



حوار أبوظبي بين الدول الآسيوية
المرسلة والمستقبلة للعمال

Abu Dhabi Dialogue among the Asian
Labour-Sending and Receiving Countries

Inter-regional study on just transition and labour mobility



International
Labour
Organization

Prepared for the 8th Abu Dhabi Dialogue
Ministerial Consultation

31 January – 1 February 2026

Executive Summary

Climate change is reshaping labour markets across the Abu Dhabi Dialogue (ADD) corridor,¹ intensifying existing vulnerabilities while generating new opportunities for economic transformation. Sudden-onset hazards (such as floods, storms, and extreme heat) and slow-onset processes (such as sea-level rise, drought, and salinization), are increasingly undermining livelihoods and reducing productivity in both origin and destination countries. At the same time, the global shift towards low-carbon development is driving structural changes in labour demand, with potentially significant implications for the region's employment and labour mobility patterns.

Labour mobility plays a central role in this evolving landscape. Destination countries in the ADD benefit from migrant workers in various sectors, including construction, logistics, manufacturing, services, domestic work, and expanding green industries, while for origin countries labour migration and remittances are key in supporting household incomes, and, increasingly, climate resilience.

For climate-vulnerable origin countries, labour migration is emerging as a climate adaptation strategy, offering an opportunity for secure and diversified income streams (as traditional sources of income may be challenged by climate change). Remittances can also diversify household and community income sources, acquire assets (housing, farm equipment, energy) and provide education and entrepreneurship opportunities for family members. These investments can build resilience to economic shocks including those arising from climate change. However, as the climate is changing, workers (including migrant workers) are exposed to existing and new challenges such as limited social protection, and heightened climate-related occupational risks, for example extreme heat. Just transition policies can help address existing vulnerabilities while promoting new economic and social opportunities and benefits for origin and destination countries alike.

Increasingly, climate action is also shaping employment opportunities. For example, ambitious climate and industrial policies in the MENA region have the potential to create millions of new jobs in hydrogen, renewable energy, electric mobility, and climate-resilient infrastructure. These emerging sectors present opportunities for workers in both origin and destination countries, particularly if skill development systems are aligned with future labour market needs. Conversely, if the social dimensions of climate change are not accounted for, the transition risks widening inequalities, excluding workers (in particular women) from new green industries and jobs, with labour and skills shortages that undermine sustainable development.

The analysis presented in this report highlights the impacts of climate change on current labour mobility patterns and the challenges and opportunities that exist for ADD countries at the nexus of climate change and labour mobility. A just transition means maximizing the economic and social opportunities from such transformations, while carefully managing and minimizing any challenges throughout. Realizing a just transition at the climate–labour mobility nexus should follow the guiding principles of the ILO *Guidelines for a just transition towards environmentally sustainable economies and societies for all*; social dialogue, fundamental principles and rights at work, policy coherence, decent work, gender equality, no one size fits all, and international cooperation.²

In many cases, this means extending the just transition guiding principles, to account for and consider migrant workers as well as migration pathways. Priority actions include strengthening decent work and OSH protections, expanding social protection to migrant workers, addressing the gendered impacts of climate change and mobility, and investing in large-scale training and skills recognition systems to prepare workers for green economies. Bilateral and regional cooperation will be critical to ensure safe, orderly, regular and fair labour mobility pathways, harmonize standards, and align labour supply and demand under changing climatic conditions. With strategic investment, inclusive governance, and coordinated policymaking, labour mobility can serve as a powerful enabler of climate resilience, sustainable development, and just transitions across the ADD corridor.

¹ The Abu Dhabi Dialogue is a voluntary and non-binding inter-governmental consultative process, engaging seven (7) countries of labour destination: Bahrain, Kuwait, Malaysia, Oman, Qatar, Saudi Arabia, and UAE; and ten (10) countries of origin: Afghanistan, Bangladesh, India, Indonesia, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand and Vietnam.

² ILO (2015). *Guidelines for a Just Transition towards environmentally sustainable economies and societies for all*.

Key messages from the report:

- **Emerging evidence indicates that climate change increasingly influences labour migration patterns in the Asia-GCC corridor.** Labour migration decisions are complex, and with limited data sources it is challenging to establish direct causal links, however indirect impacts of climate change are evident. Climate-induced stressors drive both gradual migration through the erosion of agricultural livelihoods and abrupt displacement following rapid-onset disasters, with labour migration often occurring as a livelihood diversification strategy when local adaptation options are exhausted. Anticipating and preparing for changes in mobility patterns, ensuring social protection and decent work will increase climate resilience.
- **Migrant workers face high exposure to climate risks.** Given their concentration in outdoor, and climate-vulnerable sectors, migrant workers may face increased occupational hazards, for example, from extreme heat or UV radiation or be particularly exposed to declines in certain sectors due to climate policies. Countries across the ADD corridor are already exploring and undertaking important reforms to avoid climate change amplifying these inequities and undermining the resilience for workers and their families.
- **Ambitious climate and industrial policies in the ADD participating states could generate millions of new green jobs.** Emerging green sectors such as hydrogen, renewable energy, Electric Vehicle (EV) manufacturing, and climate-resilient construction present major opportunities for economic diversification. Realizing these gains requires large-scale worker training – and including migrant workers in this reskilling ensures adequate labour supply is available to transition in destination countries and migrant workers can then use their green skills to contribute to transition in origin countries on return. Ensuring green jobs are decent and that workers have access to social protection will also ensure a just transition.
- **Labour mobility can be a powerful adaptation strategy - but only when migration is safe, regular, fair and rights-based.** For climate-vulnerable origin countries, labour migration and remittances already serve as essential mechanisms for stabilizing household income, financing adaptation, and reducing poverty. However, high recruitment costs, debt burdens, and gendered constraints limit the adaptive potential of labour migration and, in some cases, increase vulnerability. Ensuring migrant workers have social protection and decent work enables labour mobility to be an effective and fair adaptation strategy.
- **Social protection is a critical instrument to address vulnerabilities and ensure success of transition.** Social protection systems can address or even prevent adverse impacts when applied systematically with national climate policies and measures. Well designed and funded social protection, that can be iteratively adapted to changing needs of transition can shield all workers, including migrant workers, from the adverse impacts of climate change on living standards, and ensure that successful implementation of climate policies translates into wider societal gains leaving no-one behind.
- **Aligning skills development policies and strategies with private sector needs and ensuring migrant workers can access skills development – especially for workers in carbon-intensive sectors.** Planning for skills development will need to be integrated with climate and mobility policies and regulations, including Nationally Determined Contributions (NDCs), to ensure that skills needs are met and climate commitments are implemented effectively. Migrant workers need to be included in skills development programmes, enabling a green transition that is also just for all.
- **A coordinated, just transition approach is essential to harness opportunities and reduce risks.** Just transition requires policy coherence across several policy areas, across climate and employment policies, policy for strengthening social protection systems; expanding fair recruitment and labour mobility pathways; and enhancing regional and interregional cooperation, including through the ADD, are critical steps. With proactive governance and investment, labour mobility can contribute significantly to climate resilience, economic transformation, and shared prosperity across the ADD corridor.
- Just transition frameworks tend to focus on domestic settings, which may expose transition challenges in countries with high migrant workforce dependency. In the ADD corridor, migrant workers concentrated in sectors impacted by green transition, particularly energy and construction, face substantial risks if not explicitly included in transition planning.

This report was developed with the financial support of the Ministry of Human Resources and Emiratization, in collaboration with the Abu Dhabi Dialogue Permanent Secretariat. Further financial contributions were made by the [ILO STREAM Programme: Extending Social Protection to migrant workers and their families in the South Asia-Gulf Corridor](#). The report was prepared by Samantha Sharpe, Lailly Prihatiningtyas and Monique Retamal at the University of Technology Sydney (UTS) Institute for Sustainable Futures, and reviewed by Mette Grangaard Lund, Ryszard Cholewinski, Nilim Baruah, Catherine Laws, Amish Karki, Luca Pellerano, Momin Badarna, Jana Birschler, and Nilim Baruah.

The opinions and views expressed in this publication are those of the author(s) and do not necessarily reflect the opinions, views or policies of the ILO or its constituents. Reference to names of firms and commercial products and processes does not imply their endorsement by the ILO, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

Conclusion and recommendations

Climate change is increasingly reshaping labour markets and labour mobility dynamics across the Abu Dhabi Dialogue (ADD) corridor, intensifying existing vulnerabilities while also creating new opportunities for economic transformation. Both sudden-onset events (such as floods, storms, and extreme heat), and slow-onset processes, (e.g. sea-level rise, drought, and environmental degradation), are already affecting productivity, livelihoods, and working conditions in both origin and destination countries. At the same time, climate action is transforming labour markets by creating employment in emerging green sectors and displacing or restructuring jobs, for example in carbon-intensive occupations. Most jobs will require policies which both promote coherence, anticipation, and resilience across the labour market. This paper highlighted social protection and skills development as just transition policy areas, which can maximize the opportunities and minimize any negative consequences from the transition to environmental sustainability.

Climate change is already influencing labour mobility within this corridor. Origin countries such as Bangladesh, Nepal, and the Philippines face increasing climate risks (such as coastal flooding, salinisation, heatwaves, and declining agricultural productivity) that erode livelihoods and intensify labour migration as a coping and adaptation strategy. Meanwhile, in ADD destination countries, specifically in the GCC, climate impacts include rising temperatures, water scarcity, and extreme weather events that may introduce new (and worsen existing) occupational risks for migrant workers, especially those in outdoor and climate-exposed sectors.

In addition to climate impacts, climate action and policies represent both opportunities and challenges. Decarbonisation and environmental protection measures are expected to generate substantial employment opportunities in renewable energy, green hydrogen, electric mobility, and climate-resilient infrastructure, while employment in carbon-intensive and climate-sensitive sectors may decline or change in nature. Migrant workers are often over-represented in both categories: in sectors exposed to transition risks and in those expected to drive green growth. Ensuring that these transformations lead to decent work outcomes, rather than new forms of exclusion or inequality, is therefore central to achieving a just transition.

Therefore, labour mobility plays an evolving role within the ADD context. For destination countries, migrant workers continue to be essential across climate-exposed and transition-critical sectors, including construction, logistics, services, care, manufacturing, and emerging green industries. For origin countries, labour migration and remittances remain a vital source of financial support through income diversification, and, increasingly, a mechanism for coping with climate-related livelihood pressures.

The emerging climate–labour mobility nexus in the ADD corridor presents both risks and opportunities for a just transition. Without adequate protections, climate change can exacerbate existing decent work gaps and increase vulnerabilities across the labour migration cycle. At the same time, well-governed labour mobility which integrates rights-based migration governance, provides skills development for green jobs for all workers, including migrant workers, social protection, and recognition of migrant workers' role in climate adaptation can contribute significantly to resilience in both origin and destination countries. Effective policy responses will require coherent integration of labour, migration, and climate agendas; anticipation of climate-driven labour market shifts; and strengthened cooperation across national, bilateral, and interregional governance and consultation frameworks such as the ADD.

The report has analysed the nexus of climate change and labour mobility and highlighted several critical just transition hotspots in the ADD corridor context:

- **Emerging evidence indicates that climate change increasingly influences labour migration patterns in the Asia-GCC corridor.** Labour migration decisions are complex, and with limited data sources it is challenging to establish direct causal links, however indirect impacts of climate change are evident. Climate-induced stressors drive both gradual migration through the erosion of agricultural livelihoods and abrupt displacement following rapid-onset disasters, with labour migration often occurring as a livelihood diversification strategy when local adaptation options are exhausted. Anticipating and preparing for changes in mobility patterns, ensuring social protection and decent work will increase climate resilience.
- **Migrant workers face high exposure to climate risks.** Given their concentration in outdoor, and climate-vulnerable sectors, migrant workers may face increased occupational hazards, for example, from extreme heat or UV radiation or be particularly exposed to declines in certain sectors due to climate policies. Countries across the ADD corridor are already exploring and undertaking important reforms to avoid climate change amplifying these inequities and undermining the resilience for workers and their families.
- **Ambitious climate and industrial policies in the ADD participating states could generate millions of new green jobs.** Emerging green sectors such as hydrogen, renewable energy, Electric Vehicle (EV) manufacturing, and climate-resilient construction present major opportunities for economic diversification. Realizing these gains requires large-scale worker training – and including migrant workers in this reskilling ensures adequate labour supply is available to transition in destination countries and migrant workers can then use their green skills to contribute to transition in origin countries on return. Ensuring green jobs are decent and that workers have access to social protection will also ensure a just transition.
- **Labour mobility can be a powerful adaptation strategy - but only when migration is safe, regular, fair and rights-based.** For climate-vulnerable origin countries, labour migration and remittances already serve as essential mechanisms for stabilizing household income, financing adaptation, and reducing poverty. However, high recruitment costs, debt burdens, and gendered constraints limit the adaptive potential of labour migration and, in some cases, increase vulnerability. Ensuring migrant workers have social protection and decent work enables labour mobility to be an effective and fair adaptation strategy.
- **Social protection is a critical instrument to address vulnerabilities and ensure success of transition.** Social protection systems can address or even prevent adverse impacts when applied systematically with national climate policies and measures. Well-designed and funded social protection, that can be iteratively adapted to changing needs of transition can shield all workers, including migrant workers, from the adverse impacts of climate change on living standards, and ensure that successful implementation of climate policies translates into wider societal gains leaving no-one behind.
- **Aligning skills development policies and strategies with private sector needs and ensuring migrant workers can access skills development – especially for workers in carbon-intensive sectors.** Planning for skills development will need to be integrated with climate and mobility policies and regulations, including Nationally Determined Contributions (NDCs), to ensure that skills needs are met and climate commitments are implemented effectively. Migrant workers need to be included in skills development programmes, enabling a green transition that is also just for all.
- **A coordinated, just transition approach is essential to harness opportunities and reduce risks.** Just transition requires policy coherence across several policy areas, across climate and employment policies, and policy for strengthening social protection systems. Expanding fair recruitment and labour mobility pathways, and enhancing regional and interregional cooperation, including through the ADD, are also critical steps. With proactive governance and investment, labour mobility can contribute significantly to climate resilience, economic transformation, and shared prosperity across the ADD corridor.
- Just transition frameworks tend to focus on domestic settings, which may expose transition challenges in countries with high migrant workforce dependency. In the ADD corridor, migrant workers concentrated in sectors impacted by green transition, particularly energy and construction, face substantial risks if not explicitly included in transition planning.

Section 3 of the report analysed two areas of responses to these just transition issues ; social protection and skills development. These two policies areas should be considered in a comprehensive policy mix of all nine policy areas and a broader decent work agenda.

Social protection systems emerge as a foundational pillar for managing climate risks and labour market transitions. Well-designed and adequately financed systems can prevent poverty, protect incomes and health, and enable workers to navigate employment change. Recent reforms across the GCC provide an important measure of progress in social protection for migrant workers in ADD destination countries, but much more comprehensive social protection policies and schemes are needed to fully enable a just transition in the region. Moving forward, social protection reforms should account for particular vulnerabilities amongst migrant workers, women, and those in informal or non-standard employment, especially by putting in place stronger mechanisms to ensure effective access to benefits. Support and innovation in the portability of social protection across borders is needed to adequately address climate vulnerability, especially in relation to long-term risks such as disability, chronic illness, and old age. Addressing these gaps is essential not only for migrant worker protection, but also for strengthening climate resilience across origin and destination countries.

Skills development is a key just transition tool, supporting workers and labour markets to adapt to employment changes arising from the green transition and shifting skills needs. Well-aligned skills systems can facilitate job creation and transformation by linking education and training to climate policies, labour market demand, and labour mobility pathways. The report presented examples from the ADD corridor and beyond, to strengthen skills recognition, qualifications frameworks, and bilateral, regional, and sectoral partnerships, including in construction and renewable energy. Ensuring inclusivity remains essential, particularly for women and semi-skilled workers, as does strengthening the link between certification, wages, and employment outcomes. Existing skills partnerships can serve as an example on which green skills initiatives can be further developed and scaled.

Overall, the findings underscore that just transition frameworks, while primarily designed at national level, must more fully account for labour mobility and migrant workers. Greater policy coherence across climate, labour, migration, skills, social protection, and OSH domains is essential, as is stronger bilateral, regional, and interregional cooperation through platforms such as the ADD. With inclusive governance, coordinated policy action, and sustained investment, labour mobility can support climate adaptation, economic transformation, and decent work. With such coherence, policy frameworks, international dialogue and cooperation can reduce inequalities and vulnerabilities across the ADD corridor in a sustainable and job rich manner. Specific recommended courses of action in relation to social protection, skills development are outlined below. Likewise, within the context of the ADD, the report reflects on policy coherence and cooperation.

Social Protection

Social protection systems contribute in multiple ways to help realise climate adaptation and mitigation goals and facilitate just transition. With regards climate change adaptation, social protection systems tackle the root causes of vulnerability by preventing and reducing poverty, social exclusion and inequality. Furthermore, social protection enables ambitious climate change mitigation and environmental policies. Yet, migrant workers face significant legal, administrative, and practical barriers to accessing social protection entitlements, both at destination and upon return to countries of origin.

Since the COVID-19 pandemic there have been significant structural transformations in the approach to social protection for migrant workers in the ADD corridor. The current reform momentum in both ADD destination and origin countries provides a strategic opportunity to embed anticipatory and climate-responsive elements into migrant-inclusive social protection systems. Doing so would allow countries to respond more effectively to rising climate-related risks, particularly heat stress, while building on existing institutional investments, preserving fiscal sustainability, and aligning future reforms with international social protection standards and emerging global practice on climate-responsive social protection.

Currently climate risks and climate change impacts are not addressed comprehensively by social protection systems across the ADD migration corridor. With the exception of the UAE and Bahrain, migrant workers are excluded from unemployment protection systems that are critical to protect incomes and jobs during structural economic transitions and to cushion livelihoods from the negative effects of climate hazards. Typically work injury compensation schemes at destination do not explicitly cater for climate-related occupational hazards. The measures put in place by origin countries for migrant workers are often fragmented and cannot substitute for comprehensive and adequate coverage at destination, and only some countries of origin have aimed to adapt health protection schemes to explicitly cover climate-related and heat-induced illnesses. As a result, social protection coverage for migrant workers in the corridor continues to remain skewed towards short-term benefits, and long-term costs associated with climate change (including chronic illness, disability, or premature mortality linked to prolonged exposure to climate hazards) are still largely externalised to families and communities in countries of origin. Reliance on end-of-service indemnity schemes as a substitute for comprehensive social insurance leaves migrant workers insufficiently protected against life-cycle risks that are likely to intensify under climate change, undermining both individual resilience and broader adaptation efforts

Recommendations for discussion with regards to social protection:

- **Embed climate and heat-stress risks explicitly into social protection system design:** Social protection systems should move from being climate-adjacent to climate-responsive by design, by systematically integrating climate risks, particularly heat stress into legislation, eligibility rules, and operational protocols. For example, by explicitly and legally recognise heat stress and other climate-related occupational hazards as compensable risks within social protection laws and regulations; and by aligning social protection schemes with national climate strategies and other relevant legislation.
- **Sustain and accelerate the reform momentum** to shift away from employer liability towards the development of comprehensive national social insurance systems that cover all migrant workers (across all sectors and forms of employment) particularly in ADD destination countries destination, placing particular attention that legal reforms are matched by accessible and transparent systems for access to entitlements at destination and upon return.
- **Adapt unemployment protection to address climate-related work interruptions and transitions:** Unemployment protection should be expanded to cover temporary, recurrent, and climate-induced income disruptions, which are increasingly common under rising temperatures and extreme weather. For example, by introducing short-time work compensations, or enabling temporary activation or extension of unemployment benefits during periods of climate-related work stoppages or reduced working hours (e.g. due to excessive heat); combining unemployment benefits with active labour market measures (reskilling, upskilling, and labour market reintegration), targeting workers displaced by climate impacts or decarbonisation policies; and ensuring migrant workers are explicitly included in climate-responsive unemployment schemes.
- **Explicitly recognise heat-related illnesses and deaths within employment injury insurance schemes:** Employment injury compensation systems must consistently treat heat stress and climate-related occupational risks as compensable contingencies, particularly in high-exposure sectors. For example, by establishing coverage for heat-related illnesses and fatalities for workers in designated high-risk sectors, ensuring employment injury schemes provide both medical care and income replacement for short- and long-term climate-related risks, and strengthening links between employment injury insurance, OSH prevention, rehabilitation, and return-to-work mechanisms, particularly for migrant workers, in the context of climate change.
- **Strengthen health protection and sickness benefits for climate-related health risks:** Social health protection and sickness benefits should be adapted to respond to rising climate-related morbidity, including heat-induced acute and chronic conditions. For example, expanding benefit packages to explicitly cover heat-related illnesses, dehydration, heatstroke, and climate-related diseases; ensuring that sickness benefits provide adequate income replacement; and reducing disparities in healthcare access between nationals and migrant workers, in line with the principle of equality of treatment.
- **Transition from EOSI to long-term, climate-resilient income protection:** Reliance on EOSI leaves migrant workers exposed to long-term climate-amplified life-cycle risks. These can be addressed, for example, by sustaining and accelerating transitions from EOSI towards provident funds, pension savings, and social insurance-based arrangements that provide predictable, portable, and life-cycle protection; ensuring coverage of all workers, across all sectors and forms of employment; and ensuring these schemes cover old age, disability, and survivors' benefits, which are particularly vulnerable to climate change.
- **Strengthen portability and coordination across origin and destination countries:** Climate-related risks often materialise after return, making portability and coordination essential for effective protection across the migration cycle. For example, working towards conclusion of bilateral and regional social security agreements that include employment injury, disability, health, and long-term benefits with administrative protocols in place for portability of accumulated rights and benefits; strengthening coordination between destination-country schemes and origin-country migrant welfare funds to ensure complementarity; and strengthening social protection measures in origin countries that provide adequate basic income and support climate resilience, thereby reducing the need for climate-related labour migration.

Skills Development

Skills development is essential for advancing just transition. For skills development to enable and accelerate a just transition, skills policies and environmental policies need to be developed and implemented with active involvement of social partners.³ Governments play a coordinating role across line ministries in ensuring inclusive approaches. Employers' organisations contribute information about skills and learning needs based on labour market intelligence and facilitate workplace learning. Trade unions play a pivotal role in providing skills for green jobs, enhancing recognition of prior learning, and including training clauses in collective agreements. Education and training institutions develop and enhance the relevance of their programmes to labour market needs, preparing learners, trainers, and teachers to be active agents of change.

Recommendations for discussion with regards to skills development:

- **Strengthen skills anticipation and labour market intelligence for climate change and climate action scenarios:** Planning for a just transition requires forward-looking systems to anticipate skills demand arising from climate change and climate policies. For example, establishing or strengthening institutionalised mechanisms for skills forecasting and workforce planning both nationally and across the ADD corridor; integrating climate and decarbonisation scenarios into labour market information systems; and engaging workers and employers' organisations through social dialogue to validate skills needs in high-risk and high-growth sectors.
- **Expand reskilling and upskilling pathways for workers affected by climate change and climate action:** Skills policies should proactively support workers whose jobs are displaced, substituted, and transformed by climate change or climate policies. For example, scaling up modular, flexible, and short-cycle training programmes that enable rapid reskilling and upskilling; linking training access to unemployment protection, income support, or job-transition assistance where available; and prioritising pathways into emerging green and decent jobs rather than low-quality or informal employment. Regional, bilateral and private sector skills initiatives can increasingly account for these skills needs for green jobs too.
- **Strengthen skills recognition, certification, and portability across origin and destination countries:** Skills mobility is central to maximising the developmental and adaptation benefits of labour migration under climate change. For example, investing in mutual recognition of skills, qualifications, and prior learning across the ADD corridor; developing regionally aligned occupational standards for priority green and transitioning sectors; embedding skills recognition provisions within bilateral labour and social security agreements; and ensuring that competencies acquired abroad can be formally recognised and utilised upon return.
- **Ensure equal access to skills programmes:** Skills systems must take account of gender and social inequalities that risk being reinforced during climate transitions. For example, designing targeted training and career pathways for women migrant workers in non-traditional and higher-value green sectors; addressing barriers related to care responsibilities, mobility, and access to finance; and ensuring that skills anticipation and programme design explicitly consider the differentiated impacts of climate change and labour mobility on women, youth, and other vulnerable groups.
- **Invest in lifelong learning systems to support long-term employability and climate resilience:** Given the scale and persistence of climate-driven labour market change, skills development should extend beyond initial training. For example, strengthening lifelong learning frameworks that allow workers to update skills throughout their careers; integrating digital, foundational, and transferable core skills alongside technical green skills; and ensuring sustained public financing mechanisms that support continuous learning for workers in both origin and destination countries.

