intervention must respect and address their rights. By the same token, there must not be any adverse impacts on biodiversity because of REDD+ implementation, and SIS provides a compliance condition for countries.

Given the NRP scenario, this paper assesses the progress of readiness in Bhutan, India, Myanmar, and Nepal. It also aims to identify the readiness gaps and provide a comparative status on how ready these countries are. Figure 2 shows these countries, where the International Centre for Integrated Mountain Development (ICIMOD) was working with REDD+ focal points under the REDD+ Himalaya project. ICIMOD supported these countries in the REDD+ readiness phase, and so this paper assesses at what stage the different countries are. Therefore, this study's outcomes would be valuable in scoping the most suitable country for REDD+ implementation and identifying the weakness which, when addressed, can make the country suitable.
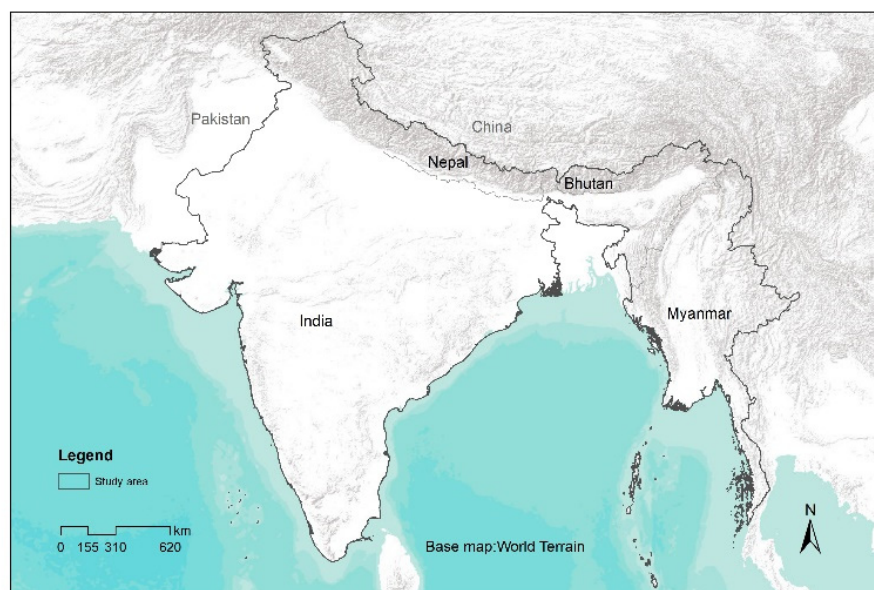
Figure 2. Location of study countries (Bhutan, India, Myanmar, and Nepal).

1.1. A Brief Illustration of REDD+ in Bhutan, India, Myanmar, and Nepal

1.1.1. REDD+ in Bhutan

Bhutan, a small landlocked country with 71% of its land area covered by forests, initiated the REDD+ programme in 2010 with support from the UN-REDD program, as reported by the Forest Resources Management Division (FRMD) [13]. Since then, Bhutan has conducted various workshops and awareness-raising activities about REDD+ at the national and local levels. In 2013, Bhutan submitted a feasibility study and readiness preparation proposal (R-PP) to the Forest Carbon Partnership Facility with the support of the UN-REDD programme [14]. As a result of these efforts, Bhutan prepared an action plan for its national forest monitoring system for REDD+ under the United Nations Framework Convention on Climate Change (UNFCCC). The plan was a useful component in developing the national forest monitoring system (NFMS) for Bhutan [15]. Bhutan also conducted its first nationwide forest inventory in 2015, which resulted in a two-volume inventory report [13,16,17]. A study conducted in 2017 highlighted the issues related to D&D and the barriers to the sustainable management, conservation, and enhancement of forest carbon stocks. The study also provided past patterns and future estimates of forest pressure based on projections for growth and development [18]. As Bhutan progresses toward the readiness phase of REDD+ implementation, it also submitted its proposed forest reference levels/forest reference emissions levels (FRL/FREL) to the UNFCCC [19].