³ As per the ILO Just Transition Guidelines.

Policy Coherence

The ILO Just Transition Guidelines call upon national governments to formulate, implement, monitor and evaluate gender-responsive, inclusive, integrated and coherent just transition frameworks that are coordinated with relevant economic, social and environmental policies and to extend these frameworks. Building on this, it would be important to integrate human and labour mobility scenarios in climate change policies, plans and actions, including in national adaptation policies and national disaster risk reduction policies. Labour migration policies should consider climate change as a driver of labour migration. Key to this will be building linkages between major international policy instruments such as the Paris Agreement, the Global Compact for Safe, Orderly and Regular Migration (GCM), the Sendai Framework for Disaster Risk Reduction 2015–2030, the 2030 Agenda for Sustainable Development and the ILO Just Transition Guidelines, as well as the national-level policy responses that operationalise these agreements.

Recommendations for discussion with regards to policy coherence:

- **Regional and national policy dialogues:** ADD member states can work individually and collaboratively to integrate labour mobility into climate change policies, national adaptation plans, and disaster risk reduction strategies, recognising the interlinkages between the Paris Agreement, the GCM, the Sendai Framework, the 2030 Agenda, and the ILO Just Transition Guidelines. Establishing national mechanisms to include workers' and employers' organisations in policy development will make policy development and implementation more robust.
- **Capacity development:** ADD member states can individually and collaboratively build capacity to collect and monitor data on climate-induced migration and related employment issues, support interregional dialogue for safe and regular migration pathways, and promote fair recruitment in line with ILO standards, principles and guidelines.⁴
- **Climate-responsive labour mobility agreements:** Bilateral labour mobility agreements in the ADD corridor could incorporate climate-responsive protections, including enforceable standards, fair recruitment and other non-discrimination measures.
- **Sharing of data and knowledge across countries and regions:** The ADD as an interregional consultative framework can contribute to institutionalising climate-labour mobility governance, including data sharing, joint risk assessments, and coordinated labour market planning.

⁴ With regard to fair recruitment, see the ILO. 2019. [General Principles and Guidelines for Fair Recruitment and Definition of Recruitment Fees and Related Costs](#).

Contents

	Page
Contents	10
1. Introduction	12
1.1. Climate change, labour mobility and employment	12
1.2. Introducing just transition frameworks	13
1.3. Structure of the report	15
1.4. Methodology of the report	15
1.5. Abu Dhabi Dialogue	16
2. Climate change and labour mobility in the ADD: analysis of the current situation	17
2.1. Labour mobility patterns	17
2.2. Climate change hazards and impacts	21
2.2.1. Increasing risks and hazards at work	22
2.3. Climate change and labour mobility nexus issues	26
2.3.1. How climate vulnerability is changing labour mobility patterns	26
2.3.2. Labour mobility contributing to climate change adaptation in origin countries	28
2.4. Climate action in ADD countries	31
2.4.1. Just transition and labour mobility provisions in climate change policy	31
2.5. Climate action and labour mobility nexus issues	35
2.5.1. Employment impacts of decarbonization	35
2.5.2. Just transition challenges in the labour migration context	36
2.6. Summary	37
3. Just transition responses for addressing the climate change and labour mobility nexus in the ADD corridor	39
3.1. Social protection in the context of a just transition	39
3.1.1. Social Protection in ADD destination countries	43
3.1.2. Social protection in ADD origin countries	46
3.2. Skills development to support just transition	47
3.2.1. Skills development in ADD destination countries	49
3.2.2. Skills development in ADD origin countries	50
3.3. Summary	51
4. Conclusion and recommendations	52
4.1. Social Protection	54
4.2. Skills Development	55
4.3. Policy Coherence	56
5. References	57

Key messages from the report:

- **Emerging evidence indicates that climate change increasingly influences labour migration patterns in the Asia-GCC corridor.** Labour migration decisions are complex, and with limited data sources it is challenging to establish direct causal links, however indirect impacts of climate change are evident. Climate-induced stressors drive both gradual migration through the erosion of agricultural livelihoods and abrupt displacement following rapid-onset disasters, with labour migration often occurring as a livelihood diversification strategy when local adaptation options are exhausted. Anticipating and preparing for changes in mobility patterns, ensuring social protection and decent work will increase climate resilience.
- **Migrant workers face high exposure to climate risks.** Given their concentration in outdoor, and climate-vulnerable sectors, migrant workers may face increased occupational hazards, for example, from extreme heat or UV radiation or be particularly exposed to declines in certain sectors due to climate policies. Countries across the ADD corridor are already exploring and undertaking important reforms to avoid climate change amplifying these inequities and undermining the resilience for workers and their families.
- **Ambitious climate and industrial policies in the ADD participating states could generate millions of new green jobs.** Emerging green sectors such as hydrogen, renewable energy, Electric Vehicle (EV) manufacturing, and climate-resilient construction present major opportunities for economic diversification. Realizing these gains requires large-scale worker training – and including migrant workers in this reskilling ensures adequate labour supply is available to transition in destination countries and migrant workers can then use their green skills to contribute to transition in origin countries on return. Ensuring green jobs are decent and that workers have access to social protection will also ensure a just transition.
- **Labour mobility can be a powerful adaptation strategy - but only when migration is safe, regular, fair and rights-based.** For climate-vulnerable origin countries, labour migration and remittances already serve as essential mechanisms for stabilizing household income, financing adaptation, and reducing poverty. However, high recruitment costs, debt burdens, and gendered constraints limit the adaptive potential of labour migration and, in some cases, increase vulnerability. Ensuring migrant workers have social protection and decent work enables labour mobility to be an effective and fair adaptation strategy.
- **Social protection is a critical instrument to address vulnerabilities and ensure success of transition.** Social protection systems can address or even prevent adverse impacts when applied systematically with national climate policies and measures. Well designed and funded social protection, that can be iteratively adapted to changing needs of transition can shield all workers, including migrant workers, from the adverse impacts of climate change on living standards, and ensure that successful implementation of climate policies translates into wider societal gains leaving no-one behind.
- **Aligning skills development policies and strategies with private sector needs and ensuring migrant workers can access skills development – especially for workers in carbon-intensive sectors.** Planning for skills development will need to be integrated with climate and mobility policies and regulations, including Nationally Determined Contributions (NDCs), to ensure that skills needs are met and climate commitments are implemented effectively. Migrant workers need to be included in skills development programmes, enabling a green transition that is also just for all.
- **A coordinated, just transition approach is essential to harness opportunities and reduce risks.** Just transition requires policy coherence across several policy areas, across climate and employment policies, policy for strengthening social protection systems; expanding fair recruitment and labour mobility pathways; and enhancing regional and interregional cooperation, including through the ADD, are critical steps. With proactive governance and investment, labour mobility can contribute significantly to climate resilience, economic transformation, and shared prosperity across the ADD corridor.
- Just transition frameworks tend to focus on domestic settings, which may expose transition challenges in countries with high migrant workforce dependency. In the ADD corridor, migrant workers concentrated in sectors impacted by green transition, particularly energy and construction, face substantial risks if not explicitly included in transition planning.

This report was developed with the financial support of the Ministry of Human Resources and Emiratization, in collaboration with the Abu Dhabi Dialogue Permanent Secretariat. Further financial contributions were made by the [ILO STREAM Programme: Extending Social Protection to migrant workers and their families in the South Asia-Gulf Corridor](#). The report was prepared by Samantha Sharpe, Lailly Prihatiningtyas and Monique Retamal at the University of Technology Sydney (UTS) Institute for Sustainable Futures, and reviewed by Mette Grangaard Lund, Ryszard Cholewinski, Nilim Baruah, Catherine Laws, Amish Karki, Luca Pellerano, Momin Badarna, Jana Birschler, and Nilim Baruah.

The opinions and views expressed in this publication are those of the author(s) and do not necessarily reflect the opinions, views or policies of the ILO or its constituents. Reference to names of firms and commercial products and processes does not imply their endorsement by the ILO, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

1. Introduction

1.1. Climate change, labour mobility and employment

Climate change is creating significant impacts in the world of work. Extreme weather events such as storms, floods and heat waves disrupt work and livelihoods, and create lasting impacts through the loss of working hours, income, and productivity as well as losses of property and assets. Slow onset events such as sea level rise and droughts also create significant impacts on employment and livelihoods. Both types of climate impacts are already occurring in the region and are expected to intensify in the future.⁵

These impacts affect the complex and multi-layered decision-making individuals and communities make about labour mobility. The Intergovernmental Panel on Climate Change (IPCC)'s Sixth Assessment Report highlights that climate change has generated and perpetuated vulnerability through displacement and involuntary migration resulting from extreme weather and climate events, and compounds vulnerabilities from growing inequality, and urbanisation.⁶ ILO research on global warming and its impact on decent work, highlights that higher levels of heat stress are associated with increased out-migration in recent years, suggesting households take climate conditions into account in their migration decisions.⁷

Climate policies and climate action are also transforming the composition of work. New jobs are being created in industries driving decarbonisation and other aspects of environmental protection. Some existing jobs are decreasing in number or have shifting requirements and skills needs. Most jobs will need to change in some respects, either with new skills, utilising new technologies and processes, or working in new ways (such as changing work hours to deal with heat).⁸

Labour migration is a defining characteristic of current labour markets. Labour mobility accounts for the majority of international migration. For example, in 2022 there were an estimated 285 million international migrants, with 167.7 million being international migrant workers.⁹ Labour mobility has strong linkages to sustainable development, with migration bringing demographic, social and economic benefits to individuals and communities in origin and destination countries. Labour mobility, if well-governed, can reduce inequalities and build connections within and between communities and countries. People move for better jobs and opportunities, sending remittances to their home communities and can eventually return with new skills, knowledge and networks to their origin countries. Destination countries benefit from migrant workers' skills and expertise, while overcoming labour and skills shortages due to demographic and other socio-economic changes. However, in general, if not well-governed, labour mobility can place migrant workers and their families in more vulnerable positions, open to risks of exploitation and exclusion.

The ADD corridor is characterised by a highly mobile working population. Immigrant and emigrant populations represent 22.5 per cent and 10.9 per cent of the total of 168.3 million inhabitants of the Arab states (incorporating most ADD destination countries); much higher, respectively, than the world average of 3.6 per cent.¹⁰ While the Arab States region represent just 2.2 per cent of the total world population, their stocks of immigrants and emigrants represent, respectively, 13.5 per cent and 6.5 per cent of the world's total migrant stock.¹¹ 13.5 per cent of all migrant workers in 2022 were in the Arab States region.¹² Thus, when considering how climate change impacts the world of work in the Abu Dhabi Dialogue (ADD) corridor, labour migration becomes important to consider.

This report examines the interactions between climate change, just transition and labour mobility within the ADD corridor. This labour mobility corridor includes seven destination countries: the Kingdom of Bahrain, State of Kuwait, State of Qatar, Sultanate of Oman, Kingdom of Saudi Arabia, the United Arab Emirates and Malaysia, and 10 countries of origin: People's Republic of Bangladesh, Republic of India, Republic of Indonesia, Federal Democratic Republic of Nepal, Islamic Republic of Pakistan, the Republic of the Philippines, Democratic Socialist Republic of Sri Lanka, Kingdom of Thailand and the Socialist Republic of Vietnam. The ADD corridor sees more than three million workers travel from Asia to work in the ADD destination countries.¹³

⁵ IPCC. (2023). [Summary for Policymakers](#). In: *Climate Change 2023: Synthesis Report*, pp. 1-34.

⁶ IPCC (2022). [Climate Change 2022: Impacts, Adaptation, and Vulnerability](#).

⁷ Kjellstrom, T., et.al. (2019). [Working on a warmer planet: The effect of heat stress on productivity and decent work](#).

⁸ Kjellstrom, T., et.al. (2019). [Working on a warmer planet: The effect of heat stress on productivity and decent work](#).

⁹ ILO (2024b). [ILO global estimates on international migrants in the labour force 4th Edition](#).

¹⁰ ILO. (2024c). [Assessment of Labour Migration Statistics in the Arab States](#).

¹¹ ILO. (2024d). [Arab States Employment and Social Outlook - Trends 2024: Promoting social justice through a just transition](#).

¹² ILO. (2024b). [ILO global estimates on international migrants in the labour force 4th Edition](#).

¹³ ADBI, OECD, & ILO. (2025). [Labor Migration in Asia: Fair recruitment, training, and development](#) and UN-DESA. (2024). [International Migrant Stock 2024](#).

As climate change and climate policies are changing labour markets both in countries of origin and countries of destination, there is an increasing need to better understand how climate change, climate policies, and labour mobility interact, and how challenges and opportunities can be accounted for. Migration, especially international migration, is driven by multiple factors that motivate people to move. These factors include economic, social, cultural, political and environmental factors, operating individually or collectively, and directly or indirectly. Climate change impacts can be drivers of migration, although largely through indirect interaction on other factors such as the economic and political factors.¹⁴ Migration can support sustainable development in both origin and destination countries, but only if accompanied by the provision of decent work, social protection and access to other services and rights. Without such a people-focused and rights-based approach, migration can increase climate vulnerability rather than reduce it.

Increased labour mobility in the context of climate change can be anticipated in some situations.¹⁵ Origin and destination countries need to develop capacities in key institutions to anticipate these changes and coordinate climate change and labour mobility policy domains.¹⁶ In origin countries, this means ensuring adequate policies are in place to mitigate and adapt to climate change and additional investments are made to reduce climate vulnerabilities that could leave people with little option but to move. In destination countries, it means reducing exposure and vulnerability to climate hazards for all workers, including migrants. Across both contexts, employment policy, regulations and standards need to recognise and adjust working conditions for a changing climate, while providing inclusive skills development and social protection to support workers who are transitioning to green jobs.

1.2. Introducing just transition frameworks

The concept of a just transition is central to delivering sustainable development in its economic, social, and environmental dimensions and to addressing the linkages between them. It is instrumental in taking ambitious action on environmental and climate change and pursuing the realization of the goals and commitments of the Paris Agreement¹⁷ and enabling accelerated climate action.¹⁸

The ILO *Guidelines for a just transition towards environmentally sustainable economies and societies for all* (henceforth ILO Just Transition Guidelines) developed by representatives of governments, employers' and workers' organizations in November 2015, and endorsed by the International Labour Conference in June 2023, provide a policy framework and a practical tool to help countries at all levels of development to address climate change in a way that advances social justice and promotes decent work creation. The Guidelines highlight nine policy areas (see Box 1) that are needed to advance a just transition. The ILO Just Transition Guidelines explicitly mention that the transition to environmentally sustainable economies and societies will face both opportunities and challenges, amongst those "the need for enterprises, workplaces and communities to adapt to climate change to avoid loss of assets and livelihoods and involuntary migration".¹⁹

In June 2023, the International Labour Conference adopted the Resolution *concerning a just transition towards environmentally sustainable economies and societies for all*. As mentioned above, this resolution endorsed the Guidelines but also expanded on various topics which had developed since the inception of the Guidelines in 2015. This included expanding on the ILOs just transition mandate and role, which, amongst others, included a focus on research and guidance "to better understand and address the impacts of climate change on inequality and social exclusion as well as on labour mobility through a rights-based lens" and to "formulate coherent just transition frameworks for labour mobility schemes that advance decent work, skills mobility and development, and poverty reduction with special consideration given to least developed countries and small island developing States".²⁰ This ILO report is a contribution towards this work and efforts in the ADD.

¹⁴ Government Office for Science. (2011). [Foresight: Migration and Global Environmental Change. Future Challenges and Opportunities](#), and Rigaud KK, et.al. (2018) [Groundswell: Preparing for internal climate migration](#).

¹⁵ ILO. (2022a). [Human mobility and labour migration related to climate change in a just transition towards environmentally sustainable economies and societies for all](#) (Just Transition Policy Brief).

¹⁶ ASEAN & IOM. (2024). [ASEAN Migration Outlook: second edition](#).

¹⁷ ILO. (2023d). [Resolution concerning a just transition towards environmentally sustainable economies and societies for all](#).

¹⁸ UNFCCC. (2025). [COP30 decision on the United Arab Emirates Just Transition Work Programme. Decision -/CMA.7. \(Advance Unedited Version\)](#).

¹⁹ ILO. (2015). [Guidelines for a Just Transition towards environmentally sustainable economies and societies for all](#).

²⁰ ILO. (2023d). [Resolution concerning a just transition towards environmentally sustainable economies and societies for all](#).

Box 1: Policy areas for a just transition

The ILO's 2015 *Guidelines for a just transition towards environmentally sustainable economies and societies for all* outline nine key policy areas essential for ensuring that the transition towards lower carbon economy is fair, inclusive and supportive of decent work, which include:

1. Macroeconomic and Growth
2. Industrial and Sectoral Policies
3. Enterprise Policies
4. Skills Development
5. Occupational Safety and Health (OSH)
6. Social Protection
7. Active Labour Market Policies (ALMPs)
8. Labour Rights
9. Social Dialogue and Tripartism

The guidelines were developed through a social dialogue process and endorsed during the 111th International Labour Conference (2023) through the *Resolution concerning a just transition towards environmentally sustainable economies and societies for all*, with the resolution highlighting the need for integrating just transition measures into NDCs and climate policies, as well as into relevant national policies in a coherent, integrated and comprehensive manner.

Climate change exacerbates existing vulnerabilities for migrant workers. Escalating climate hazards increase occupational risks for workers concentrated in exposed sectors (for example extreme heat hazards for construction and agricultural workers), resulting in deteriorating working conditions, adverse health outcomes, and reduced productivity, with potential longer term knock-on effects for incomes and living standards. These climate impacts may make already vulnerable workers more at risk, for example in terms of jobs and income stability, social protection coverage, or working conditions, for example due to new climate induced OSH risks.

Simultaneously, climate impacts in origin countries interact with socio-economic factors to drive labour migration decisions. Where labour migration occurs without adequate protections or access to decent work in destination countries, it may increase, rather than reduce, household vulnerability, particularly when labour migration is financed through debt or asset depletion.

Climate action is also driving structural changes in labour markets that directly affect migrant worker populations. Migrant workers in Gulf Cooperation Council (GCC) destination countries are often over-represented in carbon-intensive sectors, including oil and gas extraction, manufacturing, and construction serving fossil fuel industries. As employment in these sectors contracts, ensuring that affected workers (including migrants) have access to retraining, active labour market programmes, and social protection is essential for achieving just transition outcomes. Concurrently, as demand increases for employment in green sectors including renewable energy, green hydrogen production, and climate-resilient infrastructure, ensuring this work is decent, adequately protected, and accessible to all workers is critical to meeting both climate and sustainable development objectives. This includes ensuring that migrant workers have access to training and inclusive skills development pathways that enable participation in emerging green industries.

Just transition frameworks predominantly operate at national policy levels, meaning that migrant workers may not be well-covered by existing just transition frameworks or included in the development of new ones. However, just transition frameworks provide an opportunity for policy coherence across line ministries and several policy areas (i.e. the nine policy areas of the ILO Just Transition Guidelines – see Box 1 above). Well-governed rights-based labour mobility and adaptation strategies can provide opportunities to increase resilience and adaptation, avoid the loss of assets and livelihoods, and improve the skills base in destination countries and in home communities when migrants return.

Social protection and skills development are integral to a just transition, and policy coordination between origin and destination countries can ensure migrants can access both of these. Contributory social protection schemes that accompany workers across the labour migration cycle, rather than terminating upon contract completion, would provide continuity of coverage during periods of transition. For instance, adequate compensation in cases of heat-related occupational injuries, long-term illnesses as well as deaths is essential to ensure adverse health impacts do not translate into economic hardship for migrant workers, their families as well as origin countries. Unemployment benefits for migrant workers in industries undergoing transformation can facilitate reskilling, while early retirement or at least adequate and fair end-of-service indemnities should be considered for those migrant workers who cannot be reskilled and transitioned.

Bilateral labour agreements could incorporate provisions for skills portability and recognition, enabling workers to carry certified competencies acquired in destination countries back to origin country labour markets. Origin countries could develop targeted reintegration programmes that leverage skills acquired abroad in support of domestic green industry development. Social protection is another critical enabler of climate action and a catalyst for a just transition. Comprehensive social protection systems help to protect people's incomes, health and jobs, as well as enterprises, from climate shocks and the adverse impacts of climate policies.²¹

Skills development partnerships that balance meeting destination country labour demands with strengthening origin country human capital, combined with temporary and circular labour migration pathways that facilitate knowledge and technology transfer, can help mitigate these risks and also help address any unintended consequences such as reducing the skilled workforce needed for origin countries' own transition efforts. If labour mobility draws workers with technical competencies relevant to renewable energy, construction, and engineering to other countries this could jeopardise origin country capacity to achieve climate and sustainable development objectives, slowing overall transition and potentially worsening climate outcomes for all. This has been evidenced in other regions such as the Pacific.²²

A final issue specific to the ADD is that public employment is projected to be impacted in the ADD destination countries in the Gulf region, as government revenues from fossil fuels decline due to global and regional shifts away from fossil fuel energies. Recent research by ILO and the Islamic Development Bank (IsDB)²³ on decarbonisation scenarios in the MENA region indicates that without compensating international support, reduced oil royalties would constrain public expenditure with related employment impacts. Planning and preparing labour markets, the private sector, and all workers for these transitions is a necessity for achieving just transition outcomes. These issues are explored in further detail in Section 3.

1.3. Structure of the report

This report aims to inform policy discussions and decisions with regards to just transition planning in the ADD countries. The report includes four further sections, after this introduction. Section 2 examines existing patterns of labour mobility and climate risks and vulnerabilities and assesses how they currently interact. Section 3 discusses the climate change and labour mobility nexus and the challenges and opportunities that exist at this nexus in the ADD corridor. Section 4 discusses just transition responses that provide decent work, social protection and skills development, and highlights a range of relevant policies, programmes and mechanisms that are examples of good practices and can provide an avenue for peer learning across ADD member jurisdictions and beyond. Section 5 provides conclusions and recommendations for actions for consideration by ADD member states.

1.4. Methodology of the report

The report examines labour migration dynamics in the context of climate change across the ADD corridor, drawing exclusively on publicly available documents and data. The analysis synthesizes reports from international organizations, non-governmental organizations (NGOs), and policy think-tanks, along with relevant academic articles to corroborate the analysis. The report also draws heavily from government laws, decrees, policy statements, and official communications from ADD member states – including previous research reports to the ADD,²⁴ and country-level reports for the United Nations Framework Convention on Climate Change (UNFCCC). The statistical data for the analysis was derived from publicly available databases, including the United Nations Department of Economic and Social Affairs (UNDESA), ILOSTAT, World Bank Open Data Base, and the International Organization for Migration (IOM) migration portal. The most recent sources of information have been selected, with most cited works published between 2018 and 2025.