1.1.2. REDD+ in India

Since the inception of REDD+, India has actively participated in the negotiations and played a key role in transforming the REDD+ architecture from REDD to REDD+ through the Bali Action Plan and the inclusion of Article 5 on REDD+ in the Paris Agreement [20]. India has made significant progress in the readiness phase by preparing a reference document for REDD+ in 2014, which provides guidance and a framework for REDD+ implementation based on existing knowledge and the roles and responsibilities of different departments, institutions, civil society organizations, and local communities. India has also implemented several REDD+ pilot projects, including the Khasi Hills Community REDD+ Project in Meghalaya, the REDD+ Himalaya Project in Uttarakhand, and the Forest Plus Project [21]. During the pilot phase, various activities and studies were conducted, including the identification of drivers of deforestation and degradation (D&D), the establishment of reference levels at the sub-national level, and the capacity building of forest departments and local communities on REDD+ and its mechanisms. India made

its first submission of forest reference level (FRL) to the UNFCCC in 2018, followed by a modified version in the same year. Additionally, the Government of India submitted the National REDD+ Strategy (NRS) to the UNFCCC in 2018 [22]. As REDD+ activities can be implemented at the sub-national level, the NRS requires states in India to prepare State REDD+ Action Plans (SRAPs) for implementing REDD+ at the state level [8]. Furthermore, the Ministry of Environment, Forest, and Climate Change in the Government of India has adopted a uniform code, the National Working Plan Code 2014, for the preparation of working plans for the management of forests [23]. It includes REDD+ as an important component at the forest division level, linking it to the national forest inventory through the use of a robust and dynamic national carbon measuring, reporting, and verification (MRV) system based on forest resource assessment in working plans to facilitate REDD+ implementation at the forest division level in every state [23]. However, India needs to strengthen certain parameters related to the Green India Mission (GIM), a policy that allows Indian states to double the area for afforestation and reforestation to expand the country's carbon sink. The GIM also aims to increase the carbon sequestration potential of forests, improve the flow of ecosystem services, and enhance the livelihoods of local communities [24].

1.1.3. REDD+ in Myanmar

The Government of Myanmar (NUG) has been actively working on the REDD+ program since joining the UN-REDD programme in 2011, with the Forest Department leading the REDD+ activities in the country. In 2013, with assistance from the UN-REDD programme, the NUG finalized and approved a REDD+ readiness roadmap [25]. Since 2015, the UN-REDD program has been supporting the NUG in implementing readiness activities for REDD+. Myanmar is currently working on finalizing its National REDD+ strategy, which was expected to be completed in 2020 but has been delayed due to the pandemic and political uncertainty. The NUG submitted its proposed FRL/FREL to the UNFCCC in 2018 [26]. The UN-REDD programme has been supporting the country since 2015 in implementing REDD+ readiness activities. Additionally, for the implementation of REDD+ at the subnational level, Myanmar has prepared its first sub-national REDD+ plan for the state of Shan [27]. In 2020, a national approach for REDD+ safeguards was prepared with technical assistance from UN-REDD to ensure the implementation of REDD+ safeguards [28].

1.1.4. REDD+ in Nepal

In 2008, Nepal began its involvement in REDD+ by developing a readiness plan idea note for the World Bank and establishing the REDD Implementation Center (RIC) in 2009 [29]. The RIC has since organized various capacity development activities nationwide, with financial support from the Forest Carbon Partnership Facility (FCPF) of the World Bank, to enhance the knowledge of REDD+ among different stakeholders. Nepal has also received financial and technical support from various organizations, including the UN-REDD programme, ICIMOD, World Wide Fund for Nature, Norwegian Agency for Development Cooperation (NORAD), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and the Federal Ministry for Environment, Nature Conservation and Nuclear Safety [30]. From 2008 to 2012, Nepal conducted its first REDD+ programme in three watersheds. Since 2013, the RIC and ICIMOD implemented the REDD+ Himalaya project in all three districts, which concluded in 2020. In 2015, Nepal developed its first sub-national REDD+ plan and a district REDD+ action plan for the Chitwan district, following a comprehensive process that involved all stakeholders, providing a foundation for sustainability in planning [31]. This process was adopted for developing an emissions reduction programme document for 13 districts in the Terai Arc Landscape, which was approved for financial support by the FCPF in 2018. The funds will be used to reward community-based efforts to reduce carbon emissions and enhance carbon stocks through forest management activities [32]. Furthermore, Nepal submitted its proposed forest reference levels/forest reference emissions levels to the UNFCCC in 2016, which were revised and resubmitted in 2017. In 2018,

Nepal also submitted its National REDD+ Strategy to the UNFCCC to advance with REDD+ implementation [7,33].

2. Materials and Methods

This research is based on multiple-choice questions on readiness progress. To formulate the questionnaire, informal discussions were carried out with the REDD implementing agencies in four countries, followed by a review of literature focusing on the UN-REDD Programme, FCPF, and UNFCCC publications [34–42]. The questionnaire assessed progress against five readiness components: strategy or policy readiness (incorporating the NRS and PAMs), institutional readiness, technical readiness (incorporating the FRL/FREL, NFMS, and MRV), safeguard readiness, and financing readiness, including the development of a benefit-sharing mechanism for distributing the RBPs. It was initially tested with a small expert group in Nepal and was modified and finalized after testing.