The study has several limitations due mainly to resource and time constraints. It relies on secondary sources and officially reported data, which may not capture informal migration flows or undocumented workers' experiences. Climate-migration causal relationships are inferred from existing studies rather than primary field research. Some countries lack systematic information on migrant worker living and working conditions and policy, while disaggregated data by gender, sector, and migration status remains limited in parts of the ADD corridor.

²¹ ILO. (2024e). *World Social Protection Report 2024-2026: Universal social protection for climate action and a just transition*.

²² ILO and IOM. (2022). *Pacific Climate Change Migration and Human security: Climate change and labour mobility in Pacific Island Countries Policy Brief*.

²³ ILO and IsDB. (2023). *The social, economic and employment impacts of decarbonization and green industrial growth scenarios for the Middle East and North Africa region*.

²⁴ UN Women. (2024). *Current and Potential Demand for Women Workers in the Renewable Energy sector in India and the UAE*, paper prepared for the 7th ADD Ministerial Consultation.

1.5. Abu Dhabi Dialogue

This report is developed in response to the Abu Dhabi Dialogue Seventh Ministerial Declaration from February 10-11, 2024. For the Seventh Ministerial Declaration, the ADD adopted a set of guidelines for a collaborative thematic agenda, of which climate change, just transition, and labour mobility were amongst the priority research areas. The report aims to contribute to one of these areas in respect of which the ADD Secretariat was requested to

“conduct a comprehensive thematic program to analyse the correlation between existing labour market policies and workers’ ability to a Just Transition among various economic sectors and occupations. Identify sectors that will witness high-demand green jobs in the ADD countries, pinpoint initiatives that ADD member states can unilaterally, bilaterally, or regionally develop and implement to promote its efforts to upskill and reskill its labour force to meet the demand and outline necessary social protection policies to facilitate a Just Transition”.

2. Climate change and labour mobility in the ADD: analysis of the current situation

This section examines the present state of play in the ADD corridor of existing labour mobility patterns and current and projected climate change impacts in ADD member states. These are examined individually before focussing on just transition issues at the climate change and labour mobility nexus in the unique context of the ADD. Section 2.3 discusses these issues for climate change and labour mobility, and Section 2.5 discusses them for climate action and labour mobility.

1.6. Labour mobility patterns

There is significant labour mobility across the ADD corridor. ADD destination countries, including the six GCC countries and Malaysia, host large numbers of temporary migrant workers (see Figure 1).²⁵ In 2024, GCC countries hosted 10.1 per cent of migrants globally and over half of Asia's migrant workers journeyed to the GCC, where migrants comprise over 50 per cent of the population.²⁶ By mid-2024, according to the latest statistics available, GCC countries hosted 36.7 per cent of migrants from the ADD's origin countries,²⁷ notably from Bangladesh, Pakistan, and India (see Table 1). In Malaysia, while migrants' share is just above 10 per cent of population, the country hosts a significant proportion of migrants from ADD origin countries, including Bangladesh, Indonesia and Nepal.²⁸ For both destination and origin countries, temporary migrant workers continue to play a strong role in the labour markets and development, with evidence indicating migrant workers' positive influence on employment outcomes.²⁹

In the GCC, migrant workers are mostly employed in the private sector, particularly in construction, freight, logistics, transportation, hospitality, and care work, where they fill jobs across all skill levels.³⁰ In Malaysia, migrants work in sectors with domestic labour shortages, especially in labour-intensive sectors like manufacturing, agriculture, and services. However, this trend is decreasing due to economic restructuring and policies reducing dependency on migrant workers.³¹

A range of factors contribute to these labour mobility dynamics. For destination countries, labour market demand, labour shortages in specific sectors, and wage disparities motivate continued recruitment of migrant workers especially in the private sector.³² For workers in origin countries, a lack of job opportunities and decent livelihoods at home, the presence of existing migration pathways, including well-established recruitment and migration services, regional and cultural proximity, all enables labour migration.

²⁵ ILO. (2024a). [Effective matching of the demand for and supply of migrant workers between Abu Dhabi Dialogue countries of origin and destination](#) [Research paper]. Abu Dhabi Dialogue., ILO. (2024b). [ILO global estimates on international migrants in the labour force 4th Edition](#).

²⁶ ADBI, OECD, & ILO. (2025). [Labor Migration in Asia: Fair recruitment, training, and development](#), UN-DESA. (2024). [International Migrant Stock 2024](#).

²⁷ This number excludes Vietnam due to data availability.

²⁸ UN-DESA. (2024). [International Migrant Stock 2024](#). The UN-DESA migrant stock does not disaggregate migrants by type, while the ADBI, ILO & OECD's report provides the aggregate data on migrant workers of Asian origin. In this study, "migrants" refers to the total migrant population, while "migrant workers" refer to individuals who migrate for employment purposes.

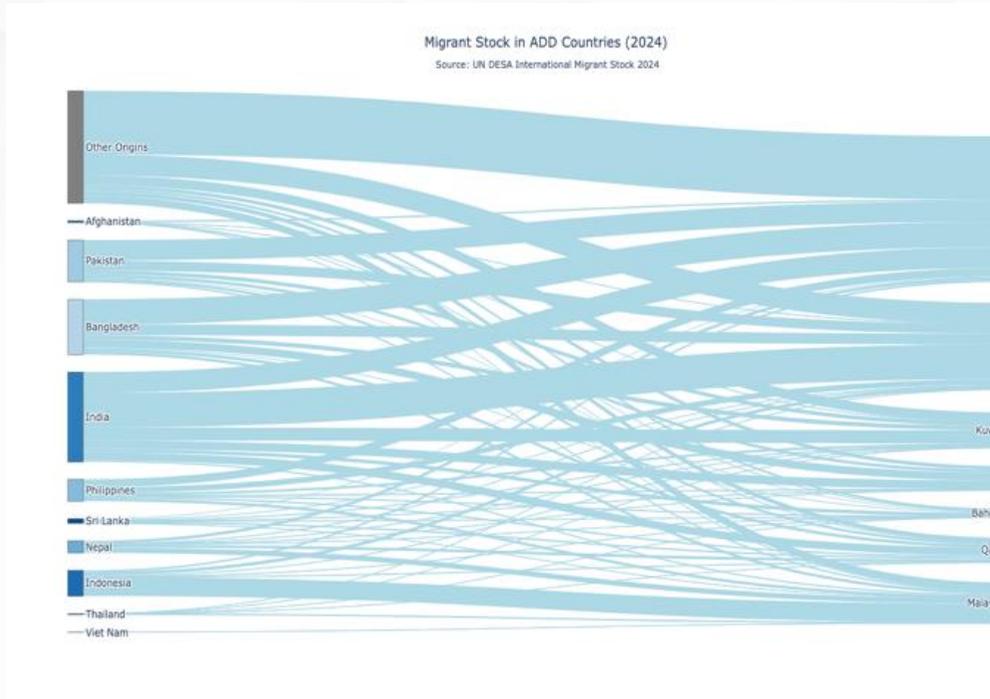
²⁹ Abdur Rahman, A., Bilo, S., Chatterjee, S., & Cheng, N. F. L. (2024). [Migration, Automation, and the Malaysian Labor Market](#) and Alfarhan, U. F. (2018). [Earnings Differentials and Nationalisation Policies in GCC's Private Sector Labour Market](#). In P. Fargues & N. M. E. Shah (Eds.).

³⁰ De Bel-Air, F., & Shah, N. M. (2025). [The future of migration to GCC countries: migrants' aspiration, labour reforms, and politics](#) and ILO. (2024b). [Effective matching of the demand for and supply of migrant workers between Abu Dhabi Dialogue countries of origin and destination](#) [Research paper]. Abu Dhabi Dialogue.

³¹ Abdur Rahman, A., Bilo, S., Chatterjee, S., & Cheng, N. F. L. (2024). [Migration, Automation, and the Malaysian Labor Market](#), ADBI, OECD, & ILO. (2025). [Labor Migration in Asia: Fair recruitment, training, and development](#), and Aun, L. H. (2025). [Facilitating gainful labour migration in Southeast Asia remains an elusive task](#).

³² ADBI, ILO, & OECD. (2024). [Labour migration in Asia: trends, skills certification, and seasonal work.](#), ADBI, OECD, & ILO. (2025). [Labor Migration in Asia: Fair recruitment, training, and development.](#), Alfarhan, U. F. (2018). [Earnings Differentials and Nationalisation Policies in GCC's Private Sector Labour Market](#). In P. Fargues & N. M. E. Shah (Eds.) and Khadri, S. (2018). A. Ibid. Highly-Skilled Professionals in the GCC: Migration Policies and Government Outlook. In P. Fargues & N. M. E. Shah (Eds.).

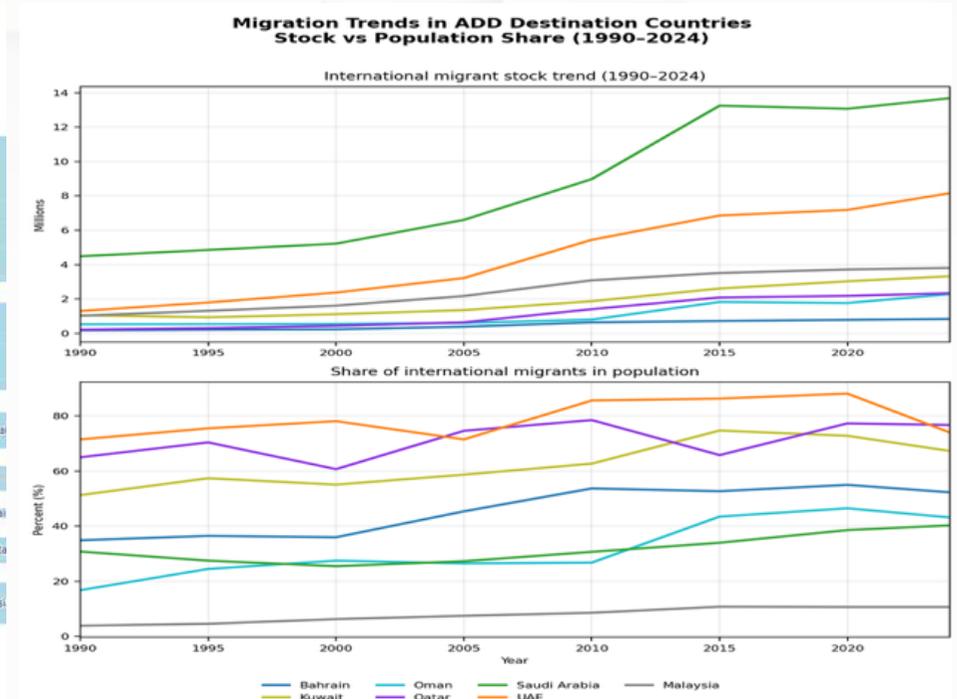
Figure 1: International migration trends in ADD member states



Panel 1: International migrants' stock in ADD corridors, 2024

The largest bilateral labour migration corridors are India-UAE (3.25 million), Bangladesh-Saudi Arabia (2.36 million), and India-Saudi Arabia (1.95 million), together making up nearly 25 per cent of international labour migration to the GCC. In total, Bangladesh, India, and Pakistan contribute 55.7 per cent of migrant workers, while Saudi Arabia and UAE receive 44.1 and 26.3 per cent, respectively.

* Disaggregated data on labour migration from Vietnam to the GCC is not available.



Panel 2: Share of migrants to population in the GCC

Migrants have made up most of the population in Qatar, the UAE, and Kuwait for decades. Migrant numbers in the GCC have continued to grow, although with a decreasing trend in terms of population share. Most migration is for employment. In Malaysia, the number of migrants has been steady, with a small decline in international migrants as a share to the total population. These trends correspond to the structural and policy changes in the reflecting country.

Source: processed from UN-DESA (2024)

While most of the migrant workers continue to fill low-skilled occupations in ADD destination countries, there is emerging evidence of them transitioning to higher skilled positions. In the GCC, a significant share of migrants from Nepal, Sri Lanka, Pakistan, and Philippines work in higher-skilled occupations, while countries such as Bangladesh and Indonesia continue to show an upward trend in the average skill level of their migrant workers in the GCC (see Table 1). This shift is driven by policies in origin countries to boost skilled migration and leverage the benefits of labour mobility and remittances.³³ In contrast, despite policies to limit the number of low-skilled migrant workers, migrants from ADD origin countries remain overrepresented in these positions in Malaysia. Nevertheless, empirical evidence shows that these roles significantly contribute to creating higher-quality jobs for locals by boosting sectoral productivity.³⁴ ADD destination countries also employ high-skilled migrant workers; however, these positions are mostly held by migrants from other origin countries, with the high-skilled migrants from ADD origin countries generally aiming for countries with better mobility pathways, including enhanced opportunities for permanent residency, such as in East Asia, North America, and Western Europe.³⁵

Table 1: Migrant workers' profile between ADD countries, based on country of origin, 2024

Origin Country	Migrants to ADD destinations 2024	Total emigrants in 2024	% of migrants ADD destination	% Women migrants in ADD destination	Primary ADD destination mid 2024	Skill profile in GCC FY2023/2024
Afghanistan	169,374	7,500,000	0.49%	29.14%	Saudi Arabia (90.5%)	n.a
Bangladesh	5,191,210	8,700,000	15.08%	12.42%	Saudi Arabia (45.5%)	32% skilled and 22% semi-skilled
India	8,440,644	18,500,000	24.51%	22.86%	UAE (38.5%)	n.a
Indonesia	2,421,129	3,700,000	3.31%	20.44%	Malaysia (72,8%)	3% high-school and above, 43% some high school
Nepal	1,139,914	2,600,000	11.42%	17.30%	Malaysia (44,1%)	72% skilled and 8% semi-skilled
Pakistan	3,932,482	6,900,000	1.29%	42.10%	Saudi Arabia (49.3%)	42% skilled and 8% semi-skilled
Philippines	2,043,182	7,000,000	7.03%	26.11%	Saudi Arabia (37.0%)	9% professional, 33% skilled and 11% semi-skilled
Sri Lanka	445,477	1,500,000	5.93%	45.43%	Qatar (36.3%)	78% skilled
Thailand	90,722	1,200,000	0.26%	72.68%	Malaysia (78,00%)	n.a
Vietnam	5	3,700,000	0.00%	40.00%	Malaysia (100%)	n.a

Source: International migrant stock data is processed from UN-DESA (2024) and Skill profile is compiled from ADBI, OECD & ILO (2025). The disaggregated skill profile of migrant workers from ADD countries of origin in Malaysia is not available.

³³ ADBI, OECD, & ILO. (2025). *Labor Migration in Asia: Fair recruitment, training, and development*, and ILO. (2024c). *Assessment of Labour Migration Statistics in the Arab States*.

³⁴ Abdur Rahman, A., Bilo, S., Chatterjee, S., & Cheng, N. F. L. (2024). *Migration, Automation, and the Malaysian Labor Market*.

³⁵ ADBI, OECD, & ILO. (2025). *Labor Migration in Asia: Fair recruitment, training, and development*.

Labour migration in the ADD has historically and to this day, been male dominated. Nevertheless, recent data shows an increasing number of women migrant workers, with growth rates surpassing men between 2011-2023 before stabilizing.³⁶ In the ADD context, this has been driven by several pull factors such as migration policies that favour women migrants at destination, rising women's participation in labour markets, and ageing populations which have increased demand for (mostly-women) care workers. These factors consequently increase demand for women migrant workers (particularly from Asian countries), especially in care sectors which require low to mid-skilled workers and which would traditionally have been undertaken by women due to social and cultural norms.³⁷ The situation is different with Malaysia: while the number of women migrants increased, especially during 2000-2015, it experienced a significant decline both overall and from ADD origin countries, with women migrants mostly coming from Thailand and the Philippines.³⁸ The decline might be attributed to the moratorium on hiring foreign workers since COVID-19 and the sectoral concentration of migrants in manufacturing, agriculture and plantation, construction and mining which traditionally are male dominated.³⁹ While the moratorium has gradually lifted since late 2022, selective limitations remain in place through means such as bilateral Memoranda of Understanding and industrial quotas, with the government recently adjusted the cap to align with the 13th Malaysia Plan (2026-2030).⁴⁰

Socioeconomic conditions and policies in countries of origin also play a major role in the increasing number of women migrant workers. Data shows that Indonesia, the Philippines, and Sri Lanka have high proportions of women migrant workers in the GCC, even though India provides the largest total number.⁴¹ This figure is consistent with the findings of the Asian Development Bank Institute (ADBI), Organisation for Economic Co-operation and Development (OECD) and ILO, which found that migrant workforces from these three countries are mostly women. Factors like limited job opportunities, wage disparities and economic pressures in home countries are the main drivers for migration decisions.⁴² However other factors, including improved recruitment processes, training opportunities, and bilateral agreements that facilitate skill recognition and safe, regular and orderly migration from origin countries, are also playing a role in encouraging women's labour mobility to the GCC. This is reflected in the increased number of women migrants with better qualifications migrating for work to the GCC, with an increased number of skilled women healthcare workers from the Philippines and Thailand now working in the sub-region, a trend that is projected to continue rising for the next two decades.⁴³

Although current migration pathways are well-established, rising demand for skilled workers in other high-income countries, particularly in manufacturing, construction, and care sectors, may challenge these countries' ability to attract and retain talent. These competing destinations may provide perceived better prospects, including improved opportunities for permanent residence, with the GCC frequently seen as a more temporary stopover for migrants enroute to North America or Western Europe.⁴⁴ Workers often return from the GCC during economic downturns, as was evident during the COVID-19 pandemic.⁴⁵ However, the GCC's economic growth, particularly in the private sector, remains reliant on migrant workers.⁴⁶ Ensuring a stable workforce in the GCC will require coordinated management between Asia and the GCC, for example through the ADD, and effective cooperation that addresses and aligns the needs and interests of origin and destination countries for mutual benefit.

³⁶ Luna, S. S., & Rahman, M. M. (2025). Feminized migration in the GCC States: the future of Asian female labour migration to the gulf. In F. De Bel-Air & N. M. E. Shah (Eds.), *The future of migration to GCC countries* and UN-DESA. (2024). *International Migrant Stock 2024*.

³⁷ Al-Kazi, L. A. Ibid. Challenges to Kuwaiti Women's Integration in the Private Sector. In Luna, S. S., & Rahman, M. M. Ibid. Feminized migration in the GCC States: the future of Asian female labour migration to the Gulf. In *The future of migration to GCC countries*.

³⁸ UN-DESA. (2024). *International Migrant Stock 2024*.

³⁹ Abdur Rahman, A., Bilo, S., Chatterjee, S., & Cheng, N. F. L. (2024). *Migration, Automation, and the Malaysian Labor Market*.

⁴⁰ ILO. (2023j). *Observation (CEACR) - adopted 2022, published 111st ILC session (2023): C029 - Forced Labour Convention*, Immigration Department of Malaysia (2025). *Main services: Foreign Workers*, Ministry of Economy of Federal Government of Malaysia. (2025). *Thirteenth Malaysia Plan 2026-2030*. The 13th Malaysia Plan notes that measures will be imposed to reduce reliance over "foreign workers" – which refers to low-skilled migrant workers, by capping the average low-skilled migrant workers to 10% of total workforce by 2030 and 5% by 2035.

⁴¹ UN-DESA. (2024). *International Migrant Stock 2024*.

⁴² ADBI, OECD, & ILO. (2025). *Labor Migration in Asia: Fair recruitment, training, and development*, and ILO. (2024c). *Assessment of Labour Migration Statistics in the Arab States*, and Luna, S. S., & Rahman, M. M. (2025). *Feminized migration in the GCC States: the future of Asian female labour migration to the Gulf*. In F. De Bel-Air & N. M. E. Shah (Eds.), *The future of migration to GCC countries*.

⁴³ IOM. (2024). *Recruitment and mobility of migrant women in the health sector in the Abu Dhabi Dialogue Corridors* [Research paper]. Abu Dhabi Dialogue.

⁴⁴ ADBI, OECD, & ILO. (2025). *Labor Migration in Asia: Fair recruitment, training, and development*.

⁴⁵ ILO. (2024a). *Effective matching of the demand for and supply of migrant workers between Abu Dhabi Dialogue countries of origin and destination* [Research paper]. Abu Dhabi Dialogue.

⁴⁶ De Bel-Air, F., & Shah, N. M. (2025). The future of migration to GCC countries: migrants' aspiration, labour reforms, and politics.

1.7. Climate change hazards and impacts

Analysing the ADD destination countries' climate policies and communications submitted to the UNFCCC highlights how destination countries, especially in the GCC, are facing similar sets of climate risks. These risks include increases in extreme temperatures, sea level rise, and climate-induced disasters like dust storms and other extreme weather events (see Table 2). Compounded by the existing environmental conditions, these hazards have intensified occurrences of drought, heatwaves, water scarcity and air pollution that directly endangers workers' health and job security, especially for those in outdoor sectors like construction, transport, and services, as well as those working in climate vulnerable sectors/precincts such as in agriculture and coastal areas.

Asian origin countries experience a greater range of climate hazards with significant evidence of employment impacts (see Table 2). Key climate hazards include sea level rise causing coastal flooding, land subsidence, and salinisation. Such climate impacts disturb or destroy livelihoods. For example, extreme temperatures resulting in glacier melt, droughts, and heatwaves that threaten livelihoods and worker safety. Likewise, rainfall variability impacts agricultural productivity and food security, with knock on effects for employment in the agricultural sector, a critical employment sector for many origin countries.

Indeed, climate change does not only have environmental effects. Globally, climate change and environmental degradation are directly impacting employment outcomes by lowering productivity and increasing OSH risks, especially in outdoor sectors.⁴⁷ The recent [ILO factsheets on the employment, environment and climate nexus](#) for the countries in the Arab States' region found similar impacts in the ADD destination countries.⁴⁸ The World Bank's country climate and development report⁴⁹ shows how climate change impacts on jobs are unevenly distributed across regions, populations, and sectors, with marginalized and low-income groups frequently disproportionately impacted by climate shocks and stresses, especially in agriculture.⁵⁰ Increased climate-induced extreme weather events like cyclones, floods, and droughts have also led to population displacement and economic disruption.

These challenges are already being recognised in some climate policies and strategies, for example, two of the six GCC countries have included OSH considerations in their NDCs in particular with regards to heat stress, air pollution, humidity, and productivity.⁵¹ The UAE's NDC 3.0 (2024) identified that the country is facing "a high risk of reduced productivity of outdoor workers due to heat stress, as well as morbidity and/or mortality caused by heat stroke".⁵² Likewise, Oman's NDC from 2023 refers to the risk related to global warming and rising temperatures, "the temperature increase will also significantly impact human health and well-being, particularly for vulnerable populations such as the elderly, children, and people with existing health conditions. The temperature rise will also exacerbate existing problems, such as air pollution, and increase the risk of heat-related illnesses".⁵³ Malaysia's National Policy on Climate Change 2.0 (2024) and National Energy Transition Roadmap (2023) acknowledge that the country's climate commitment will bring opportunities and challenges, including new employment and green economy opportunities, while displacing jobs in high-emitting sectors like energy, oil and gas, and the automotive sector – where the risks and benefits may not be distributed equally, thus necessitating just transition measures.⁵⁴

While considering how exposed (i.e. the changes the country face) and sensitive (i.e. how much it is affected) countries are to climate change, it is also key to consider countries adaptive capacity (i.e. how well-equipped countries are to adjust, cope, and plan for those changes). Relative to global averages, some ADD destination countries have lower-than-average climate vulnerability and have high levels of adaptive capacity (partially due to financial capacity to invest and adapt).⁵⁵ This suggests that while these countries face significant exposure to climate hazards, they are comparatively well-positioned to respond effectively. Given the strategic importance of climate-sensitive sectors - such as construction and infrastructure, logistics, and services in the GCC, and agriculture and mining in Malaysia, to the countries' development - as well as migrant workers' critical contribution to these sectors, it is essential that adaptation policies cover all workers in these sectors and are adequately resourced to support their implementation. Unlike the destination countries, Asian origin countries generally have higher vulnerability to climate shocks and lower capacity to respond. This makes them more susceptible to climate hazards and in need of international support for adaptation and mitigation.⁵⁶

⁴⁷ ILO. (2024). [Ensuring safety and health at work in a changing climate](#).

⁴⁸ ILO. (2025c, 24 October 2025). [New ILO factsheets reveal linkages between climate challenges and green job opportunities in the Arab States region](#).

⁴⁹ The World Bank analysis covers all the ADD countries of origin except India and Afghanistan. See [Country Climate and Development Reports \(CCDRs\)](#) <https://www.worldbank.org/en/publication/country-climate-development-reports>.

⁵⁰ World Bank. (2025d). [Jobs in a changing climate: Insights from World Bank Group Country Climate and Development Reports covering 93 economies](#).

⁵¹ ILO. (2026). [NDC 2.0 Review in the Arab States Regional report of the integration of just transition themes in the Nationally Determined Contributions across the Arab States](#).

⁵² United Arab Emirates. (2024). [The United Arab Emirates' Third Nationally Determined Contribution \(NDC 3.0\)](#). Dubai: Ministry of Climate Change and Environment.

⁵³ The Sultanate of Oman. (2023). [First Update of the second Nationally Determined Contribution](#).

⁵⁴ Malaysia, F. G. o. (2023). [National Energy Transition Roadmap: Energising the nation, powering our future](#). Kuala Lumpur. Malaysia, F. G. o. (2024). [National Climate Change Policy 2.0](#).

⁵⁵ ND-GAIN. (2025). [Notre Dame Global Adaptation Initiative Country Index \(ND-GAIN\)](#).

⁵⁶ All the ADD countries of origin indicate within their NDCs the conditionality of their climate actions and targets to the availability of international support, including financial support, technology transfer, and capacity development support.

1.7.1. Increasing risks and hazards at work

Climate change is amplifying occupational, health and safety risks in the GCC, exposing migrant workers to increasingly hazardous conditions as they dominate sectors with high climate vulnerability. Table 2 (in the previous section) shows that most GCC countries identified heat stress as a serious threat for outdoor workers. Reports show that extreme heat events have become more frequent and severe, with temperatures surpassing 50°C and wet-bulb readings nearing physiological limits. Workers in sectors such as construction, transportation and logistics, face the greatest exposure, with migrant workers over-represented in these sectors. The health consequences of heat stress are profound: heat stress reduces productivity by 30-50 per cent during peak hours and can cause dehydration, kidney disease, heat exhaustion, and fatal heat stroke. ILO projects that heat stress alone will result in the equivalent loss of 80 million full-time jobs globally by 2030, with productivity losses concentrated in regions already experiencing elevated temperatures.⁵⁷ The intersection of climate exposure and inadequate labour protections renders migrant workers particularly vulnerable to occupational injury, illness, and death.

Other climate-related health risks include exposure to ultraviolet radiation, extreme weather events, air pollution, vector-borne diseases and agrochemicals in the workplace. Most GCC countries identified heat stress as a serious threat for outdoor workers and ADD destination countries have introduced measures to address heat stress such as midday work bans and hydration requirements. There are opportunities to extend these measures further, such as aligning regulations with peak heat periods (rather than calendar-based measures) and ensuring all workers, including informal and migrant workers, are covered by these regulations. Additionally, strengthening monitoring and enforcement of these measures can also improve effectiveness.

In the agricultural sector, climate hazards such as heavy rainfall and flooding can disrupt work schedules and increase accident risks. These events are particularly pertinent in Malaysia where climate risk and migrant workers concentration in the sector are higher. Comprehensive responses, such as climate-sensitive OSH standards, heat stress protocols, can provide protection for agricultural workers including migrant workers.

Heat stress affects workers across demographic categories, though specific populations face elevated vulnerability, including persons with pre-existing or recently acquired medical conditions, pregnant women, and older workers. Migrant workers warrant particular attention within OSH frameworks due to structural factors that compound climate exposure: concentration in physically demanding outdoor occupations, limited bargaining power to engage in workplace discussions on remedial measures, inadequate access to health services and social protection, and housing conditions that impede recovery from heat exposure during non-work hours.

Scientific consensus indicates that effective heat protection requires transition from calendar-based restrictions to risk-based measures that account for actual environmental conditions and work intensity. The Wet Bulb Globe Temperature (WBGT) index, which measures occupational heat stress based on air temperature and relative humidity, provides an evidence-based framework for determining work-rest schedules calibrated to actual conditions.

Qatar became the first GCC country to introduce WBGT-based protections in 2021, establishing an upper threshold of 32.1 degrees Celsius to prohibit outdoor work (see Box 2). The involvement of employers and workers in the design of OSH interventions is essential for implementation effectiveness and sustainability. Workers and their representatives possess direct knowledge of workplace conditions, hazard exposure patterns, and practical constraints on implementation of protective measures. Social dialogue processes facilitate ownership of interventions and promote compliance. Migrant workers should also be included in these processes.

⁵⁷ ILO. (2023b). *Just Transition policy brief: Occupational safety and health in a just transition*.

Box 22: Protecting migrant workers from occupational heat stress in Qatar

A decision of the Minister of Administrative Development, Labour and Social Affairs (ADLSA) in Qatar (subsequently renamed as the Ministry of Labour), which was announced in May 2021, amended the legal framework in the country to better protect workers from heat stress. The new legislation was based on the findings and recommendations of a large-scale study on heat stress and strain in two sectors in Qatar, namely construction and agriculture.⁵⁸ The revised legal framework extended the dates and times of the prohibition of any outdoor work in the country. The new dates extended from 1 June to 15 September (previously 15 June to 31 August), while the new hours were set between 10:00 am and 3:30 pm (previously: 11:30 am until 3:00 pm).⁵⁹ The revised framework also introduced several other measures. In the summer of 2022, a targeted inspection campaign, focusing on construction worksites, agriculture, delivery companies and the industrial sector, led to 463 worksites (almost all in construction) being shut down for non-compliance with the legislation.⁶⁰ To inform employers and workers of the new legislation and raise awareness on the dangers of heat stress and the protective legal provisions, a number of materials were widely disseminated through different social media outlets and used in presentations to key stakeholders in Qatar. Moreover, an International Conference on Occupational Heat Stress was organized in Doha in May 2023, bringing together stakeholders to discuss and share expertise on heat stress research, and the design of mitigation strategies, policies and legislation.

⁵⁸ ILO. (2019a). *Assessment of occupational heat strain and mitigation strategies in Qatar*.

⁵⁹ Al Mazroui, Z. (2023). *Qatar's Occupational Heat Stress Legislation and Enforcement*, International Conference on Occupational Heat Stress, May 2023.

⁶⁰ ILO. (2022). *Labour reforms in the State of Qatar Coming together around a shared vision*.

Table 2: Climate vulnerabilities and their labour market implications in Asia-GCC corridor countries

Countries	Key Climate Risk	Climate vulnerability (ND-GAIN)				Observed and potential employment implications	Source
		Vulnerability	Readiness	Score	Rank		
Destination							
1 Bahrain	Extreme temperature rise, water scarcity, sea level rise, coastal flooding	0,436	0,491	52,80	61	Outdoor work at risk of heat, requiring workplace adaptation especially for the construction, services, and industry sectors. Decline of agriculture jobs due to salinization.	NDC (2021), NC (2020), ILO Factsheets (2025), NDC 3.0 (2025)
2 Kuwait	Extreme temperature rise, dust storms, droughts and water decline, sea level rise	0,362	0,439	53,90	53	Working hours and productivity losses in outdoor sectors; risks to safe working environments for citizens and residents; economic stress on oil/gas sectors affecting labour opportunities.	NDC (2021), NAP (2019), ILO Factsheets (2025)
3 Oman	Temperature rise, droughts, cyclone, low rainfall	0,420	0,465	52,30	65	Disruptions to ports/logistics, adaptation required in fisheries and tourism, green transition could create jobs.	NDC (2023), LTS (2023), ILO Factsheets (2025)
4 Qatar	Sea level rise (coastal flooding and inundation), extreme temperature rise, erratic rainfalls, dust storms	0,351	0,512	58,00	37	Outdoor work at risk of heat stress; threats to tourism, critical infrastructure, and oil/gas and energy industry could potentially affect employment.	NDC (2021), NC.2 (2025), ILO Factsheets (2025)
5 Saudi Arabia	Extreme temperature rise, desertification, droughts, sea level rise, coastal risks	0,408	0,566	57,90	41	Agriculture/irrigation and oil and gas jobs at risk but transition to renewables and carbon management could create jobs.	NDC (2021), BUR (2024), BTR (2024), ILO Factsheets (2025)
6 UAE	Extreme temperatures and sea levels rise, increased humidity, water scarcity, and extreme weather events	0,383	0,582	59,90	32	Outdoor work dominated by low-skilled migrants is at risk, the NDC and LTS projects job creation especially in the energy sector as a co-benefit of climate actions.	NDC (2024), LTS (2023), ILO Factsheets (2025)
7 Malaysia	Temperature rise, rain variability, sea level rise, floods	0,367	0,474	55,40	50	None of the documents submitted include climate change impacts on jobs.	NDC (2025), NC4 (2024), BTR1 (2024), NCCP (2024)
Origin							
1 Afghanistan	Temperature rise, droughts, glacier melt, floods, rain variability	0,588	0,243	32,80	180	Agriculture and rural livelihoods at risk leading to food insecurity.	NDC (2016), NC (2019), BUR (2019)
2 Bangladesh	Extreme temperature, erratic rainfall, floods and droughts, more intense tropical cyclones, sea-level rise, seasonal variation, riverbank erosion, salinity intrusion, and ocean acidification	0,568	0,226	32,90	178	Aggravating vulnerability for agriculture, fisheries, and textile workers. Frequent displacement undermines sustainable employment and increases migration pressure.	NDC 3.0 (2025), BUR (2023), NAC (2023)

Countries	Key Climate Risk	Climate vulnerability (ND-GAIN)				Observed and potential employment implications	Source
		Vulnerability	Readiness	Score	Rank		
3 India	Temperature rise, erratic monsoons, droughts, sea level rise, flooding	0,485	0,355	43,50	115	Decrease of income and productivity from agriculture, heat stress/loss of work in outdoor employment and informal sectors.	NDC (2022), LTS (2022), NC 3 and IAC (2023)
4 Indonesia	Floods, drought, sea level rise, climate-induced disasters (e.g. landslide, cyclones, typhoons)	0,430	0,348	45,90	98	Jobs at risk in agriculture, fisheries, forestry, and tourism. Need for green skilling for low carbon transition.	NDC (2025), LTS (2021), BTR (2024), NAC (2022)
5 Nepal	Increasing temperatures, glacier melting, loss of biodiversity, floods, drought, landslides, Glacial Lake Outburst Floods, fires and heatwaves	0,490	0,329	41,90	126	Major risk for farm/rural jobs, out-migration as an adaptation and coping strategy.	NDC (2025), BTR (2025)
6 Pakistan	Glacial melt, catastrophic monsoon flooding, droughts	0,515	0,273	37,90	152	Job and earning loss in agriculture and rural sectors; increased displacement and precarity for vulnerable communities leading to a lack of sustainable livelihoods.	NDC (2025), BTR (2024)
7 Philippines	Typhoons, sea level rise, increased rain variability, flooding, landslides, droughts, rising temperatures, extreme precipitation	0,444	0,312	43,40	116	Destruction of or productivity loss from jobs in farming/fisheries and tourism especially in coastal area, higher disaster-linked unemployment; rural-urban migration as part of climate adaptation; loss of productivity across industries, including manufacturing and tourism; and reduced incomes due to infrastructure damage.	NDC (2021), NC.2 (2025), NAP (2024), BTR (2025)
8 Sri Lanka	Rain variability and intensity, flooding, landslide, drought, extreme temperature rise, sea level rise and coastal flooding, salination	0,475	0,354	43,90	110	Loss of productivity and livelihoods of rural and agricultural workers, heat stress and loss of productivity of labour-intensive industries like textile and garments.	NDC (2025), BTR (2024), LTS (2023)
9 Thailand	Extreme temperature rise, rain variability, coastal erosion and sea level rise	0,435	0,432	49,90	80	Decrease of agriculture workers due to flooding.	NDC (2025), BTR (2024)

Source: Compiled by the authors from UNFCCC's repository, ILO Regional Factsheets and ND-GAIN index.⁶¹

⁶¹ Climate vulnerability is assessed using the [ND-GAIN Country Index](#), which evaluates exposure across six sectors: food, water, health, ecosystem services, human habitat, and infrastructure; and readiness based on economic, governance, and social factors. Countries are classified into four quadrants of vulnerability and readiness. In Table 1, colour codes indicate: **red** = high vulnerability/low readiness (urgent action), **yellow** = moderate challenges, **blue** = high challenges but strong adaptive capacity, and **green** = low vulnerability/high readiness (well positioned to adapt) ND-GAIN. (2024). [University of Notre Dame Global Adaptation Initiative: Country Index Technical Report](#).

1.8. Climate change and labour mobility nexus issues

This section discusses how climate change and labour mobility interact in the specific context of the ADD and highlights the specific just transition issues that this nexus creates, including greater exposure to climate change increasing vulnerabilities of migrant workers in destination countries, as discussed in Section 2.2 above; how climate impacts in origin countries especially in key employment sectors such as agriculture can change labour mobility patterns; and how this can create follow-on concerns including increasing indebtedness of migrant workers, and labour force gaps in origin countries. The final nexus issue for climate change and labour mobility relates to whether and under what conditions labour mobility can become a climate change adaptation strategy for households and communities in origin countries, and the strong linkages to the availability of decent work and social protection for labour mobility to be an effective adaptation strategy.

1.8.1. How climate vulnerability is changing labour mobility patterns

Data limitations and the complexity of migration decisions make it challenging to establish direct causal links between climate change and labour mobility. The relationship between climate change and labour migration is complex: social, political, economic, environmental, and demographic factors (all of which are influenced by climate change) interact to shape migration decisions. Yet, emerging evidence shows that climate change impacts can be intensifying existing vulnerabilities for migrant workers and affecting labour migration patterns in the ADD corridor.⁶² A growing body of research shows that climate-induced stressors drive both gradual migration through the erosion of livelihoods and abrupt migration following rapid-onset disasters, with adaptation becoming difficult, as slow-onset changes surpass local resilience limits.⁶³

Recent evidence suggests a more direct interaction between labour migration patterns and climate change.⁶⁴ Climate-induced migration in South Asia often occurs as a livelihood diversification strategy, with extreme weather events and resulting agricultural productivity losses contributing to labour migration (see case study Box 3 on Bangladesh below). A similar trend is observed in Indonesia, the Philippines, Vietnam, and Thailand where communities facing increasing climate hazards often choose labour migration when they are unable to adapt locally.⁶⁵ Similarly, in the Middle East and North Africa (MENA) region, labour migration is often used as a climate adaptation mechanism especially for rural communities facing aggravating risks from flooding, erratic rainfalls and increasing frequency of climate-related disasters.⁶⁶ While various reports highlight that climate-migration patterns predominantly flow from rural to urban or to nearby areas,⁶⁷ international labour migration is also occurring where there are better livelihood opportunities, pre-existing migration pathways and available capital and social networks.⁶⁸

Evidence of these climate-induced labour mobility patterns is also evident in the ADD corridor showing that climate events in the origin countries can induce labour migration as a livelihood diversification strategy.⁶⁹ In rural and impoverished regions in Nepal, individuals (especially men), migrate to GCC countries and Malaysia as a coping strategy for negative livelihood impacts of climate change.⁷⁰ Similarly, in Indonesia, men from agricultural communities dealing with rain variability and prolonged drought and the resulting reduced agricultural productivity, have resorted to temporary labour migration to Malaysia to replace lost agricultural income.⁷¹ These examples demonstrate how climate change can temporarily or permanently destroy traditional livelihoods, prompting communities to engage in labour migration for alternative livelihoods especially when opportunities to locally adapt are not available. Still, the majority of this labour migration continues to be internal migration, rather than international migration.

⁶² ADBI, OECD, & ILO. (2025). *Labor Migration in Asia: Fair recruitment, training, and development*. MMC. (2024). *Climate Change Impacts on Mobility in the Middle East: What do we know?*, UN-ESCWA. (2024). *Migration and climate change in the Arab region*. UN ESCWA., World Bank. (2023). *World Development Report 2023: Migrants, Refugees, and Societies*.

⁶³ Almulhim, A. I., Alverio, G. N., Sharifi, A., Shaw, R., Huq, S., Mahmud, M. J., Ahmad, S., & Abubakar, I. R. (2024). *Climate-induced migration in the Global South: an in depth analysis*. *npj Climate Action*, 3(1), 47.

⁶⁴ Ahmed, M. N. Q., Givens, J., & Arredondo, A. (2024). *The links between climate change and migration: a review of South Asian experiences*. *SN Social Sciences*, 4.

⁶⁵ ASEAN, & IOM. (2024). *ASEAN Migration Outlook: second edition*.

⁶⁶ MMC. (2024). *Climate Change Impacts on Mobility in the Middle East: What do we know?*, UN-ESCWA. (2024). *Migration and climate change in the Arab region*.

⁶⁷ Ahmed, M. N. Q., Givens, J., & Arredondo, A. (2024). *The links between climate change and migration: a review of South Asian experiences*. *SN Social Sciences*, 4. MMC. (2024). *Climate Change Impacts on Mobility in the Middle East: What do we know?*, UN-ESCWA. (2024). *Migration and climate change in the Arab region*. UN ESCWA., World Bank. (2023). *World Development Report 2023: Migrants, Refugees, and Societies*.

⁶⁸ ASEAN, & IOM. (2024). *ASEAN Migration Outlook: second edition*, ILO. (2025c, 24 October 2025). *New ILO factsheets reveal linkages between climate challenges and green job opportunities in the Arab States region*. MMC. (2024). *Climate Change Impacts on Mobility in the Middle East: What do we know?*, Tomoiagă, E., Pop Silaghi, M. I., Cheregi, V. I., & Cismaş, L. M. (2025). *Could climate change be a driver of migration flows from Asia? A panel data analysis*. *Journal of Applied Economics*, 28(1), 2513252.

⁶⁹ MMC. (2024). *Climate Change Impacts on Mobility in the Middle East: What do we know?*

⁷⁰ DIIS. (2024). *Climate migration amplifies gender inequalities*. DIIS Policy Brief, Issue.

⁷¹ ASEAN, & IOM. (2024). *ASEAN Migration Outlook: second edition*.

Box3: Climate stress and labour migration in Bangladesh

In Bangladesh, the increasing prevalence of climate hazards and highly vulnerable populations is changing internal and cross-border labour migration patterns. As climate disasters doubled between 1966 to 2022, migration flows have accelerated, especially internal rural-urban migration for construction and garment factory jobs.⁷² Slow onset events and frequent climate hazards erode traditional livelihoods for communities and act as a driver for migration.⁷³ International migration for employment in Bangladesh, predominantly to GCC countries, has also intensified as climate impacts erode agricultural livelihoods.

Research in climate-disaster prone regions in Bangladesh found that for many communities, migration is a last-resort coping mechanism in the face of relentless climate change impacts.⁷⁴ Frequent disasters have destroyed key infrastructure, incurred economic loss, decreased agriculture-based livelihoods, and reduced the availability of local work. The continued pressures on local livelihoods have pushed many households within these regions to send family members away for work. These migrant workers are mostly men aged 25-34, with GCC countries the main destination choice, driven by the demand for low-skilled workers, established pathways facilitated by recruitment agencies, and the opportunity for stable earnings for remittances.⁷⁵ This finding aligns with other research that shows that labour migration to Gulf countries for low-skilled jobs has long played an important role for climate resilience.⁷⁶ As international labour migration is costly, it is a long-term family decision which can only be afforded by those who have adequate financial and social capital. Most of these migrant workers are funded via debt, mainly with the assistance of relatives, but also from formal and informal financial services and/or from selling productive assets.

Bangladesh's National Adaptation Plan (2022) and the Mujib Climate Prosperity Plan (2022) recognize migration as an adaptation strategy⁷⁷. These policies address the issue by promoting climate-smart cities and locally led adaptation programmes to reduce climate-induced migration outcomes, while implementing adaptive social protection programmes that dynamically expand social assistance to address the impacts of climate shocks. These policies are further reiterated in their NDC 3.0 (2025) although provisions are still limited to internal migrants.⁷⁸ Future strategies could include plans to address climate impacts and implications for international migrant workers.

The agricultural sector warrants further analysis due to its high climate vulnerability and the high level of employment in origin countries (see Figure 2). Labour mobility, both internally and internationally, has long served as a coping strategy for rural communities and agricultural workers facing declining labour intensity, seasonal variability, and climate events. Increasing climate change impacts and limited climate adaptation options mean that more agricultural families turn to labour migration for better economic opportunities.⁷⁹ For example, in Nepal, the agricultural sector provides most of the country's employment but is experiencing a rapid decline in value. In 2023, the sector provided employment for 61.2 per cent of the population but with a GDP share of only 23.1 per cent (see Figure 2). This is less than the value of remittances inflows at 26.55 per cent of GDP in the same year.⁸⁰ Increasing climate stressors and gender norms have accelerated out-migration of men, especially to the GCC and Malaysia, leading to a significant decrease in the agricultural workforce and a shift in gender dynamics, with women now comprising 73 per cent of the sector's workforce.⁸¹ Therefore, to avoid any future unintended consequences, such as food insecurity, climate adaptation plans should include financial inclusion initiatives so that women have access to financial resources to invest in climate smart agriculture.

This is substantiated with other evidence for origin countries in the ADD. A systematic review of agricultural households in low- and middle-income countries revealed that when in situ adaptation options like irrigation, diversified cropping, and resilient seed varieties are unavailable or unaffordable, families increasingly resort to labour migration as a livelihood strategy rather than remaining in rural areas.⁸² These adaptive constraints disproportionately affect smallholder and landless farmers, who are prevalent in countries across Asia. These farmers often face declining productivity due to heat stress, erratic rainfall, and drought, leading

⁷² Bharadwaj, R., Chakravarti, D., Karthikeyan, N., Islam, S., & Tanni, U. (2024). *Exposed and exploited: climate change, migration and modern slavery in Bangladesh*. World Bank. (2024a). *Climate migration and its impact on women in Bangladesh*.

⁷³ Bharadwaj, R., Chakravarti, D., Karthikeyan, N., Islam, S., & Tanni, U. (2024). *Exposed and exploited: climate change, migration and modern slavery in Bangladesh*. Rudolph, L., Koubi, V., & Freihardt, J. (2025). *Environmental change and migration aspirations: Evidence from Bangladesh*. *Global Environmental Change*, 91, 102966, Uddin, M. J. (2023). *Climate Change, Vulnerabilities, and Migration: Insights from Ecological Migrants in Bangladesh*. *The Journal of Environment & Development*, 33(1), 50-74.

⁷⁴ Bharadwaj, R., Chakravarti, D., Karthikeyan, N., Islam, S., & Tanni, U. (2024). *Exposed and exploited: climate change, migration and modern slavery in Bangladesh*.

⁷⁵ Ibid.

⁷⁶ ILO. (2023c). *Climate change and human mobility in Bangladesh* [Policy Brief].