A total of 57 questions were included in these five categories, and broad indicators are shown in Table 1, which were formulated based on the REDD+ Warsaw framework. The survey was conducted in two rounds in all four countries with REDD+ implementing agencies, NGOs, private sector, and academics so that all REDD+ stakeholders' views could be collected. Both rounds of the survey were conducted in the form of workshops. In the first round, the questionnaire was sent to the respondents, and when tallied, the responses were the same. So, in the second round, all the responses were discussed and verified in the plenary. There were 101 respondents from four countries: Bhutan (20), India (27), Myanmar (18), and Nepal (36).

Table 1. List of indicators by readiness area.

Readiness Category	Indicators
Strategy readiness/policy readiness	National REDD+ Strategy (NRS)
	Methodology of D&D drivers' analysis
	Risk/feasibility analysis on PAMs/S&As
	Extra-sectoral PAMs/S&As
	Cost–benefit analysis of PAMs/S&As
	Analysis of barriers to carbon stock enhancement
	PAMs/S&As with private sector/supply chain focus
	Forest sector economic valuation study
	Forestry targets in NDCs *
	High-level political support for REDD+ *
	Incentives in PAMs/S&As to change 'business as usual' *
	Forest law enforcement capacity and compliance *
	Effective and equitable judicial system *
Institutional readiness	Non-forestry sector leadership of PAMs/S&As
	Steering Committee: formation and independence
	Institutional independence of SIS
	M&E: institutional formulation and independence
	Communications/knowledge management strategy
	MRV institutional arrangements
	Management of implementation finance/RBPs
	Inter-ministry/sectoral coordination *
Technical readiness	Submission of FRL/FREL to UNFCCC
	Carbon pools in FRL/FREL
	Use of national Emissions Factor (EF)
	Forest degradation measurement
	National Forest Monitoring System
	REDD+/Carbon Registry
	Accessibility NFI data
	Most recent satellite forest cover map
	Biennial Update Report (BUR)

Table 1. *Cont.*

Readiness Category	Indicators
Safeguard readiness	Social and governance risk analysis of PAMs/S&As
	Safeguards Information System progress
	Summary of information
	Policies, Laws, and Regulations (PLR) gaps analysis
	Safeguards contextualization analysis
	Grievance Redress Mechanism (GRM) for REDD+
	Analysis of gender equity impacts of PAMs/S&As
	Anti-corruption commission or equivalent
	Transparency of forest management data
	Biodiversity risks analysis of PAMs/S&As
	Regulation of plantation crops on degraded forest land
	Biodiversity provisions of timber harvesting regulations
	Risk analysis of emission reversals
	Rights/tenure of forest-dependent groups/smallholders *
	Legal basis and implementation of FPIC *
	Legal basis and implementation of EIA *
	Biodiversity provisions in EIA regulations *
Financing readiness (including benefit sharing)	REDD+ financing or investment plan
	Costing/budgeting of PAMs/S&As
	Analysis of nesting of REDD+ projects in NRP
	REDD+ benefit sharing plan
	Experience with demonstration/pilot projects
	Experience of cash transfers or RBPs to households
	Legal provision for disclosure of financial information
	Analysis of domestic financing sources
	Approved finance for REDD+ implementation
	Confidence in management of RBPs *

Note: * More judgment or opinion-based indicators.

Most of the choices in the questionnaire were arranged in ascending order of readiness, but in some cases, the responses were either "yes", "no", or open-ended. To create circular bar and balloon plots for basic qualitative analysis, the responses were converted to a 1–4 scale, with 4 indicating a higher readiness level and 1 indicating the lowest level. This scale was used for most of the questions.

3. Results and Discussion

3.1. Strategy Readiness

The overall strategy readiness of Bhutan is higher compared to the other three countries, which is consistent with Bhutan's well-documented environmental policies and strong forest governance [43], as shown in Figure 3. India's lower readiness score can be attributed to its national-level PAMs being defined by existing laws and policies, rather than being specifically defined in the national REDD+ strategy, as is the case in other countries [8]. However, in four Indian states, namely Mizoram, Uttarakhand, Himachal, and Sikkim, the process of defining differentiated PAMs at the state level has been completed, while in Madhya Pradesh and Chhattisgarh, this process is currently underway [44–47].