⁷⁷ Government of Bangladesh. (2022a). Mujib Climate Prosperity Plan 2022-2041. , Government of Bangladesh. (2022b). National Adaptation Plan of Bangladesh (2023-2050).

⁷⁸ Government of Bangladesh. (2025). *Bangladesh's third Nationally Determined Contribution (NDC 3.0)*.

⁷⁹ Ahmed, M. N. Q., Givens, J., & Arredondo, A. (2024). *The links between climate change and migration: a review of South Asian experiences*. *SN Social Sciences*, 4., Almulhim, A. I., Alverio, G. N., Sharifi, A., Shaw, R., Huq, S., Mahmud, M. J., Ahmad, S., & Abubakar, I. R. (2024). *Climate-induced migration in the Global South: an in depth analysis*. *npj Climate Action*, 3(1), 47.

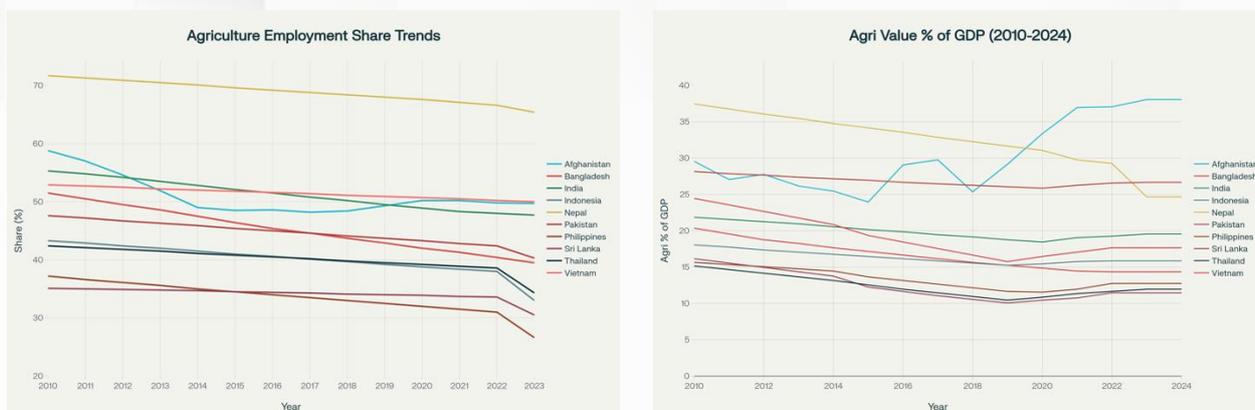
⁸⁰ World Bank. (2025c). *Personal remittances, received (% of GDP)* World Bank Open Data.

⁸¹ Government of Nepal. (2025b). *Nationally determined contribution (NDC) 3.0*.

⁸² Mukherjee, M., & Fransen, S. (2024). *Exploring migration decision-making and agricultural adaptation in the context of climate change: A systematic review*. *World Development*, 179, 106600.

them to opt for cross-border migration to supplement their income.⁸³ Insufficient agricultural adaptation (whether due to financial, technical, or infrastructural barriers) shapes climate-driven labour mobility patterns across the ADD corridor’s origin countries.

Figure 2: Agriculture share to employment and GDP in ADD countries of origin



Panel 1: Agriculture share in employment (2010-2023)

Except for the Philippines, agriculture provides employment for more than a quarter of the population for all ADD origin countries, with Nepal being the most dependant with 61.2 per cent of population working in agriculture. The data also show an overall accelerating decline of agriculture employment from 2010 to date, especially in the Philippines, Bangladesh and Indonesia.

Source: World Bank (2025b).

Panel 2: Agriculture share to GDP (2010-2024)

Aligned with employment share, agriculture value has also been declining over the years (except for Afghanistan due to sociopolitical conditions), albeit with a slight reversal from 2020. Countries such as Nepal, Sri Lanka, and Bangladesh show the most significant decline. Moreover, compared to the employment share, the value trend shows that agriculture remains a labour-intensive sector with low productivity, indicating the need for a sectoral transformation.

Source: World Bank (2025a).

1.8.2. Labour mobility contributing to climate change adaptation in origin countries

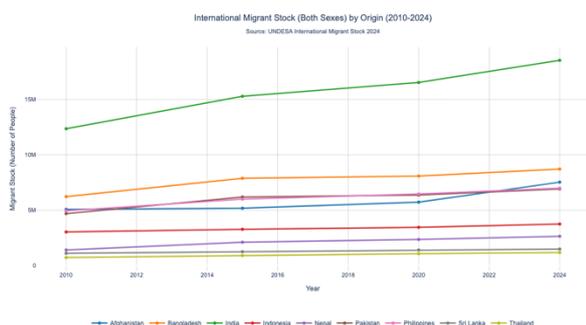
Labour migration can support climate adaptation by enabling populations to reduce their exposure to risk and to strengthen resilience to environmental pressures. Within ADD corridors, there is evidence that remittances from GCC countries increase South Asian countries’ coping capacity for climate-induced disasters.⁸⁴ Financial remittances support households’ consumption and human capital and productive investment, while social remittances allow investments in family education and help achieve better employment. The potential for remittances is very much shaped by the socioeconomic context and enabling factors like decent work opportunities, ease of doing business, and effectiveness of climate adaptation programmes, all of which are shaped by an enabling policy and socio-economic governance dynamics beyond the scope of individual migrant workers.⁸⁵ Labour migration can transform sustainable development and climate action, but only if the environment enables such co-benefits.

⁸³ ASEAN, & IOM. (2024). *ASEAN Migration Outlook: second edition.*, ILO. (2025a). *Climate change, environmental degradation and labour mobility in the ASEAN region* (ILO brief, Issue., Vigil, S., & Kim, D. (2023). *International labour migration in a changing climate: insights from Malaysia and Thailand.*

⁸⁴ Makhoul, F., & Selmi, R. (2024). 'From aspirations for climate action to the reality of climate disasters': Can remittances play key role in disaster response? *World Economy*, 47(8), 3487-3510.

⁸⁵ ASEAN, & IOM. (2024). *ASEAN Migration Outlook: second edition.*

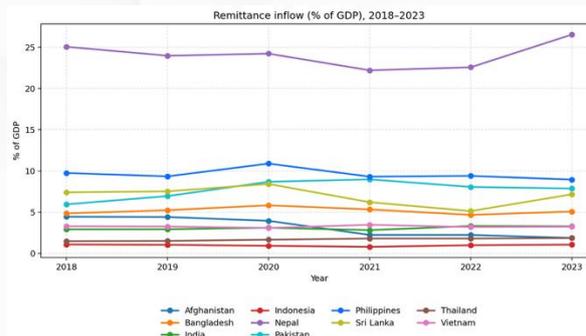
Figure 3: Emigration and remittance inflow trends in ADD countries of origin



Panel 1: International migration outflow (2010-2024)

From 2010 to 2024, international migrant stocks have generally risen across most countries in the region, with India leading in overall numbers, while Afghanistan, Indonesia, Nepal, and the Philippines demonstrate consistent, albeit varied, growth in their migrant populations abroad. Nepal, in particular, shows a noticeable upward trajectory. Although Sri Lanka and Thailand have lower migrant stocks, they too have seen increases, and minor year-to-year fluctuations across countries are likely influenced by economic, policy, or geopolitical factors.

Source: processed based on UN-DESA (2024).



Panel 2: Share of remittance inflow to GDP (2018-2023)

Aligned with the rapid migration upward trend, remittances as a share of GDP have risen sharply in Nepal. In Pakistan, the trend has risen moderately, while most other countries in the region, including Bangladesh, Sri Lanka, and the Philippines, have seen declines or only marginal increases, indicating shifting economic reliance on overseas income sources. Nepal's trend highlights this dependence on remittances while the basic sector's share (agriculture) continues to decline (see Section 2.2).

Source: processed based on KNOMAD (2025).

The relationship between remittances and conditions in origin countries is inherently complex, shaped by multiple (and often simultaneous) motivations such as altruistic, solidarity-based, and self-interested incentives. Migrants' capacity to remit may be adversely affected by economic downturns in host countries, while institutional, socioeconomic, and labour-market characteristics in those host contexts further complicate remittance behaviour. These factors collectively underscore the need for nuanced empirical strategies capable of capturing heterogeneity across migrant populations, origin and destination contexts, and the nature of climate-related shocks. Box 4 below provides a relevant example of these complexities.

Some origin countries, such as Sri Lanka and the Philippines, increasingly recognise human mobility as part of their broader climate-risk context, and are beginning to align climate policy frameworks in ways that can support migrant workers and the resilience gains they can bring. Sri Lanka's NDC 3.0 (2025) integrates cross-cutting Gender Equity and Social Inclusion (GESI) commitments and emphasizes climate action that generates multiple environmental, social, and economic co-benefits. This intent ensures that climate policies benefit vulnerable groups, including climate-related internal migrants, by providing access to green employment, climate-smart technology, skilling, and participation in policy processes and green governance.⁸⁶ The Philippines NAP 2023-2050 lists population displacement and migration as one of the focal points for adaptation action, recognizes different patterns of human mobility, and highlights rising "displacement and migration" amid climate impacts. This recognition opens policy space to link employment services, access to skills- and capacity development, social protection, and financial inclusion.⁸⁷

⁸⁶ The Sri Lanka's NDC (2025) observes that despite the risk of aggravating social vulnerability and inequality from climate change, "climate-induced migration can serve as an adaptation strategy for rural communities by enabling access to better employment opportunities, provided it is supported by appropriate capacity-building measures and guided through safe, regular, and orderly migration pathways" (p. 13). Ministry of Environment, S. L. (2025). *Nationally Determined Contributions 3.0 (2026-2035)*.

⁸⁷ The NAP emphasizes that climate-induced mobility is a growing concern for the country's climate adaptation, "as communities in vulnerable regions are compelled to migrate internally or internationally in search of improved living conditions, often lacking the proper support mechanisms to ensure safety and security" (p. 32). Population displacement and migration along with cultural heritage is set as one of the key adaptation priorities, with the document including a durable solution for climate-induced mobility, aiming at three outcomes: adaptive physical, social and economic support; robust preparatory and reintegration support, and protection of cultural heritage against climate risk (pp. 38-9, 210-12). This strategy also includes plans to develop a national policy framework on climate-induced migration to ensure social protection to migrants and displaced persons (p. 211). Philippines. (2023). *National Adaptation Plan of the Philippines 2023-2050*. Manila and Quezon City.

Box 4: Remittances and households' climate adaptation in Nepal

Nepal provides an interesting case study on how labour migration can be an effective adaptation strategy, especially for rural and agricultural communities. Nepal's high climate vulnerability, overreliance on the agricultural sector, and limited climate adaptation capacity (see Section 2.2.) mean the country is leaning on labour migration as a key climate adaptation and economic strategy. For example, in 2023, agriculture's share to GDP was lower than remittance inflows.

The latest 2021 census noted that 23.3 per cent of households had at least one member living abroad, with 7.5 per cent of the population working abroad, primarily in ADD destination countries. The census also indicates that 73.4 per cent of emigrants leave for wage reasons, with the likelihood of labour migration being seven times higher among 25–34-year-olds.⁸⁸ Nepal's remittances share to GDP is one of the highest globally and has been a key driver in reducing poverty, with over 30 per cent direct causality between 2011 and 2023.⁸⁹ While most remittances were disbursed for consumption and loan repayments, there is growing evidence of households also using them for investment in health and education.⁹⁰

Facing accelerating climate impacts, remittances also enable households to finance climate adaptation investments. A report by the Danish Institute for International Studies (DIIS) found that in climate-affected regions like Madhesh Province, families use monthly remittances to construct flood-resistant brick houses, acquire water pumps, and purchase climate-adaptive technologies such as portable stoves for waterlogged conditions.⁹¹ These funds also cover debts repayment incurred for labour migration costs and traditional expenses, especially when agriculture production is dwindling. Additionally, the World Bank report shows that having a family member working abroad improves the household's resilience in facing food insecurity.⁹²

While remittances provide substantial financing scale, there are limits to their climate adaptation potential, for example when it comes to large infrastructure investments.⁹³ Additionally, empirical analysis reveals an inverted U-shaped relationship between remittance levels and greenhouse gas emissions: moderate increases raise emissions significantly, while only major flows enable greener technologies.⁹⁴ Likewise, job security abroad is not guaranteed⁹⁵, making dependency on remittances a fragile situation. These constraints suggest remittances supplement but cannot substitute for comprehensive climate policy.

Labour migration can also be maladaptive, particularly when it intensifies pre-existing vulnerabilities or relocates migrant workers into contexts that are equally or even more precarious. Labour migration costs and lack of adequate protection of migrant workers in both origin and destination countries can lead to more precarity. If labour migration is occurring in the context of climate change and as a last resort when in-situ adaptation is not available, migrants are already in a highly vulnerable situation. Without access to decent work and safe, regular and fair pathways for employment, migration can be maladaptive. Lastly, the distribution of climate-related migration impacts are highly uneven: women, children, older persons, and populations in vulnerable situations experience disproportionate risks owing to intersecting structural disadvantages, including lower average income and educational attainment, limited access to or ownership of natural resources, and restricted access to the information, institutions, and resources necessary for effective climate adaptation.

⁸⁸ Government of Nepal. (2025a). [International migration in Nepal](#).

⁸⁹ World Bank. (2024b). [Nepal development update: International migration and well-being in Nepal](#).

⁹⁰ Ibid.

⁹¹ DIIS. (2024). [Climate migration amplifies gender inequalities](#). DIIS Policy Brief.

⁹² World Bank. (2024b). [Nepal development update: International migration and well-being in Nepal](#).

⁹³ World Bank. (2024b). [Nepal development update: International migration and well-being in Nepal](#).

⁹⁴ Saha, J., & Iqbal, Z. (2025). [The Impact of Remittances on Climate Change: Empirical Evidence from Nepal](#). *Indian Economic Journal*.

⁹⁵ Government of Nepal. (2025a). [International migration in Nepal](#).

1.9. Climate action in ADD countries

1.9.1. Just transition and labour mobility provisions in climate change policy

This section analyses the ADD climate policies and commitments under the UNFCCC's framework vis-à-vis the ILO just transition guidelines.⁹⁶ Such policy areas are important in order to ensure that the socio-economic effects of climate change and climate policies are adequately addressed. Table 3 in this section shows how some countries explicitly mention just transition in their policies, others refer to just transition policy areas such as social protection, OSH, and skills, while others make explicit references to workers, vulnerable communities, and migrant workers for example.

Globally, countries are increasingly including just transition and other socio-economic issues in their climate policies. For example, by late 2025, 79 per cent of 123 countries had made explicit references to a just transition in their NDC (80 per cent of Arab States countries, and 70 per cent of countries in Asia and the Pacific).⁹⁷ While some countries like the UAE (in NDC), Saudi Arabia (in NC.4) and Malaysia (NC.4) explicitly mention "just transition" as a term, the majority of them focus on dedicated policy areas such as macroeconomic and growth policies, industrial and sectoral policies, skill and enterprise development policies. For example, UAE's climate policy, especially the latest NDC 3.0 (2024), shows a strong just transition alignment: it explicitly refers to just transition, focusing on the energy transition that considers the economy-wide implications, emphasizing job creation and integrating transitional measures planned for vulnerable groups in sectoral targets and pathways, as well as emphasizing social inclusivity for increasing public acceptance. In general, GCC countries emphasise the climate policies' co-benefits such as economic diversification, with some references to job creation. In other countries, such as Malaysia, the climate policy is directed towards sectoral transition, such as energy, the circular economy and blue economy, with Malaysia's NDC emphasizing strengthening institutional settings, including the planned climate change bill that will formalize the emissions reduction target by law. Still, some topics are less frequently featured in climate policies (such as OSH, social protection, labour protection and social dialogue mechanisms), despite being equally important in a just transition. Social dialogue, which could help address and mitigate any blind spots in policy making, is rarely mentioned, despite the importance of social dialogue and stakeholder consultations on these topics. Such policies, as outlined above, can be further strengthened and implemented through dedicated just transition strategies and partnerships.

Origin countries show a good uptake of just transition policy areas across their climate policies. Most countries make an explicit just transition reference and provide wider policy provision in their climate policies and national communications. Many perceive just transition as a cross-cutting principle for driving climate actions, with only India referring to just transition within their Long-Term Strategy (LTS) in the context of energy transition. In this way, climate action is linked with social inclusion, job creation, and resilience. Most NDCs emphasize green job creation, skills development, and social protection for vulnerable groups, often integrating gender and youth empowerment. Bangladesh and Nepal provide very comprehensive just transition frameworks with sector-specific actions, social dialogue, and policy coherence, while Pakistan and the Philippines combine just transition with skills development for green jobs and legislative alignment. India and Indonesia highlight investment in social infrastructure and workforce reskilling. Sri Lanka embeds just transition in tripartite dialogue, focusing on green jobs and social protection, whereas Thailand and Vietnam reference just transition at a high level and cross cutting themes with less linkages to sectoral provisions (see Table 3).

⁹⁶ The analysis covers climate policy documents such as the Nationally Determined Contributions (NDC), the National Adaptation Plan (NAP), the Long-Term Strategy for Lower Carbon Transition (LTS-LC), as well as formal communication and transparency reports including National Communications (NC), Biennale Update Report (BUR), Biennale Transparency Report (BTR), and National Adaptation Communication (NAC). As the submission and communications are voluntary based, the type and period of documents being included are based on countries' latest submissions which are made available for public in the UNFCCC's repository.

⁹⁷ ILO. (2025). [Mapping just transition in NDC 3.0: global trends across 123 countries](#).

There are some examples of ADD member states' climate policies recognising labour migration and climate-induced mobility policies. Among destination countries, Oman and the UAE's NDC identify displacement risks linked to extreme weather and drought leading to health impacts. The UAE's LTS acknowledges migrants' risks from occupational climate hazards and commits to integrate migrant workers' perspectives in its forthcoming NAP which currently under development.⁹⁸ Qatar's NC.2 references migrant workers in the context of labour reforms and workforce transition. Likewise, Malaysia refers to displacement as an illustration of climate risk.⁹⁹ Bangladesh and Nepal recognize climate-induced displacement as a key adaptation priority, with Bangladesh emphasizing planned relocation and social safety nets, and Nepal outlining risk-sensitive resettlement and climate-resilient migration strategies.¹⁰⁰ Bangladesh's NAP and national climate plan point to internal migration as an adaptation strategy through climate-smart cities and locally led programmes, with Adaptive Social Protection to mitigate climate risks, but this does not extend to international migrant workers.¹⁰¹ Likewise, Sri Lanka and Philippines recognize migration as a potential adaptive strategy, contingent on safe, regular, and orderly pathways, while also addressing gendered vulnerabilities.¹⁰² In the Philippines, climate-induced mobility and migration is set as one of the key adaptation strategies in their NAP, citing that migrants' integration into the local workforce can lead to improved productivity and growth when skills are matched.¹⁰³ Other countries, such as Pakistan, India, Indonesia, Thailand, and Vietnam, acknowledge displacement and migration, for example in terms of disaster risk reduction or internal mobility (see Table 3). Overall, while origin countries increasingly link human mobility to adaptation and resilience, there is an emphasis on internal migration. Thereby, focusing on international labour migration and migration pathways could further strengthen and improve the role of labour mobility as a means of climate adaptation.

In summary, the analysis shows that although there is a positive progress in just transition and climate mobility provisions within ADD countries' climate policy frameworks, the linkages between climate policies and international labour migration are still nascent. These findings underline the need to promote the ILO guiding principles of a just transition, in particular the principle of policy coherence, and through effective international cooperation and dialogue.

⁹⁸ United Arab Emirates. (2024). [The United Arab Emirates' Third Nationally Determined Contribution \(NDC 3.0\)](#).

⁹⁹ State of Qatar. (2025). [Second National Communication under UNFCCC](#).

¹⁰⁰ Government of Bangladesh. (2025). [Bangladesh's third Nationally Determined Contribution \(NDC 3.0\)](#) and Government of Nepal. (2025b). [Nationally determined contribution \(NDC\) 3.0](#).

¹⁰¹ Government of Bangladesh. (2022a). Mujib Climate Prosperity Plan 2022-2041, Government of Bangladesh. (2022b). National Adaptation Plan of Bangladesh (2023-2050).

¹⁰² Ministry of Environment of Sri Lanka (2025). [Nationally Determined Contributions \(NDC 3.0\) \(2026-2035\) of Sri Lanka](#) and Philippines. (2023). [National Adaptation Plan of the Philippines 2023-2050](#).

¹⁰³ Philippines. (2023). [National Adaptation Plan of the Philippines 2023-2050](#).

Table 3: Just transition and climate mobility provisions in ADD member states' climate policies and communication under the UNFCCC framework

Country	Enterprise development	Skill development	OSH	Social protection	ALMPs	Rights	Soc. Dialogue /Inclusion	Macro & growth	Industry/ Sector	Displacement and DRR	Risk identification	Labour migration	Highlights	Source
Bahrain	Yes	Yes	No	Yes	No	No	No	Yes	Yes	No	No	Yes	NDC 3.0 does not include an explicit reference to JT nor labour migration.	NC (2020), NDC 3.0 (2025)
Kuwait	No	No	No	No	No	No	No	Yes	No	No	No	No	NDC, NAP, NC and BUR do not contain explicit references to both JT and labour migration.	NDC (2021), NAP (2019), NC (2019), BUR (2019)
Oman	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	No	NDC2 and NC.2 do not explicitly mention JT nor labour migration, but provisions are made including under the orderly transition strategy (2023).	NDC (2023), LTS (2023)
Qatar	No	Yes	No	No	No	No	Yes	Yes	Yes	No	No	Yes	No explicit reference to JT in the NDC, with partial provisions are available in the National Climate Change Action Plan.	NDC (2021), NC.2 (2025)
Saudi Arabia	No	Yes	No	No	Yes	No	No	Yes	Yes	No	Yes	No	NDC provides general language on JT emphasizing job creation as a potential co-benefit from climate actions. Displacement is part of risk identification, but there is no response provision.	NDC (2021), BUR (2024), BTR (2024)
UAE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NDC 3.0 integrates JT as a response to global stocktaking, linking it to all policy areas. Climate-induced displacement is part of risk identification and measures provision. NDC mentions a targeted adaptation programme for migrant workers in the upcoming NAP.	NDC (2024), LTS (2023)
Malaysia	Yes	yes	No	No	No	No	Yes	Yes	Yes	No	No	No	No explicit reference to JT and labour migration in the NDC. NDC refers to JT in the context of energy transition without further elaboration. JT provisions under the National Climate Change Policy focus on job creation, sectoral development, and skilling, with the JT strategy listed as a key action for energy transition. The policy does not mention labour migration but notes displacement because of climate hazards.	NDC (2025), NC4 (2024), BTR1 (2024), NCCP (2024)
Afghanistan	No	No	No	No	No	No	No	No	No	No	No	No	No explicit reference to JT and labour migration. Skill development is highlighted but as a challenge to attain climate targets.	NDC (2016), NC (2019), BUR (2019)
Bangladesh	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NDC 3.0, BUR, and NAC contain dedicated people and job-centred JT references, with decent work principles as their core. They also include climate mobility analysis and provisions.	NDC 3.0 (2025), BUR (2023), NAC (2023)

Country	Enterprise development	Skill development	OSH	Social protection	ALMPs	Rights	Soc. Dialogue /Inclusion	Macro & growth	Industry/ Sector	Displacement and DRR	Risk identification	Labour migration	Highlights	Source
India	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	NDC does not explicitly mention JT and labour mobility but focuses on environmental justice. The LTS-LCCR provides explicit references and detailed provisions, with implementation details in NC (NC.3 and IAC). Migrant-centric provisions for internal migration.	NDC (2022), LTS (2022), NC 3 and IAC (2023)
Indonesia	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	The NDC and LTS have specific measures for JT, but on a general level. The NDC states that the government is developing an inclusive JT action plan. The climate mobility provision only covers internal migration.	NDC (2025), LTS (2021), BTR (2024), NAC (2022)
Nepal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	The NDC 3.0 provides explicit emphasis on JT, where an implementation plan is being prepared. Climate mobility is mentioned and will be mainstreamed in policies, with labour migration being addressed as a challenge.	NDC (2025), BTR (2025)
Pakistan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	NDC 3.0 provides analysis on JT in a separate section, with the government plan to develop sector-specific JT plans. Climate mobility is addressed as an emerging risk and in the DRR context but not in labour migration.	NDC (2025), BTR (2024)
Philippines	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NDC explicitly mentions JT, but detailed provisions and implementation are under the NAP, NC, and BTR. Climate mobility is a high risk highlighted in the DRR, with NAP providing an overarching policy linking JT, climate adaptation, and human mobility. These policies only cover adaptation, lacking differentiation between internal and international migration and specific measures for labour migration.	NDC (2021), NC.2 (2025), NAP (2024), BTR (2025)
Sri Lanka	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NDC 3.0 strongly references JT mainstreamed to detailed mitigation and adaptation programmes. It acknowledges climate mobility as a risk and implication, and recognizes labour migration as an adaptive strategy, focusing on internal migration but without identifying specific measures.	NDC (2025), BTR (2024), LTS (2023)
Thailand	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	The NDC 3.0 provides references to JT with high-level provisions. The previous BTR includes JT-related measures implemented or planned and references climate mobility as part of risk and DRR.	NDC (2025), BTR (2024)
Vietnam	No	Yes	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	NDC mentions JT as a rationale for international support, focusing on job creation, skilling, and social assistance. Climate mobility is recognized as a risk with climate change impacting labour migration patterns but without specifically differentiating between internal or cross border migration.	NDC (2022)

Source: Authors' analysis based on ADD member states' submission to the UNFCCC repository as indicated in the last column.

1.10. Climate action and labour mobility nexus issues

This section discusses how climate action and labour mobility interact in the specific context of the ADD and highlights several just transition themes that this nexus creates, including the specific employment and skills implications of decarbonization. The section also addresses how emerging just transition frameworks in ADD destination countries can make provision for migrant workers and the extent that climate policies in origin countries consider migrant workers.

1.10.1. Employment impacts of decarbonization

The ILO and Islamic Development Bank's modelled the employment impacts of different climate policy scenarios for the MENA region. Under a scenario in which countries implement only their currently declared Nationally Determined Contributions (NDCs), projected employment gains are marginal, approximately 55,000 jobs by 2050, while GDP declines by an estimated 2.2 per cent, primarily due to reductions in fossil fuel revenues and failing to meet the Paris Agreement targets. In contrast, more ambitious pathways that combine strong industrial policy and climate resilience measures yield substantial employment gains, with the former creating an estimated 6.6 million jobs and the latter nearly 10 million jobs by mid-century.¹⁰⁴ These findings underscore that proactive policy design is essential to mitigate negative economic impacts associated with reduced demand for fossil fuels in global energy markets.

The study also highlighted labour market changes between sectors, indicating which sectors require reallocation of workers across the economy. Job creation is heavily concentrated in green and transition-related industries, particularly hydrogen supply, construction, electric vehicle manufacturing, renewable electricity generation, and electrical engineering, generating millions of new jobs under ambitious scenarios. Conversely, carbon-intensive sectors (including oil and gas extraction, manufactured fuels, gas supply, and plastics) experience significant job losses, reflecting structural decline as countries move towards net-zero emissions. These shifts could also have other indirect employment implications – with reduced state revenues from fossil fuel income, if not replaced with other revenue sources, leading to contracting public sector budgets with potential public sector job losses and service delivery impacts. This analysis highlights both the opportunities and challenges inherent in decarbonisation, with sectoral gains and losses varying by country according to economic structure, industrial capacity, and fossil fuel dependency. Countries such as Saudi Arabia and the United Arab Emirates stand to benefit in particular from strong industrial policies due to their potential competitiveness in hydrogen and EV production; however, this transition will also entail labour market transformations which require planning in order to be smoothly implemented.

Achieving the employment outcomes projected in the ambitious scenarios requires large-scale investment in human capital and financial resources. The modelling estimates that across the whole MENA region at least 16 million workers will need training by 2050, including reskilling for displaced fossil fuel workers (nationals and non-nationals alike), upskilling for existing workers adapting to low-carbon technologies, and education and vocational training for the region's growing youth population.¹⁰⁵ Financing needs are substantial, ranging from USD 1.3 trillion to USD 10 trillion under different scenarios for climate action ambition, with lost oil royalties representing a central challenge to fiscal stability. The report stresses that positive employment and socioeconomic outcomes hinge on coordinated just transition policy packages that integrate employment creation in climate action, with targeted industrial strategies, skills development, social protection measures, and active labour market policies.

While the ILO and ISDB study does not focus specifically on migrant workers, it can help policy makers understand which sectors will expand and which will contract. This can indicate which skills and jobs will be demanded in the future, and which workers will become redundant. For migrant workers, who dominate employment in construction and low-skilled sectors, ambitious climate and industrial policies could sustain or increase labour demand, particularly in construction and infrastructure. Yet emerging green sectors are likely to favour higher-skilled workers, raising the risk that migrant workers could be excluded from new opportunities without deliberate measures to ensure accessible training, fair recruitment, and inclusive labour mobility pathways. Furthermore, due to perceived negative impacts of climate action, workers and employers may object to new climate policies. Social protection can play a particular role in facilitating and enabling the transition by securing that no one is left behind and all stakeholders are protected during the transition.

¹⁰⁴ ILO and IsDB. (2023). [The social, economic and employment impacts of decarbonization and green industrial growth scenarios for the Middle East and North Africa region.](#)

¹⁰⁵ ILO and IsDB. (2023). [The social, economic and employment impacts of decarbonization and green industrial growth scenarios for the Middle East and North Africa region.](#)

Box 5: Employment impact for migrant workers in oil industry from UAE's decarbonization

The UAE's Net Zero 2050 Strategic Initiative targets the creation of approximately 160,000 jobs with an additional 40,000 jobs from futureproofing to offset fossil fuel declines.¹⁰⁶ Official labour statistics suggest a declining share of workforce employed in fossil fuel based industries, such as mining and quarrying and electricity, gas steam and air conditioning supply.¹⁰⁷ However, this decline is not necessarily attributable to job loss or economic diversification, but through reclassification. While recent employment data is unavailable, previously published data by the Ministry of Human Resources and Emiratisation collected by the Gulf Labour Markets, Migration and Population (GLMM) Programme shows that the number of private sector workers registered under "Mining and Quarrying" (the primary category for Oil & Gas extraction) reduced from 60,493 in 2019 to just 8,300 in 2022¹⁰⁸. This 86 per cent statistical drop occurred simultaneously with a surge in "Business Activities" (up 64 per cent to 1.06 million) and "Construction" (1.3 million). This shift may indicate that oil industries are outsourcing work, meaning impacted workers could be overlooked in the creation of transitional measures if they target only the direct workers in oil and gas sectors.

Estimates from UN Women in 2024 project that the UAE can create 100,000 renewable energy jobs, primarily in solar PV and grid modernization.¹⁰⁹ The report highlights that while the renewable sector aims for high-skilled, "future-proof" roles (e.g., engineers, data analysts), the existing migrant labour force in the energy-intensive sectors is heavily segmented into manual roles. With the UAE's NDC targeting a 47 per cent emission reduction by 2035, the risk for low-skilled workers is not just job loss, but structural exclusion. The 16,000 high-quality jobs explicitly earmarked for nationals in the In-Country Value (ICV) programme, could be coupled with a quantitative target for retraining the thousands of subcontracted migrant workers who maintain the oil infrastructure.¹¹⁰ As decarbonization pathways could be less labour intensive with the move towards automatization in carbon capture (CCUS) and hydrogen which is more capital than labour intensive, migrant manual workers can be vulnerable to job losses, and may not have access to unemployment benefits, retraining and upskilling support.¹¹¹ Just transition frameworks can be applied to enable transition in a way that maximises opportunities and manages any challenges in the transition, including for migrant workers.

1.10.2. Just transition challenges in the labour migration context

Emerging just transition frameworks in the region (and globally) typically focus on just transition in a domestic setting prioritizing domestic industries and workers. In the ADD corridor, the high level of workforce mobility means this domestic-only focus leaves potential gaps in just transition planning. For destination countries with a high proportion of migrant workers in sectors that are impacted both by climate change itself as well as climate policies (most notably in the energy and construction sectors), not being included in just transition measures may risk leaving someone behind.

As the previous section highlighted, there will be significant employment implications associated with investments that countries make in greening the economy and developing infrastructure that is environmentally sustainable. For ADD destination countries in the GCC, because of the concentration of fossil fuel development sectors, these implications will result from both global action (as other countries shift to low carbon energy sources) and national actions. Disaggregated data for migrant workers in carbon-intensive sectors in destination countries is not readily available and better understanding the composition of workers in sectors vulnerable to climate change (i.e. outdoor work) as well as sectors vulnerable to climate action (i.e. the energy sector) could help policy makers better understand particular vulnerabilities for different types of workers.

In origin countries, the investment in greening the economy and increasing climate resilience of communities will also need a more detailed understanding of how these transition processes will impact labour markets, and to anticipate and plan for these changes, including skill development needs. In these activities, it will be critical to better understand the role that labour mobility could play in greening and resilience-building activities. This would require relevant labour market information, workforce and development policies as well as policies for returning migrants that enhance their security and support their labour market reintegration.

In sum, just transition frameworks need to cover the livelihoods and transition opportunities of migrant workers as part of a just transition, ensuring migrant workers have access to skills development, green jobs and social protection so they can also contribute to greening of the economy. Enhanced policy coordination, and public-private partnership development could help the design of inclusive national and sectoral policies that increase relevant skills development for green jobs, thus ensuring a faster and just transition.

¹⁰⁶ United Arab Emirates. (2023). The United Arab Emirates' First Long-Term Strategy (LTS): Demonstrating commitment to Net Zero by 2050.

¹⁰⁷ Ministry of Human Resources and Emiratisation. (2025a). [Employment Percentage Distribution by Economic Activities 2022 – 2024](#).

¹⁰⁸ GLMM. (2022). [UAE: Total labour force in the private sector by economic activity \(2017-2022\)](#).

¹⁰⁹ UN Women. (2024). [Current and potential demand for woman workers in the renewable energy sector in India and the UAE](#) [Research paper]. Abu Dhabi Dialogue.

¹¹⁰ United Arab Emirates. (2024). [The United Arab Emirates' Third Nationally Determined Contribution \(NDC 3.0\)](#). Dubai: Ministry of Climate Change and Environment.

¹¹¹ Ministry of Human Resources and Emiratisation. (2025b). [Insurance against job loss](#).

1.11. Summary

This section has highlighted existing labour mobility patterns in the ADD. The ADD corridor is shaped by long-standing migration patterns between Asian origin countries and GCC destination states. The GCC remains one of the world's most significant destinations for temporary migrant workers, with migrants constituting 50-70 per cent of the population in GCC countries and accounting for more than 10 per cent of global migrant stock despite the region's relatively small demographic footprint.

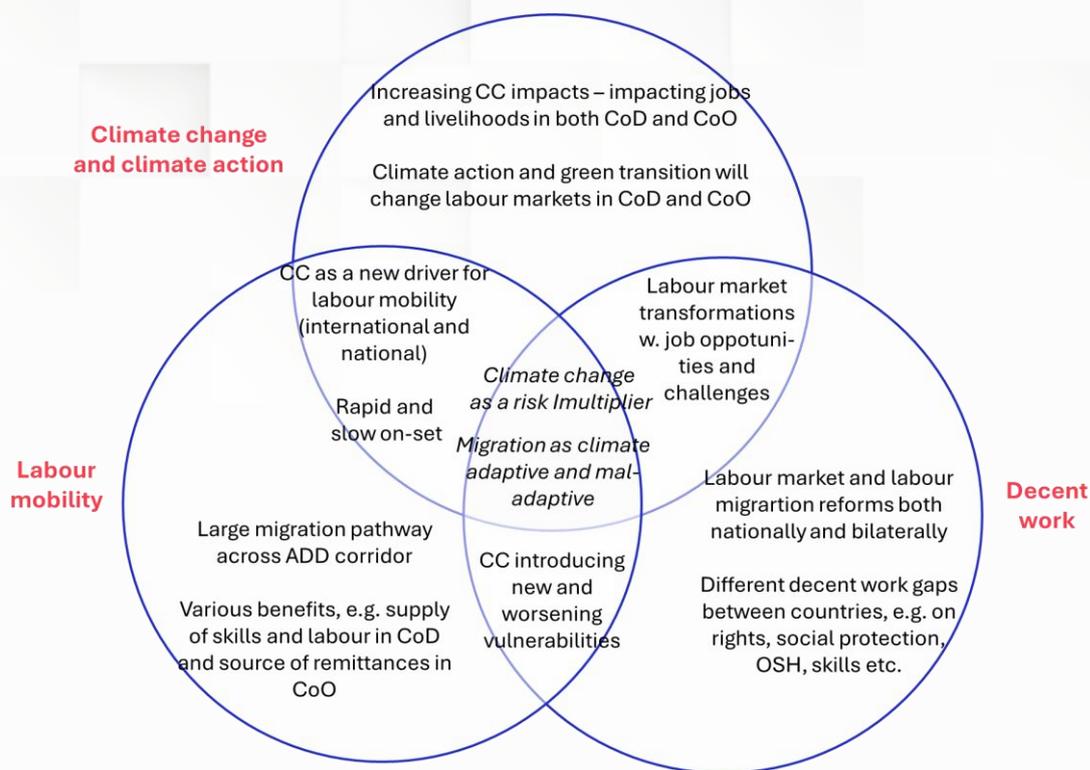
This section has also highlighted how climate change poses escalating challenges for labour markets in both GCC and Asian origin countries, with implications for migrant workers and labour mobility. As climate change exacerbates and both slow- and rapid-onset effects of climate change worsen, more people may experience loss of jobs and livelihoods in countries of origin and engage in labour mobility as an adaptation strategy. Meanwhile, working conditions may become increasingly challenging around the globe, in particular due to longer periods of extreme heat.

Analysing the nexus of climate change, labour mobility, and decent work highlights several just transition issues. Figure 4 highlights these intersecting issues of labour mobility, decent work and climate change. While there are some distinct challenges in the intersection of climate change and climate action with e.g. decent work or labour mobility, this paper will focus on the centre. The centre of the diagram shows how climate change is a risk multiplier across several dimensions, and depending on decent work opportunities and conditions, labour migration can be climate adaptive or mal-adaptive. The intersectionality and complexity of the challenges call for a just transition framework which is holistic and robust, and developed on the guiding principles of social dialogue, decent work, fundamental principles and rights at work, gender equality, and international cooperation.¹¹² The below list elaborates on some of the themes which came out in this section.

- **Emerging evidence indicates that climate change is increasingly influencing labour migration patterns in the Asia-GCC corridor:** Migration decisions are complex, and with limited data sources it is challenging to establish direct causal links, however indirect impacts are evident. Climate-induced stressors drive both gradual migration through the erosion of agricultural livelihoods and abrupt displacement following rapid-onset disasters, with migration often occurring as a livelihood diversification strategy when local adaptation options are exhausted. Anticipating and preparing for changes in mobility patterns will increase climate resilience.
- **Climate change is amplifying decent work gaps, in particular OSH risks:** Migrant workers in the ADD destination countries, such as the GCC and Malaysia, are concentrated in climate-vulnerable sectors including construction, transportation, logistics, and agriculture. Adjusting OSH and social protection can help address such new climate-related OSH risks.
- **Labour mobility can support climate adaptation in origin countries by enabling income diversification and remittances:** Remittances are important sources of income for families and communities in origin countries. However, migration as climate adaptation is only effective when rights-based, fair, genuinely voluntary, and supported by safe pathways and adequate social protection. Labour migration can also be maladaptive when it intensifies existing vulnerabilities. The complex relationship between remittances and origin country resilience underscores the need for policy approaches tailored to diverse contexts and climate-related shocks.
- **Employment modelling can help policy makers anticipate the job impacts of climate action – both job gains and losses:** Job creation concentrates in green industries, hydrogen, construction, EVs, and renewables, while carbon-intensive sectors face significant losses. For migrant workers who dominate construction and low-skilled employment, ambitious policies could sustain labour demand. Granular labour market data in climate-vulnerable sectors can help pinpoint particular vulnerable groups (such as migrant workers), and how they may be impacted by both climate change and climate action.
- **Just transition frameworks tend to focus on domestic settings:** Globally as well as in the ADD corridor just transition frameworks tend to focus on domestic challenges and opportunities. In the ADD corridor, where labour migration is a key aspect of the labour market, it can be beneficial to consider international labour migration patterns to properly address socio-economic challenges and opportunities from climate action.

¹¹² ILO. (2015). *Guidelines for a just transition towards environmentally sustainable economies and societies for all*.

Figure 4: Interacting themes in the nexus of labour mobility, decent work and climate change



Source: Authors own summary.

2. Just transition responses for addressing the climate change and labour mobility nexus in the ADD corridor

The previous section highlighted some just transition issues for the ADD region. This section uses the ILO's Just Transition Guidelines as a framework to identify specific responses to these issues, providing examples of good practice in the region that can be shared and scaled further, as well as relevant examples from other countries that can provide insight and inspiration for further ADD contextualised responses.

The transition process is complex and poses a significant challenge for national policymakers, technical practitioners and advisers working on climate, social protection and active labour market policies. Employers' and workers' organizations face significant hurdles in ensuring sustainable economic growth and decent work throughout the transition, including in new and emerging sectors.

While just transition frameworks should consider the nine just transition policy areas holistically, this report will focus on two areas of the ILO Just Transition Guidelines as a starting point; social protection and skills development. While this section focusses on these two areas, the Just Transition Guidelines (as previously mentioned and outlined) provide applicable guidance across all the nine policy areas.

2.1. Social protection in the context of a just transition

Social protection is one of the four pillars of decent work and refers to the set of policies and programmes designed to reduce and prevent poverty and vulnerability across the life cycle.¹¹³ This includes child and family benefits, maternity protection, unemployment support, employment injury benefits, sickness benefits, health protection, old-age benefits, disability benefits and survivors' benefits in line with ILO standards.¹¹⁴

Social protection systems work through a mix of contributory schemes, primarily social insurance, and non-contributory tax-financed schemes in cash or in-kind (including social assistance), and sometimes are combined with active labour market interventions.

They are instrumental in cushioning the impact of common lifecycle risks and vulnerabilities as well as larger-scale crises, such as, for example, the COVID-19 pandemic or climate-related disasters, serving as a macroeconomic stabilizer and enabling faster recovery. Climate change, as well as associated climate policies, may significantly exacerbate the life cycle risks that social protection systems are designed to address (see figure 5). For example, people may face greater and different health challenges because of heat stress, pollution or disasters, or they may be at higher risk of job loss or otherwise reduced income. They may also face a higher poverty risk due to rising energy and food prices.¹¹⁵

Social protection as a just transition measure

Social protection systems contribute in multiple ways to help realise climate adaptation and mitigation goals and facilitate just transition. With regards climate change adaptation, social protection systems tackle the root causes of vulnerability by preventing and reducing poverty, social exclusion and inequality. For example, it enhances people's resilience and capacity to cope with climate-related stressors and shocks ex ante by providing an income floor and access to healthcare. Likewise, social protection systems can be leveraged to deliver additional support at scale to people who lost their incomes, assets or livelihoods or who suffered health challenges due to unavoidable impacts of climate change (e.g., droughts, floods, storms, extreme heat, etc.). Lastly, social protection can enhance adaptive capacities, including of future generations, by increasing human development, productive investments, and livelihood diversification.

Furthermore, social protection enables ambitious climate change mitigation and environmental policies. For example, it can cushion people from potential adverse welfare impacts of climate policies such as carbon pricing or fossil fuel subsidy reform. Similarly, when integrated with active labour market, skilling and lifelong learning policies, social protection helps transition workers affected by climate or environmental policies to greener employment opportunities and more sustainable economic practices. It also ensures that new jobs emerging in the transition are decent jobs, with access to social protection benefits, including health protection. Lastly, social protection can make direct contributions to mitigation objectives through the greening of its own operations, including pension fund investments and through the incentivization of conservation and restoration of crucial carbon sinks such as forests or soils (e.g., through public employment programmes).

¹¹³ ILO. (2023a). [Social protection for a just transition](#).

¹¹⁴ ILO. (2024e). [World Social Protection Report 2024-2026: Universal Social Protection for Climate Action and a Just Transition](#).

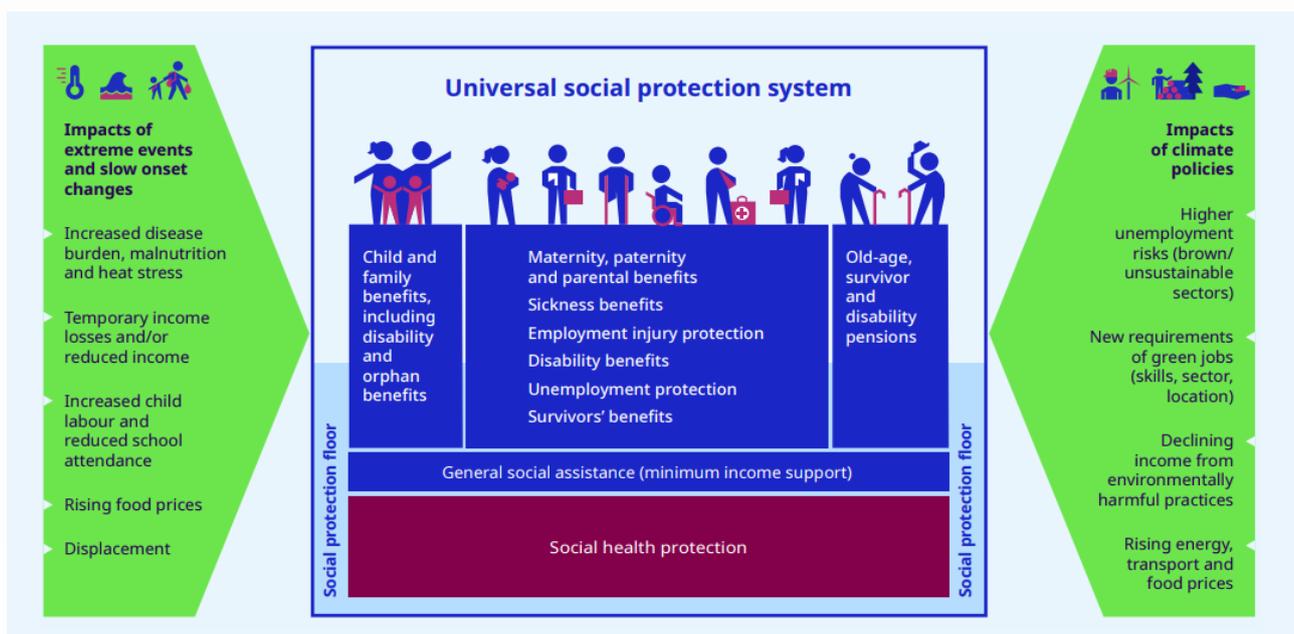
¹¹⁵ ILO. (2024e). [World Social Protection Report 2024-2026: Universal Social Protection for Climate Action and a Just Transition](#).