When more subjective indicators were included, India's strategy readiness score surpassed Myanmar's and was equal to Nepal's. However, it is worth noting that civil society stakeholders may have given different ratings for some indicators [13,17]. Furthermore, it is unclear how "transformational change" will be achieved in India, at least if it is based on the nationally defined PAMs, as the India National REDD+ Strategy is based on existing policies, legal frameworks, and regulations, including some older laws and policies such as India's National Forest Policy of 1988 [48,49].

Myanmar seems to have the weakest policy and strategy readiness of the four countries, as it has the third-highest rate of deforestation in the world (1.7% per year), driven by policy and governance challenges and high demand for agricultural commodities from

neighboring countries such as China and India [50–53]. Another major challenge is that most of the remaining high-density forests are in areas controlled by Ethnic Armed Organizations (EAOs) [54].
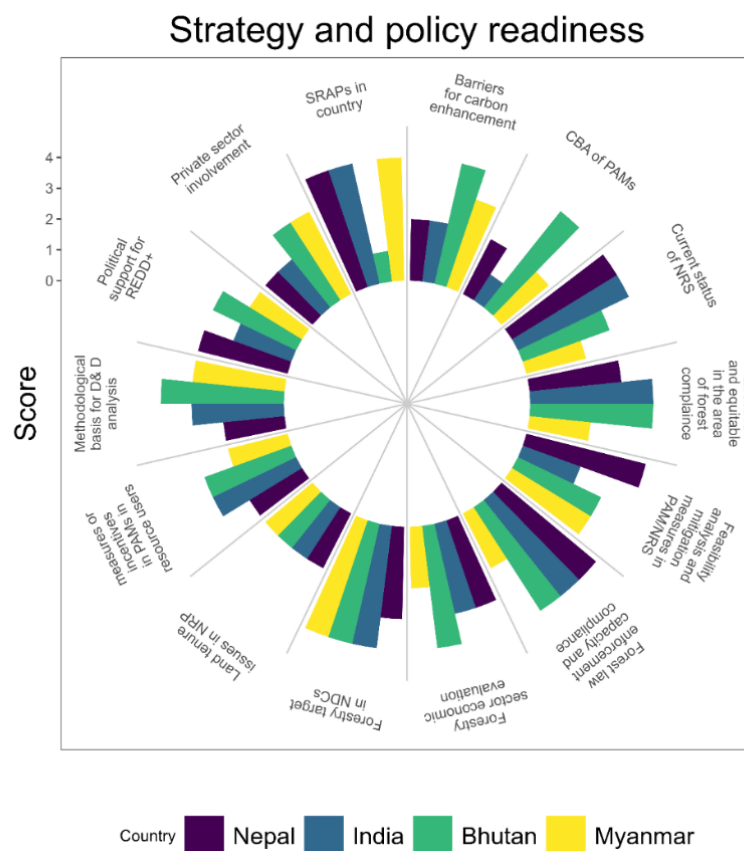

Figure 3. Strategy or policy readiness in four countries.

3.2. Institutional Readiness

The overall institutional readiness ratings were relatively similar among the four countries, except for Bhutan, which had a considerably lower rating due to most functions related to REDD+ being under the Department of Forests and Park Services (DFPS), without a separate REDD+ Steering Committee [36]. However, Bhutan's low rating may not accurately reflect its governance and intersectoral planning strengths, which reduce the dependence on forest sector institutions. Additionally, the DFPS falls under the Ministry of Agriculture and Forests, which reduces the likelihood of conflicts between agricultural and forestry (or environmental) policies. Compared to the other readiness areas, institutional readiness had generally lower ratings, making it one of the most challenging areas of readiness (Figure 4). If it were possible to obtain an objective indicator for intersectoral coordination and give it appropriate weight (considering that most drivers of deforestation and degradation are extra-sectoral), institutional readiness ratings would be even lower, except possibly for Bhutan. Weak intersectoral coordination is likely to persist as a significant problem for REDD+ implementation [55].
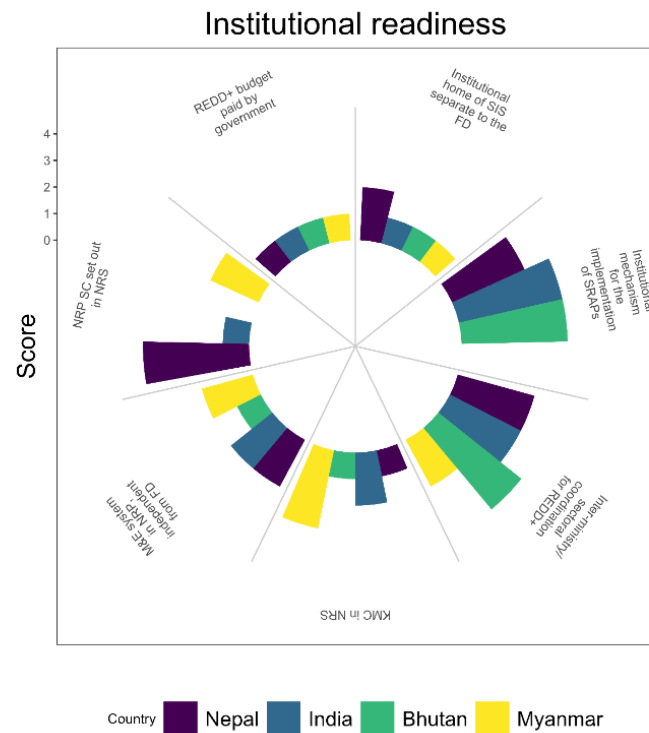
Figure 4. Institutional readiness in the four countries.

3.3. Technical Readiness

The technical readiness ratings for the four countries indicate that Myanmar is behind the others, as shown in Figure 5. This could be attributed to various factors, including limited capacity, inadequate technical assistance, and funding constraints [50,56]. In contrast, the other countries have managed to overcome these challenges, leading to greater progress in terms of technical readiness.
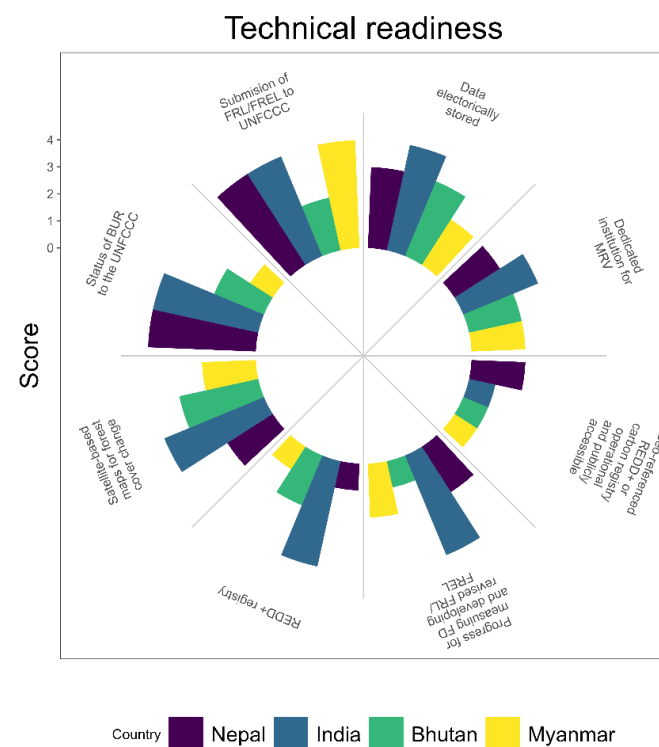

Figure 5. Technical readiness of four countries.

It's important to note that technical readiness is only one aspect that determines a country's preparedness for a specific program or initiative. Other factors, such as political economy and environmental governance, may also impact a country's ability to implement a program effectively [57,58]. However, in the case of these four countries, these factors do not seem to present significant challenges. Building institutional and policy-related capacities can help overcome technical limitations, as exemplified by India's advanced technical readiness, attributed to the institutional and technical capacity of the Forest Survey of India. Nepal's readiness was also boosted by the World Bank-supported Terai Arc Landscape Emissions Reduction Project (ERP) [59], one of the first REDD+ programs in all these countries. In contrast, Myanmar's readiness was somewhat less advanced, partly due to its later start compared to Nepal, which partly explains its lower rating [31,36,50].