The following list summarises types of social protection instruments and their relevance to just transition:¹¹⁶

- **Unemployment protection measures** can provide income protection to those who lose their job and/or livelihood, e.g. from climate change impacts or climate policy-related shocks. When supporting workers transition into new jobs and sectors, unemployment benefits provide income support, while upskilling, reskilling, and other active labour market policies ensure access to new opportunities. In addition, some countries provide adverse-weather unemployment insurance, including for the case of extreme heat, that compensate employers for lost working time during work stoppages.
- **Work injury compensation schemes** can provide compensation to workers who have suffered heat-related occupational illness, injury or death. This includes medical costs, and earnings-related periodic cash benefits for disabled workers, or dependents of deceased workers, including funeral grants.
- **Social health protection** and **sickness benefits** provide coverage in the event of health conditions associated with climate change. Social health protection includes measures that ensure effective access to healthcare without financial hardship, including through social health insurance, national health services or a combination thereof; and income security to compensate for lost earnings in case of sickness, namely, sickness benefits.
- **Pensions** provide income security to older persons, persons with disabilities and survivors. Pensions reduce vulnerability and enhance resilience by ensuring income for food, adequate living conditions, and access to healthcare, including in the case of climate-related crises. Pension funds generated by long-term contributory schemes also need to consider and manage climate-related risks to preserve the capital invested by rights' holders, but at the same time promote investments in climate change mitigation efforts by greening of public pension funds (including divestment from fossil fuels and investment in green and sustainable sectors).
- **Other non-contributory cash or in-kind benefits** for certain groups of the population such as children, older persons, persons with disabilities or people otherwise unable to earn sufficient income, social assistance schemes can guarantee income and basic needs. During climate-related shocks, these benefits act as income floors, preventing negative coping strategies. They can also be scaled up temporarily during crises to enable recovery.

The ILO World Social Protection Report 2024-2026 showcases that social protection plays a key role in countering climate change impact. However, according to the Report, the countries most impacted by the climate crisis are the least prepared. For example, in the 50 most climate-vulnerable countries, 75 per cent of the population (2.1 billion people) lack any social protection coverage. Many of these risks are heightened for vulnerable workers, such as women, older persons, migrant workers, and those working in more precarious work such as in the informal economy or in diverse forms of employment. This leads to multiple layers of vulnerability due to intersectionality.

Figure 5: Role of social protection in addressing life-cycle and climate change risks



Source: ILO (2024e). World Social Protection Report 2024-2026: Universal Social Protection for Climate Action and a Just Transition. Addressing climate risks through social protection

¹¹⁶ ILO. (2024e). *World Social Protection Report 2024-2026. Universal social protection for climate action and a just transition.*

As previously outlined in this report, workers in ADD countries face various challenges from both climate change and climate policies, which social protection can help address:

- **Extreme weather events impact on workplaces and workers**, with workers and enterprises facing income and productivity losses as a result of sudden-onset events such as storms and heatwaves. These impacts can have long-lasting effects in not only reduced income but also increased food insecurity, with climate events impacting food availability and food prices. This may also lead to increasing exposure to OSH risks especially for workers in highly exposed sectors such as construction, transport and logistics and agriculture. These risks include work injuries and short- and long-term health impacts, both of which can negatively impact people's ability to work. Social protection can provide income security and health protection. As an example, the Philippine Health Insurance Corporation has started providing coverage for heat-related illnesses, in recognition of the increased risk derived from climate-induced rising temperatures. The package includes non-transmittable diseases (such as heatstroke, dehydration, eye soreness), as well as accounting for a heat-induced increased spread of transmittable diseases.¹¹⁷ Furthermore, Thailand's Social Security Act establishes a protocol to reduce employee and employer contributions and to extend the duration of unemployment benefits during emergencies, including those linked to climate-related disasters.¹¹⁸
- **Slow- and sudden-onset climate hazards can damage livelihoods and lead to unemployment, underemployment or loss of income**, especially for people employed in sectors that rely on natural resources, such as agriculture, fisheries, forestry and tourism. In this context, climate impacts can affect economic and other drivers for migration. Social protection can be an enabler for in situ adaptation, enhancing people's ability to cope, and increasing adaptive capacity, including of future generations. An example of climate-responsive short-term benefits outside of the ADD region include Algeria, where the Ministry of Labour, Employment, and Social Security established an agreement for the protection of workers in climate-induced heat-exposed sectors (namely construction, public works, and irrigation) by extending social security to cover unemployment caused by extreme temperatures. Currently, this sectoral agreement covers 50,000 workers, with plans to progressively extend its geographical and occupational reach.¹¹⁹ Meanwhile, countries along the ADD corridors have taken steps to strengthen adaptive social protection; Pakistan has implemented emergency cash transfer programmes in response to the 2022 floods,¹²⁰ while the Philippines' social insurance institutions deploy additional measures during disasters, such as advanced disbursements of pensions, higher payout of health insurance claims, calamity or emergency loans at concessional rates (such as reduced loan rates for house repairs), etc.¹²¹
- **Employment change or loss as a result of climate and other environmental policies** as sectors decarbonise and move to protect and restore natural systems. Social protection can cushion impacted workers and households from these adverse impacts. Many migrant workers are not covered by just transition efforts, including unemployment benefits, retraining support and active labour market programmes that are designed to mitigate some of these negative impacts. One example, outside of the ADD corridor, is the agreement between the Spanish government and the union on coal mine closure, which included early retirement schemes, local re-employment in green jobs and land restoration, and green reskilling programme.¹²²

Social protection, just transition and labour migration

Migrant workers, like all workers, face these climate change and life-cycle risks, but they also face some additional challenges in the context of the labour migration process, including preparations for departure, the journey and work abroad, and return and reintegration.¹²³ These additional challenges underscore the importance of developing a clearer understanding of migrant workers' exposure to life-cycle and climate-related risks across the migration cycle, and of identifying opportunities for strengthened national policy responses and international coordination in regards to social protection.

A comprehensive (global) literature review by Silchenko and Murray¹²³ found particularly three interlinkages between social protection policies and climate-mobility, where social protection can contribute by 1) easing the financial barriers to movement by derisking climate change risks and impacts, 2) addressing adverse drivers that may encourage maladaptive migration, 3) supporting and maintaining livelihoods in origin countries for families and communities. According to the authors, social protection can either support migration or adaptation in-situ. Adequate social protection can help avoid maladaptive migration and support livelihoods of families and communities in origin countries. For example, cash transfers and labour market programmes can facilitate or lead to migration by lowering costs for migrants. Meanwhile, public works programme may reduce the need for temporary rural-urban movements, and increase community resilience, thus addressing distress migration.

¹¹⁷ Presidential Communication Office. (2025). *Palace: PhilHealth benefit covers heat-related illnesses*.

¹¹⁸ WFP, Oxford Policy Management, European Civil Protection and Humanitarian Aid. (2018). *Strengthening the capacity of ASEAN Member States to design and implement risk-informed and shock-responsive social protection systems for resilience Thailand Case Study*.

¹¹⁹ ILO. (2024). *Heat at work: Implications for safety and health : a global review of the science, policy and practice*.

¹²⁰ ADB. (2025). *Adaptive and Shock-Responsive Social Protection in Asia and the Pacific*.

¹²¹ ILO. (2024). *World Social Protection Report 2024-2026. Universal social protection for climate action and a just transition*.

¹²² WRI. (2021). Spain's National Strategy to Transition Coal-Dependent Communities.

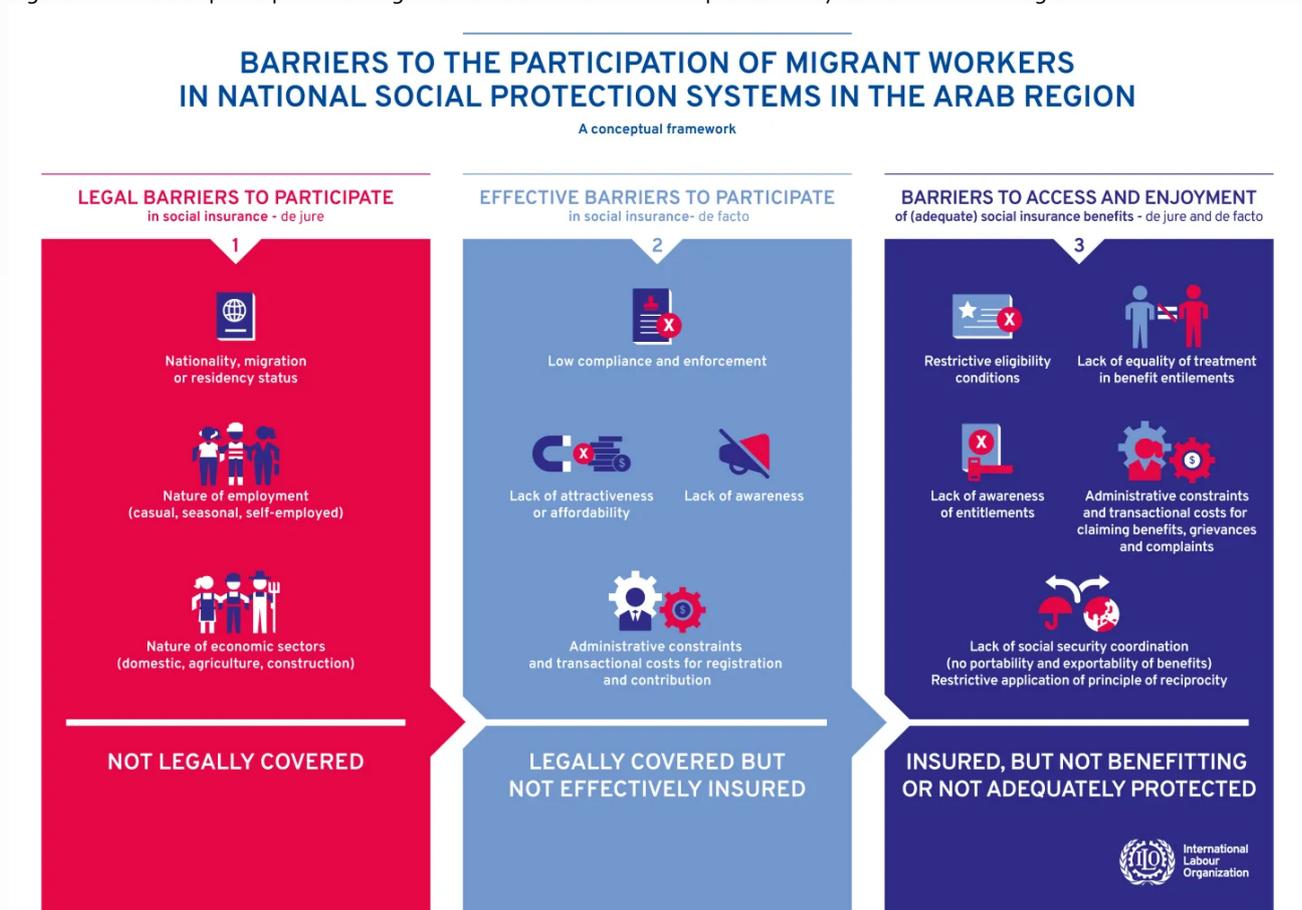
¹²³ Silchenko and Murray. (2023). Migration and climate change – The role of social protection.

In particular, migrant workers and their families face legal and practical obstacles to the exercise of their right to social security and effective access to social protection benefits, including healthcare.¹²⁴ Work by the ILO has highlighted that migrant workers face legal and practical barriers for accessing social protection (particularly contributory schemes).¹²⁵

- **Legal barriers preventing registration in social insurance.** This refers to obstacles that are entrenched in the legal framework whereby migrant workers are excluded from national insurance systems, either based on their nationality, their employment status, or the sector in which they are employed.
- **Practical barriers to participation in social insurance,** where obstacles effectively exclude migrant workers from social insurance systems, even when they are legally entitled to participate. These can include low levels of compliance with social security obligations, limited interest or lack of affordability, lack of information regarding rights, and complex procedures for registration that make it difficult for migrant workers to access social insurance.
- **Barriers to access/enjoyment of (adequate) benefits.** This is where migrant workers who participate in social insurance systems face additional challenges to adequately benefit from such systems because of restrictive eligibility conditions and lack of effective mechanisms to claim benefits. The absence of coordination mechanisms between countries of origin and destination also prevents the effective portability and enjoyment of benefits by migrant workers upon return to their countries of origin.

Figure 6 provides a visual illustration of these barriers across the three categories. Addressing these barriers presents a good opportunity to improve social protection coverage through existing systems.

Figure 6: Barriers to participation of migrant workers in national social protection systems in the Arab region



Source: ILO (2023e). Extending social protection to migrant workers in the Arab region: An analysis of existing barriers and good practices in light of international social security standards.

¹²⁴ For a general framing see: ILO. (2024). [Strategy on Extending Social Protection to Migrant Workers, Refugees and their Families](#), which provides a policy and operational framework for inclusive, rights-based extension of social protection.

¹²⁵ ILO. (2023e). _

2.1.1. Social Protection in ADD destination countries

The previous sections highlight the importance of social protection measures to workers in the context of climate change and climate action. This section examines the coverage and availability of social protection in ADD Destination countries for migrant workers.

Important reforms in terms of migrant workers access to social protection in ADD destination countries have been made in recent years, especially in the GCC (Figure 7). While some of these reforms have not been explicitly designed with climate change in mind, they provide an important institutional and policy foundation upon which climate-responsive design features can be integrated into existing and ongoing social protection systems.

Migrant workers in ADD destination countries work in the private sector and are covered under a range of different arrangements, with social protection entitlements historically established as a direct responsibility of the employer by labour law (so called employer liability model). There are great differences across countries in terms of coverage, access and form of mechanism, as well as by migrants' employment and migration status and the sector in which they work.¹²⁶ Figure 7 provides a summary of social protection coverage across ADD destination countries.

Figure 7 Social protection coverage for national and migrant workers employed in the formal private sector in the GCC countries

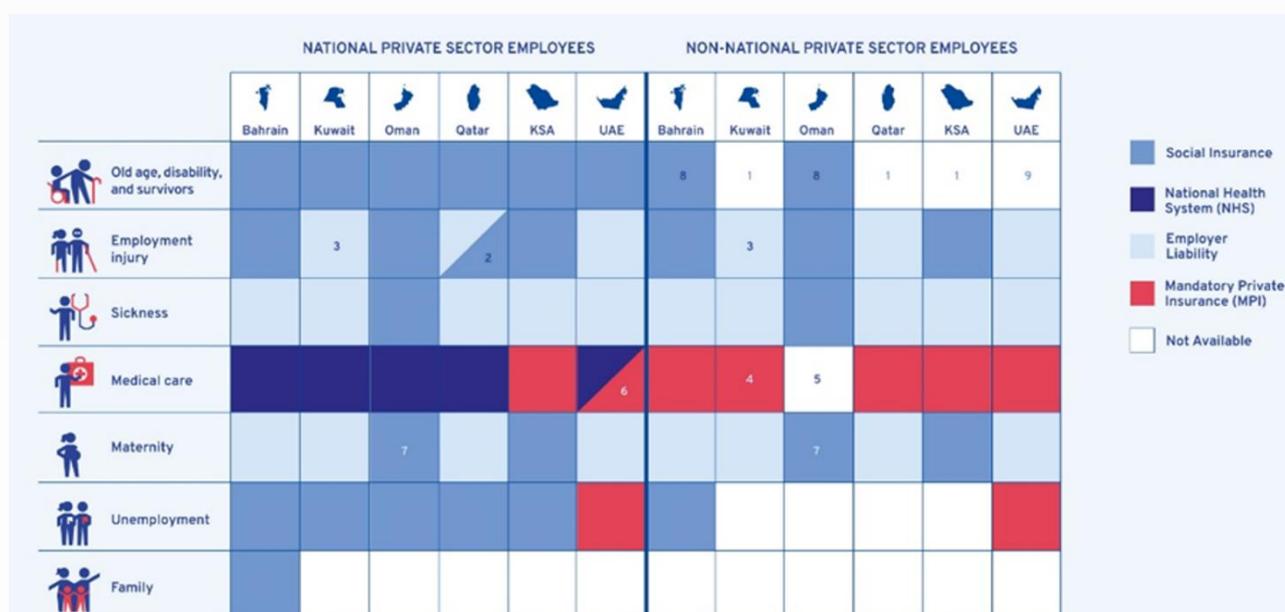


Figure 7 notes: 1) EOSI does not work as a social insurance mechanism and falls short of minimum standard of protection for old age, disability and survivors. 2) Survivor of Qatari nationals insured with GRSIA are eligible to a periodical pension equal to 100% of the previous wage in case of work-related death regardless of years of service. 3) Employment injury provision of social insurance for nationals is not implemented. Article 88 of the labour code stipulates a mandatory private insurance. 4) Roll out of the mandatory private insurance is underway. 5) Coverage was not previously mandatory, but non-national did have the right to access to NHS, on a subsidized rather than free basis. Roll out of mandatory private insurance is still under debate. 6) MPI in Dubai International Finance Centre and Dubai and NHS in Abu Dhabi. 7) Maternity and Paternity. 8) Transition from EOSI to a provident fund managed by the national social insurance institution has been legislated and pending implementation. 9) Special private pension system for employees in the financial district; Voluntary privately managed EOSI savings system for employees in the private sector and free zones announced in September 2023.

Source: ILO. (2023n). [Social protection for migrant workers in the Gulf Cooperation Council countries: A regional mapping of provisions on paper and in practice.](#)

¹²⁶ ILO. (2023e). [Extending social protection to migrant workers in the Arab region: An analysis of existing barriers and good practices in light of international social security standards.](#)

Most migrant workers have some social protection coverage, including certain statutory levels of leave for sickness and maternity through standard employer-liability provisions. In some countries migrant workers can access the same benefits for workplace injuries as citizens, via inclusion in the social insurance system (e.g. Bahrain, Saudi Arabia), or under employer-liability schemes (e.g. Kuwait, Qatar, the United Arab Emirates).¹²⁷ In most countries both national and migrant workers enjoy statutory levels of leave for sickness and maternity through standard employer-liability provisions. In relation to medical care, an increasing number of provisions in the GCC now include migrant workers, entitling migrant workers in the private sector to a minimum level of health insurance, funded by employers. However, healthcare for migrant workers is often provided on different terms from those that apply to nationals

A new foundation for climate-sensitive social protection, including for migrant workers

A number of significant reforms have been implemented in GCC countries in recent years that have extended social protection coverage for both national and migrant workers (see details in Box 6). Taken together, these reforms, while not explicitly conceived as climate-change responses, constitute a critical enabling platform for embedding climate-responsive social protection within the GCC's evolving social protection architecture. The expansion of contributory coverage in few countries, the shift from pure employer-liability models toward more collective and regulated arrangements, the strengthening of guarantee mechanisms, and the increasing role of public social security institutions all create entry points to integrate climate-related design features in a progressive and feasible manner.

New schemes/systems could be adapted to incorporate climate-responsive triggers and parameters, such as temporary benefit extensions (e.g., unemployment benefit) or advance payments during extreme heat events, recognition of heat-related illnesses and injuries as compensable under employment injury schemes, and adaptive contribution or eligibility rules for workers in high-risk sectors. The introduction of unemployment and employment injury insurance further offer opportunities to link income protection, prevention, and return-to-work mechanisms to climate and occupational safety and health risks.

¹²⁷ ILO. (2023e). [Extending social protection to migrant workers in the Arab region: An analysis of existing barriers and good practices in light of international social security standards.](#)

Box 6: Reforms in GCC countries expanding access to social protection schemes

- With the adoption of a new Social Protection law in 2023 Oman is in the process of transitioning toward covering national and migrant workers through a social insurance mechanism for a range of benefits (maternity and paternity, sickness, employment injury), marking a significant shift away from reliance on employer liability.¹²⁸
- In 2022, the UAE introduced a new unemployment insurance scheme that covers both national and migrant workers. The scheme consists of a mandatory employee-funded private insurance scheme for national and migrant workers in either the private sector or public sector but excluding domestic workers.¹²⁹
- The Kingdom of Saudi Arabia has introduced in 2025 a social-insurance based scheme for maternity cash benefits, covering both national and non-nationals workers.
- In the UAE, optional insurance coverage under *Taa-meen*, the new workers' protection programme provides a guarantee of up to 20,000 Dirhams (US\$400), including claims for unpaid wages, End-of-service indemnity payments (EOSI), return ticket, and repatriation in case of death or work-related injury in case of non-payment by the employer. In case the employer is unable to pay the employment injury compensation, the scheme will cover claims for work-related injuries.¹³⁰
- Several GCC countries have embarked on reforms of End-of-Service-Indemnity systems (EOSI), in recent years including:
 - o Qatar and the UAE have introduced public and market-based guarantee schemes to ensure the payment of wages and EOSI.
 - o The UAE is also introducing individual pension savings schemes to replace the EOSI system for selected categories of employees working in the financial sector, government sector or in large firms, with the stated objective of attracting and retaining highly skilled employees and easing the financial management of EOSI liabilities. The Dubai International Financial Centre (DIFC) has adopted a DIFC Employee Workplace Savings (DEWS) plan for expatriate workers, which became effective in February 2020.¹³¹
 - o Bahrain and Qatar are implementing reforms to the EOSI system.¹³² In Bahrain, a new provident fund for migrant workers will finance end-of-service indemnities (EOSI) managed by the Social Insurance Organization. This reform aims to address the common issue of non-payment of EOSI benefits to workers upon termination by securing pre-financing and thus allowing for prompt benefit delivery. In Qatar, the social insurance reform law expands coverage to all Qatari private-sector workers and offers voluntary coverage for the self-employed.

Despite these advances and opportunities, there are still efforts to be taken to close any legal or effective gaps for migrant workers which may remain in the private sector.¹³³ While recent GCC reforms have focused on improving the security of EOSI payments, they have not systematically addressed benefit adequacy or alignment with international social security standards.¹³⁴ Where migrant workers are legally entitled to certain benefits, effective coverage is often constrained by low compliance, limited awareness of rights, complex administrative procedures, and weak enforcement, resulting in significant exclusion in practice. For example, according to a recent nILO survey on access to social protection amongst Nepali returnee migrant workers from the GCC, 58 per cent of respondents who had completed their contracts reported receiving their EOSI before returning to Nepal. Receipt rates were particularly low among women, with only 30 per cent reporting that they had received their EOSI.¹³⁵

¹²⁸ ILO. (2023m). https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40arabstates/%40ro-beirut/documents/publication/wcms_903672.pdf Far-reaching reforms in Oman set new benchmark for social protection in the region.

¹²⁹ ILO. (2023g). [Review of the National Social Protection Legislation and Legal Frameworks for Migrant Workers in the Gulf Countries.](#)

¹³⁰ ILO. (2023e). [Extending social protection to migrant workers in the Arab region: An analysis of existing barriers and good practices in light of international social security standards.](#)

¹³¹ Ibid.

¹³² ISSA. (2024). [Social security reforms in Arab countries in the Middle East.](#)

¹³³ ILO. (2023n). [Social protection for migrant workers in the Gulf Cooperation Council countries: A regional mapping of provisions on paper and in practice.](#)

¹³⁴ EOSI schemes provide lump-sum payments upon termination of employment and function mainly as guaranteed savings rather than protection against defined life-cycle risks, while remaining weakly linked to unemployment or climate-related income shocks and vulnerable to employer non-compliance or insolvency. These benefits are often criticized for being inadequate and unreliable social protection for workers in comparison to pensions and other forms of social protection that are needed by people in older age, or to cover sickness and injury that arise after prolonged exposure to climate extremes such as heat and pollution. As EOSI are employer funded, if employers do not set aside sufficient financial resources or in cases of bankruptcy workers are left unprotected. ILO. (2023o). [Reforming end-of-service indemnity for migrant workers in Member States of the Cooperation Council for the Arab States of the Gulf \(GCC\).](#) ILO

¹³⁵ ILO. (2023i) [Access to social protection for Nepalese migrant workers in countries of the Cooperation Council for the Arab States of the Gulf \(GCC\).](#)

Across different dimensions of social protection, effective access to benefits appears to vary significantly by company size and wage level, with large companies often provide migrant workers with better information and access to social protection than small and medium-sized enterprises and higher-wage workers have more effective access to social protection than their lower-paid counterparts. Women and particularly domestic workers – already entitled to lower levels of social protection by law – often enjoy limited access in practice because they are both geographically and socially isolated.