3.4. Safeguard Readiness

The readiness indicators for safeguards revealed that Bhutan and Myanmar had the highest level of preparedness (Figure 6). Myanmar has taken concrete steps towards submitting a Summary of Information (SoI) to the United Nations Framework Convention on Climate Change (UNFCCC), demonstrating its strong commitment to addressing climate change [22].
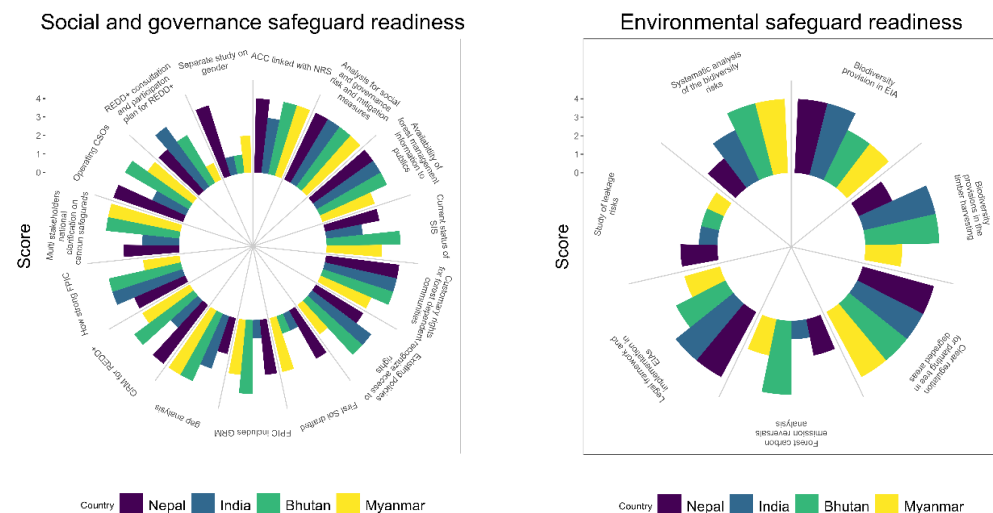

Figure 6. Safeguard readiness in four countries.

The inclusion of opinion-based indicators in the assessment of safeguard readiness provided a more nuanced perspective on the situation in the four countries. As a result, India's rating improved to a level comparable to Nepal and Myanmar, whereas Myanmar's rating decreased to a level comparable to Nepal and India. Overall, Bhutan had the highest safeguard readiness rating when considering opinion-based indicators, indicating that the country is well prepared to address the environmental and social impacts of development projects.

3.5. Financial Readiness

Bhutan is following the other countries in terms of financing readiness (Figure 7). This deficiency may be due to a lack of financing or investment plans, insufficient funding for REDD+ implementation, and a lack of pilot REDD+ projects. Paradoxically, one specific challenge is Bhutan's low rate of deforestation and degradation, which reduces the potential for REDD+ scope and results-based payments.
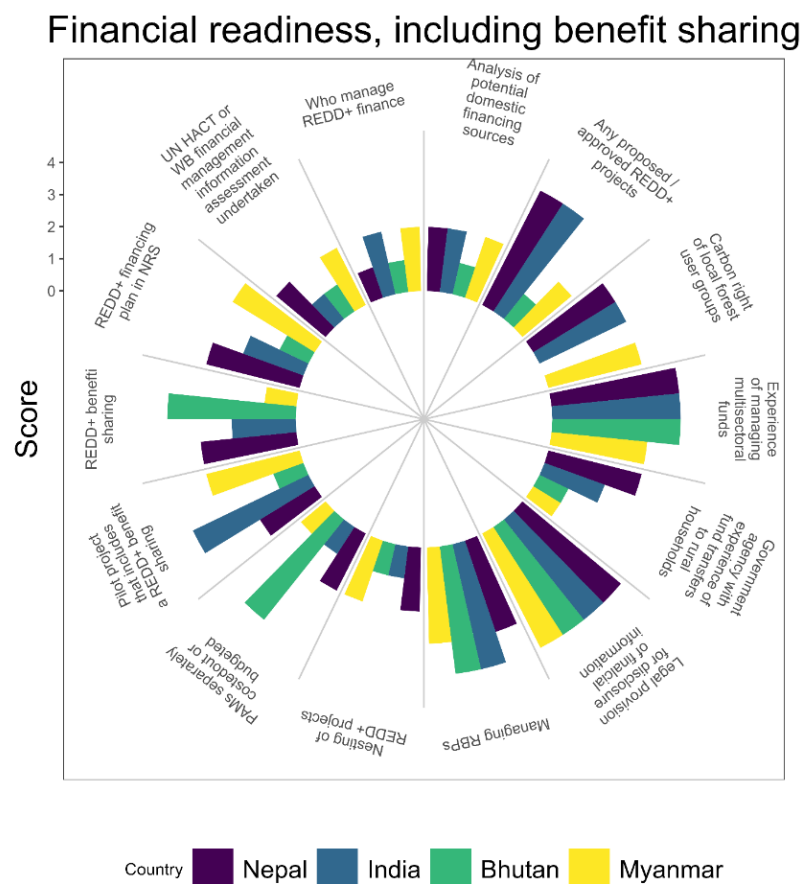
Financial readiness, including benefit sharing

Figure 7. Financial readiness in four countries.

However, it could also be argued that Bhutan, with its strong legal and regulatory framework and good governance, has effectively implemented the Net Zero policy for a prolonged period and REDD+ for an extended period. On the other hand, Nepal is considered the most finance-ready country primarily due to the support of the World Bank and the Terai Arc Emissions Reduction Project. Nevertheless, sustaining such interventions requires essential domestic policies and financial institutions. India, with its financial management experience, established systems such as the DBT Portal and assured domestic financing, slightly surpassing Myanmar and Bhutan.

3.6. Capacity Building Needs

In this regard, all four countries have identified specific areas where capacity building and training are needed, as shown in Table 2. Participants from Bhutan and India have highlighted the need for assistance in communications and knowledge management, as well as financial or ecosystem valuation. Meanwhile, Myanmar, India, and Nepal have prioritized the development of a Carbon or REDD+ registry. Additionally, Nepal and Myanmar have emphasized the need for support in establishing benefit-sharing systems, while all three countries have identified the capacity building of local stakeholders, particularly in the implementation of safeguards, as a priority. India and Myanmar have also stressed the importance of subnational REDD+ planning and implementation. Finally, all three countries have mentioned various aspects of SIS in national or subnational REDD+ as areas where they would benefit from additional capacity building and training.

Table 2. Outstanding capacity-building or training needs.

Readiness Area	Bhutan	India	Myanmar	Nepal
Strategy	Valuation/green accounts Policy/legal	Ecosystem Valuation CBA of PAMs	Implementing PAMs Integrating social/env. factors in land use planning	Studies of emissions from drivers
Institutional	Information management Communications	Communications /knowledge management	Knowledge/comms. methods Capacity building of local stakeholders	Institutional continuity with forest management regimes
Technical	NFI database system Uncertainty analysis Inter carb. pool transfers Statistics/data analysis	Registry	Measuring degradation (FRL) Registry	Registry Aligning MRV to international system NFIS
Safeguards	EIA	Gender mainstreaming, environmental SIS	GRM, including awareness Risk assessment of reversals and leakage	Stakeholder capacities to implement safeguards Safeguard audit and information systems
Finance	Proposal writing	Finance mechanisms (benefit sharing) Nested projects	Benefit sharing system	Fund management—ERP Benefit sharing system
Subnational REDD+		Planning/implementing SRAPs, SIS, including capacity building	Drivers and barriers' analysis Implementing PAMs	Awareness of SIS/ESMF Identification of safeguard measures

3.7. Overall Readiness

Nepal is slightly more prepared than other countries to implement REDD+ initiatives, with high ratings for technical and financing readiness as shown in Figure 8. This is partly due to the World Bank-supported Terai Arc ERP program, which funds projects related to reducing emissions from deforestation and forest degradation [60]. Nepal's longer experience with readiness efforts may have also contributed to its higher ratings. However, it is important to note that the overall average readiness score for the four countries evaluated was similar, indicating that other countries are not far behind in terms of readiness.
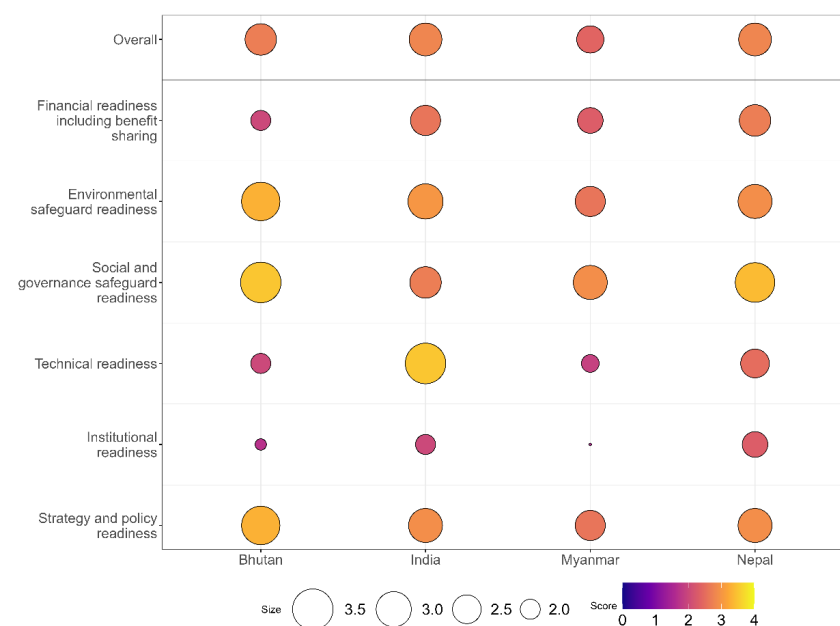
Figure 8. Comprehensive readiness in the four countries.

India's readiness level for implementing the REDD+ program is similar to Nepal's, with positive feedback from respondents, particularly regarding safeguard readiness. India also received high ratings for technical readiness, thanks to the capacity of the Forest Survey of India (FSI). However, it was found that India's strategy readiness was lower than that of other evaluated countries due to the lack of national or sub-national policies and measures specifically for REDD+. To address this issue, the implementation of REDD+ in India mandated the development of sub-national REDD+ plans for all states, along with state-level support for monitoring, reporting, and verification (MRV) and the System for Assessing, Monitoring, and Evaluating REDD+ (SIS) [8]. The variability of political support for REDD+ among Indian states may lead to uneven implementation and leakage issues.

Bhutan received high ratings for strategy and safeguard readiness but lower scores for institutional and financing readiness. However, Bhutan has a strong institutional basis for REDD+ implementation under the leadership of the Ministry of Agriculture and Forests. The lower financing readiness score is due to Bhutan's historically low deforestation rate, which reduces the viability of results-based payments (RBPs) [61]. The implementation of Net Zero measures may also be seen as an incentive in Bhutan for successful conservation and sustainable forest management. Myanmar's readiness for implementing REDD+ had consistent ratings across the readiness areas, with a lower score for technical readiness. However, Myanmar is the most advanced country in terms of safeguard readiness, with a draft Statement of Intent (SoI) for safeguards [62]. Myanmar also faces significant challenges to the effective implementation of REDD+, with large areas of intact forest outside of state control, the demand for food, timber, and charcoal from China, and complex political economy issues [50,52,53].

The priorities identified for REDD+ capacity building in the evaluated countries align with those identified by the Green Climate Fund in 2019, which focus on improving the national forest monitoring system (NFMS), updating the forest reference emission level/forest reference level (FREL/FRL), establishing or improving the national reporting system and its interface platform, preparing the Biennial Update Report (BUR), defining high-priority interventions, and enhancing private sector engagement in the national REDD+ program [63]. Additionally, there is a need to estimate uncertainty related to emissions under the FREL/FRL.

Furthermore, in theory, countries should start implementing REDD+ activities once they demonstrate meeting the requirements outlined in the four building blocks of REDD+. In practice, some demonstration or pilot activities in the form of sub-national jurisdictional REDD+ programs and REDD+ projects aiming to trade carbon credits on the voluntary carbon market (VCS) can be included in the first phase, as this allows a 'learning by doing' approach. During this phase, capacity building and the refinement of technical and safeguard systems may also progress. It is important for a country to ensure that it has adequate policy, institutional, and governance-related measures before fully implementing the REDD+ program. Lastly, the development of new technologies that increase the accuracy of monitoring, reporting, and verification (MRV) and reduce the cost is imperative for REDD+ to become more viable [64,65].

4. Conclusions

The indicators and questionnaire responses revealed that the four countries examined had comparable levels of overall readiness, with Nepal having a slight edge over the other three. Generally, readiness progress until the end of 2021 was positive for technical and safeguard readiness, satisfactory for strategy readiness (except for India's lower rating and the future role of State REDD+ Action Plans), and modest for financing readiness, except for Nepal.

The readiness area that scored the lowest and posed the most significant challenge was institutional readiness. Apart from Bhutan, the readiness process was led by the Forest Department, resulting in limited support from other sectors for a sound institutional foundation for (cross-sectoral) REDD+ coordination and implementation. Additionally,

institutional readiness is the least responsive to international technical assistance, as it depends on the level of political will for REDD+. It is likely to be the most significant obstacle to effective REDD+ implementation [55].

Except for the challenging area of institutional readiness, most readiness gaps can be addressed through capacity building and south–south exchange. Countries that are more competent in one area can train institutions in other countries, and vice versa. It is evident that capacity building and other readiness activities will need to continue well into the implementation phase. This is where access to REDD+ implementation funding becomes crucial, as it enables the momentum gained from programs such as UN-REDD to be sustained, and ongoing readiness activities to be integrated with early implementation in a 'learning by doing' process. Some NRPs in Asia experienced stagnation when their UN-REDD programs ended due to a lack of follow-on funding. Therefore, it is vital to ensure sufficient funding to maintain REDD+ initiatives beyond the preparedness phase.

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