2.1.2. Social protection in ADD origin countries

Social protection adequacy and coverage in countries of origin remain uneven and are critical for strengthening climate resilience. Although Asia-Pacific has made significant progress in expanding social protection coverage between 2023 and 2025, with the share of the population covered by at least one non-contributory benefit rising from 38.7 per cent to 53.6 per cent,¹³⁶ this regional progress conceals substantial variation across countries of origin. These aggregate figures also obscure persistent gaps in both the types and adequacy of social protection benefits available, including unemployment, employment injury and sickness protection.

High informality across the Asia-GCC migration corridor in sectors such as agriculture, fisheries, forestry, construction and domestic work, where labour mobility is often used as a strategy to cope with climate-related livelihood disruptions, means that some workers lack social protection both at origin and destination, increasing poverty, vulnerability and exposure to climate-related risks.

Ensuring the portability of social protection across the labour migration cycle is critical for promoting social inclusion and safeguarding the rights of migrant workers and their families. While lack of portability is a global issue, its impacts are particularly acute for ADD countries, given the limited number of bilateral arrangements and the absence of social security agreements. Although the [2022 ASEAN Declaration on the Portability of Social Security Benefits for Migrant Workers](#) marks an important step toward strengthening social protection at the sub-regional level, policy processes to advance portability remain limited at the wider regional level and in relation to GCC destination countries. As a result, many migrant workers lack long term income security at key life-cycle risks and events such as in case of work-related injury or occupational disease, old age and for long term health conditions. These gaps are further exacerbated by climate change and associated transitions, increasing vulnerability and income insecurity.

Countries of origin continue primarily rely on unilateral measures to compensate for the lack of portable protections and to address implementation gaps at destination. Multiple countries of origin, including Bangladesh, India, Nepal, Pakistan, the Philippines and Sri Lanka have established Migrant Welfare Funds that provide compensation in cases of work-related injury, disability or death.¹³⁷ In most cases, death compensation is provided irrespective of its cause, which is important in the context of heat-related mortality. However, Migrant Welfare Funds rarely cover occupational diseases or long-term climate-related health conditions and generally lack mechanisms to sustain income security for migrant workers and their family members over the life course, including in cases of climate-related labour market transitions.

Some countries of origin are moving towards inclusion of migrant workers in national social security systems. In Nepal, migrant workers are mandated to participate in the Social Security Fund and access to long-term benefits, including old-age and employment injury protection. The scheme also provides medical coverage for workers and their families, which can contribute to mitigating some health consequences associated with heat- and climate-related illnesses. Similarly, the Philippines has included migrant workers in the National Health Insurance Program and, through the Philippine Health Insurance Corporation, offers benefit packages covering hospital confinement and outpatient emergency care for heat-related illnesses, helping to mitigate both the health consequences and the financial burden associated with increasing exposure to extreme weather. While such initiatives are promising, they remain limited in scope and largely short-term in nature, and do not establish strong linkages with national social protection systems in countries of destination to adequately respond to life-cycle risks or to labour market transitions, including associated with climate change.

Taken together, these challenges underscore the importance of strengthening migrant-inclusive and gender-responsive social protection frameworks anchored in statutory coverage, effective portability and coordinated implementation across countries of origin and destination. Embedding climate considerations into social protection design and strengthening cross-border coordination are essential to support just transitions and address the intersecting climate and life-cycle risks faced by migrant workers and their families.

¹³⁶ ILO. 2024-26. Universal social protection for climate action and a just transition. [World Social Protection Report 2024-26: Universal social protection for climate action and a just transition.](#)

¹³⁷ ILO. (2023o). [Reforming end-of-service indemnity for migrant workers in Member States of the Cooperation Council for the Arab States of the Gulf \(GCC\).](#)

2.2. Skills development to support just transition

Skills development is one of the key policy areas which enables the transition to environmentally sustainable economies and decent work. Skills development plans will have to be linked with key climate and environmental policies to ensure that future skills needs are met and climate commitments are implemented effectively. A global ILO study of the situation in 32 countries mapped sets of policies on environmental sustainability and climate change that form overarching frameworks for consideration of capacity development, occupations and skills.¹³⁸ Of the countries studied, only a small group of European high-income countries had both strong environmental performance and comprehensive and coordinated skills policies. While the study only captures some ADD countries (Bangladesh, India, Indonesia, Mauritius, the Philippines, Thailand, and the UAE) the study clearly presented the importance of linking skills development with the green transition.

In fact, a just transition requires that education and training are considered essential for all individuals at all stages of their lives and enable people and economies to reap the job creation benefits and minimize the burdens of transition to carbon neutrality.¹³⁹ A diverse skill set is required to enable workers to thrive in a low-carbon economy. This includes foundational, technical (hard), and core (soft) skills, with an emphasis on STEM competencies. Education and training initiatives should be targeted, inclusive, and responsive to sectoral needs, prioritizing vulnerable groups. Expanding digital learning, apprenticeships, and financial support for training can further broaden access to green skills development. Skills approaches may vary depending on the national context and priorities in their pursuit of a just transition, nonetheless, it is worthwhile looking at skills development in the context of labour migration and a just transition for the ADD region as an enabler for green and inclusive job growth

Skills development must respond to the labour market transformations resulting from climate action. The ILO broadly considers four key changes in the labour market will arise from climate action and the green transition; new jobs created, jobs destroyed, jobs transformed, and jobs substitute.¹⁴⁰ Global findings indicate that the majority of the jobs created and reallocated will in mid-skills jobs which is important as particularly mid-skilled jobs are disappearing globally. Skills development plays various and important roles across these labour market changes. For example, in the case of jobs destroyed, transformed or substituted, there may be a demand for upskilling, reskilling and upskilling of the workers impacted by these transformations. Meanwhile, in the case of new jobs created there may be a need to reform and develop entirely new skills programmes.

The same ILO study found, globally, the greatest job creation and destruction impact is expected for male-dominated occupations, suggesting that men in mid-skill occupations will have the greatest need of reskilling and upskilling to enable them to tap into new job opportunities. This also suggests that current occupational gender stereotypes are likely to persist: women will get only a fraction of the jobs created, unless measures are taken to train women in relevant skills, so that they can benefit from potentially created jobs

¹³⁸ ILO. (2019b). *Skills for a Greener Future: A Global View*.

¹³⁹ ILO. (2022e). Just Transition Policy Brief. [Skills development for a just transition](#).

¹⁴⁰ ILO. (2019b). *Skills for a Greener Future: A Global View*.

Skills development in the context of climate change and labour migration

Skills gaps threaten to slow down the transition. Labour market information is one of the key aspects of matching labour mobility with labour market needs. Improving data availability regarding the skills and qualifications of the foreign workers, including identifying matching tools and mechanisms for identifying anticipated skills growth areas. Unlike other countries of destination facing structural labour shortages, such as the United Kingdom, Germany and Australia, labour market institutions of GCC countries lack mechanisms to publish and share regular data on skills shortages.¹⁴¹ Employers' and Workers' organizations also have a significant role to play in sharing information on changing demand for skills and facilitating skills development in their workforces, including for migrant workers. One example of a skills partnership between the private sector and labour unions, from outside of the ADD region, include an agreement between a renewable energy company with the labour union, North America's Building Trades Union, to skill and train construction workers for off-shore wind projects, to accelerate ensure skills supply would be demand in the expansion of wind energy.¹⁴²

In addition to public private partnerships, designing and implementing sound labour market information systems, including accurate labour market needs assessment and skills anticipation, and putting in place processes for skills recognition are important to prevent brain drain and deskilling in the context of labour migration. Access to skills recognition processes, especially for low- and medium-skilled migrant workers, is often limited, while migrants frequently encounter difficulties in articulating their experiences from the destination countries into better human resources development opportunities on their return.

Availability of opportunities for skills development and recognition, especially in emerging green in-demand occupations and sectors in destination countries, allows migrant workers to develop skills and access green jobs. This helps to build adaptive capacity for migrant workers and their communities, and if matched with re-integration support in countries of origin can make it possible for returning migrant workers to use their skills and talents to contribute to achieving climate goals in their home communities as well. There are several approaches to developing and recognising the skills of migrant workers:¹⁴³

- **Skills' testing and certification:** where workers are tested in the country of origin and issued with certificates that demonstrate their competencies and match the skill standards required by the country of destination.
- **Mutual standards and qualifications frameworks:** this involves co-relating two or more skills or qualification frameworks across countries in terms of levels, credits, and types of qualifications. The [ASEAN Qualifications Reference Framework \(AQR\)](#) is one example.
- **Establishment of joint minimum standards:** this is where countries align their national classification frameworks with international standards. A joint minimum standards framework does not include systematic recognition of certificates as described within the previous model (mutual standards and qualification frameworks) but enables cross-border comparison to allow the skills of migrant workers to be effectively evaluated.

Further, Public Employment Services play an essential role in job search and job matching processes and capacity building for improved counselling services for job seekers, including potential and return migrants. Private recruitment agencies can also have an important responsibility in the matching process for labour migration as new green jobs are developed. Work to improve skills identification and matching should be combined with broader efforts to enhance coherence between employment, skills and migration policies, with the active participation of government institutions and the social partners. These coordinated efforts will also result in a better information exchange between the education system and the labour market, thus providing the basis for up-to-date skills information and forecasting.

To address the limited bilateral and interregional skilling and certification standards, various government and private sector actors in the Asia-Gulf labour migration corridor have attempted to launch skilling initiatives (both for profit and non-profit) in order to increase the competitiveness of migrant workers and address the growing labour shortages in GCC labour markets.¹⁴⁴ Some examples include the Philippines Tad-beer domestic worker skilling and recognition programme, South Asia Qualifications Reference Framework or the private sector recruitment and training initiative by Al Habtoor, of workers from Asian origin countries.¹⁴⁵

¹⁴¹ ILO. (2023). Abu Dhabi Dialogue: Matching labour mobility with labour market needs in ADD corridors.

¹⁴² NABTU. (2022). North America's Building Trades Unions and Ørsted Agree to Build an American Offshore Wind Energy Industry with American Labor.

¹⁴³ ADB, ILO & OECD. (2024). [Labour Migration In Asia: Trends in Skills, Certification and Seasonal Work](#).

¹⁴⁴ ILO. (2024a). Effective matching of the demand for and supply of migrant workers between Abu Dhabi Dialogue countries of origin and Destination.

¹⁴⁵ Ibid.

2.2.1. Skills development in ADD destination countries

Analysis of ADD destination countries' NDCs and related climate communications shows that six out of seven ADD destination countries are referencing skills development in one or another way. For instance, the UAE's NDC 3.0 notes the upskilling and capability building plan to support the job creation projected under their Net Zero Strategy,¹⁴⁶ while Malaysia's NDC 3.0 highlights that achieving their NDC requires upskilling¹⁴⁷ with both provisions only target their nationals. Elsewhere, the KSA's BTR notes that the country is investing in education, research and workforce development to build a knowledge-based economy, aimed at improving technical skills and promote research and innovation to tackle climate challenges,¹⁴⁸ while Qatar's NC.2 indicates the country's intention to invest in a comprehensive capacity-building programs to cultivate expertise in climate change science, policy and technical analysis.¹⁴⁹ In some cases, the efforts on linking skills development with sustainability goes beyond policies. For example, Qatar's Education Above All and SILATECH are two royal initiatives which aims to promote education, sustainability and job creation in the Arab Region and beyond.

The ADD has successfully promoted dialogue and pilot projects between specific destination and origin countries to harmonise skills recognition and certification, such as the UAE-India pilot for Certification and Mutual Skills Recognition in the construction sector. The programme has been launched in Bangladesh, India, Pakistan and Sri Lanka.¹⁵⁰ AQ Skills Verification Agreement was signed by the Sri Lanka Tertiary Vocational Education Commission and the Saudi Takamol for Business Services. It currently covers five out of the 23 targeted professional specializations, namely plumbing, electricity, automotive electricity, automotive mechanics, and refrigeration and air conditioning.¹⁵¹ But despite official skills certification via the Takamol system, certified credentials do not necessarily guarantee higher wages for Indian and other South Asian migrant workers.¹⁵² This potential disconnect between certification and remuneration represents a fundamental barrier to meaningful skills development and recognition for migrant worker populations. GCC private sector companies thereby, sometimes, independently conduct their own recruitment, training, and skilling operations, and in the absence of regional skills recognition and certification frameworks, private sector actors have become the primary determinants of skills certification standards.¹⁵³ Similarly, Saudi Arabia and India have bilaterally attempted to recognize and regulate the skills of Indian migrant workers bound for Saudi Arabia. Such initiatives illustrate the ongoing progress and challenges faced by ADD member states in developing a harmonized framework for skills matching and recognition in the Asia-GCC corridor.

A previous ILO report to ADD highlighted some private sector initiatives have sought to address skills gaps themselves.¹⁵⁴ For example, Al Habtoor draws on both a local and international supply of migrant workers using its advanced skilling infrastructure in the GCC, specifically in the UAE. This company specifically runs its private recruitment of construction workers from India, Pakistan and the Philippines. At the GCC level, Al Habtoor facilitates the training of migrant workers and addresses skill asymmetries to meet the skill requirements. Because of such longstanding industry practices, Al Habtoor has strategically managed to develop their own occupational standards and frameworks, which have been verified and reviewed by many international testing institutions, including City and Guilds. Another private sector initiative for a non-ADD destination country is the bilateral agreement for Germany and India, between the German solar association and India's Skills Council for Green Jobs, to support with 2,000 Indian skilled solar panel installer for Germany.¹⁵⁵ Thus, GCC or Malaysia-based private sector initiatives could thereby be adapted to green sectors or specific environmental or sustainability skills.

This privatisation of skills recognition should aim not to undermine bilateral intergovernmental efforts. The practical consequences of such for migrant workers are significant: employer refusal to accept certification from countries of origin, combined with reluctance to pay wage premiums for certified skills or to cover training costs, adversely affects migrant worker welfare and undermines incentives for skill acquisition. Effective skills recognition frameworks should generate corresponding wage and salary premiums that reward additional competencies; without such linkages, migrant workers have limited incentive to invest in skills development.

¹⁴⁶ United Arab Emirates. (2024). *The United Arab Emirates' Third Nationally Determined Contribution (NDC 3.0)*.

¹⁴⁷ Malaysia, F. G. o. (2025). *Malaysia's Third Iteration of the Nationally Determined Contribution*.

¹⁴⁸ Kingdom of Saudi Arabia. (2024). *The first Biennial Transparency Report submitted to UNFCCC*.

¹⁴⁹ State of Qatar. (2025). *Second National Communication under UNFCCC*.

¹⁵⁰ UN-ESCAP. (2024). *Asia-Pacific Migration Report 2024: Assessing implementation of the Global Compact for Migration*.

¹⁵¹ UN-ESCAP. (2024). *Asia-Pacific Migration Report 2024: Assessing implementation of the Global Compact for Migration*.

¹⁵² ILO. (2024g). *Asia-Pacific Employment and Social Outlook 2024: Promoting Decent Work and Social Justice to Manage Ageing Societies*.

¹⁵³ ILO. (2025a). *Effective Matching of the Demand for and Supply of Migrant Workers between Abu Dhabi Dialogue Countries of Origin and Destination*.

¹⁵⁴ ILO. (2025a). *Effective Matching of the Demand for and Supply of Migrant Workers between Abu Dhabi Dialogue Countries of Origin and Destination*.

¹⁵⁵ Dempster and Huckstep. (2024). *Options for Green-Skilled Migration Partnerships: A Guide for Policymakers*.

2.2.2. Skills development in ADD origin countries

Data and analysis for skills development pathways and issues for migrant workers in ADD origin countries shows a range of mechanisms that are in place or under development. Initiatives are both regional and bilateral, and represent a growing recognition of skills mobility and mutual recognition frameworks. Such initiatives should consider inclusivity, especially for women and middle-skilled workers, and be designed to bridge any skills supply and demands gaps there may be. An assessment of skills development for women migrant workers from Sri Lanka identified several structural barriers.¹⁵⁶ Skill matching proved difficult due to the absence of relevant and current information on labour demand trends in GCC destination countries, combined with limited offers to train women migrant workers for emerging labour market opportunities.

As a regional initiative, the [ASEAN Vientiane Declaration on Skills Mobility, Recognition and Development for Migrant Workers](#) is interesting. The Declaration aims to facilitate freer movement of skilled workers principally through Mutual Recognition Agreements, which are currently in place in eight occupations: engineering, nursing, architecture, dentistry, medicine, tourism, surveying and accountancy – though not necessarily in “green” sectors. There has been limited progress in operationalization of these agreements, however, demonstrating the challenge in harmonizing different national laws, regulations and policies across the ASEAN Member States.

As previously mentioned, labour mobility can help meet skills needs in countries of destination. Memoranda of Understanding (MOUs) or admission policies covering all skills levels can help to meet the skills demands of employers and businesses in economies with labour and skills shortages. Such entry processes should have fair, transparent and cost-effective processes for skills recognition or certification.¹⁵⁷ While ASEAN Mutual Recognition Agreements are intended for skilled occupations, ILO has also been promoting the recognition of middle to low-skilled categories of workers through the mutual recognition of skills in selected occupations within the ASEAN Qualifications Reference Framework. Thailand has been collaborating with Cambodia, Lao People’s Democratic Republic and Myanmar to pilot mutual recognition of skills of migrant workers in bricklaying and plastering, industrial sewing and building electrical wiring. While Cambodia and Thailand reached an agreement on mutual recognition of skills in bricklaying and plastering in 2023, the mobility arrangements still remain to be developed.¹⁵⁸

While some skilling and labour mobility initiatives may not have a dedicated or sole green focus, these types of programmes do exist. In the Philippines, the Philippines Green Jobs Act (2016) mandates the Department of Education and the Commission on Higher Education to develop and implement curricula that would support the skills and knowledge requirements of a green economy. The Act also tasks the Technical Education and Skills Development Authority (TESDA) and the Professional Regulation Commission with developing training regulations and qualifications frameworks, respectively, to facilitate the certification of skilled and professional green personnel. These activities target economy-wide green skills development and training ecosystems in the Philippines but given the large pool of workers that migrate internationally from the Philippines, it also provides an example of good practices for origin countries. There are interesting and relevant examples of skill mobility partnerships in the Asia Pacific that build in skills development and recognition for migrant workers. See below the example for Australia and the Pacific Island States where origin and destination countries coordinate on mutual skills needs (Box 6). Australia, as the destination country, provides opportunities for training and skills acquisition and accreditation for migrant workers in their origin country, and investing in training infrastructure in origin countries. Thereby, the partnership contributes to skills development and labour market needs in origin as well as destination countries.

As mentioned previously, labour market changes from the green transition requires attention to the inclusion of both men and women, to avoid leaving anyone behind. In ADD origin countries, women’s participation in technical and vocational education and training programmes was found to be low, with high attrition rates among those who did enrol, primarily attributable to the division of family responsibilities.¹⁵⁹ There are various examples of skills trainings for women across origin countries, but the direct linkages to green jobs and employment opportunities is still missing. A study by the European Training Foundation showed how women migrant workers from Georgia, Morocco and Tunisia can benefit from training and capacity building, for example through pre-departure training programmes, language proficiency courses, and sector-specific vocational skills.¹⁶⁰

Lastly, in terms of skills matching, labour market data can assist in ensuring the right training and the right skills level are being developed. While labour force survey data from Malaysia and Thailand for 2019 show that a majority of migrant workers employed in these countries were in medium-skilled occupations, admission policies of both countries do not provide a facilitated regular migration pathway for medium-skilled workers. Therefore, where appropriate, middle-skilled labour migration should be reflected in admission policies coupled with skills recognition or certification mechanisms.¹⁶¹ Ultimately, skills partnerships and labour mobility programmes should lead to better wages, job mobility, or improved working conditions, in order to encourage effective skilling and upskilling initiatives.

¹⁵⁶ UN-ESCAP. (2024). *Asia-Pacific Migration Report 2024: Assessing implementation of the Global Compact for Migration*.

¹⁵⁷ Baruah, et.al. (2024). Middle-skilled Labor Migration in the Construction Sector: Migration Pathways and Certifying Skills of Migrant Workers in Singapore and Thailand and UNESCO. (2023). *Asia-Pacific Regional Convention on the Recognition of Qualifications in Higher Education*.

¹⁵⁸ ILO. (2023k). *Signing ceremony on technical assessment report for skills certification in skills bricklaying and plastering between Thailand and Cambodia*.

¹⁵⁹ UN Women. (2024b). *Gender Assessment of Skills Development and Overseas Employment Opportunities for Women in Pakistan*. Bangkok: UN Women.

¹⁶⁰ ETF. (2024). *Migrant women call for skills: What education and training systems can do*.

¹⁶¹ Baruah, et.al. (2024). Middle-skilled Labor Migration in the Construction Sector: Migration Pathways and Certifying Skills of Migrant Workers in Singapore and Thailand.

Box 36: Global Skills Partnerships in the Pacific for migrant workers in Australia

Labour mobility is a crucial tool for adaptation and managing climate-related shocks for Pacific Island communities.¹⁶² Labour mobility between the Pacific islands and Australia and New Zealand have occurred over a long period of time and has been strengthened by bilateral labour migration agreements. The Agreements aim to address labour shortages and provide economic development and empowerment for Pacific workers. Increasing employment opportunities and remittances from working in Australia and New Zealand are contributing to building climate resilience in Pacific communities, especially in the aftermath of economic and climate shocks.

These bilateral labour mobility agreements have been strengthened to include skills partnerships with an explicit focus on skills training addressing skills shortages in both origin and destination countries. Labour mobility when accompanied by skills development, formalised with qualifications, provides long lasting economic opportunities for migrants, their communities, and origin countries when migrants return with additional skills and experience.

The Australia Pacific Training Coalition is an example of a skills partnership.¹⁶³ Funded by Australia's Department of Foreign Affairs and Trade, it provides Australian standard qualification in various vocational areas across ten countries (Fiji, Kiribati, Nauru, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu) for employment in Pacific Island countries and Australia. In this model, training to a specific (destination country) standard is funded and delivered in origin countries, based on labour market needs in both origin and destination countries. This model develops both the technical and vocational education and training capacity in Pacific origin countries and allows migrant workers to obtain relevant qualifications before departure, making them more attractive in destination country labour markets. Current training includes skills that are in demand for the green transition including building and construction, plumbing and sustainable energy.

2.3. Summary

This section applied the ILO's Just Transition Guidelines to identify policy responses across social protection and skills development in the context of a just transition in the ADD corridor.

Social protection is a just transition tool as it can reduce vulnerability to climate shocks and climate policies while helping people manage job and income changes. It goes beyond safety nets by supporting climate mitigation, adaptation, and transition pathways through unemployment support, injury and sickness benefits, health coverage, pensions, and targeted assistance, including scalable emergency top-ups during disasters to name a few. Climate risks intensify life-cycle risks, yet coverage is weakest in the most climate-vulnerable countries, with layered impacts for women, migrants, and informal workers. The chapter also notes that there have been several legal reforms to improve social protection systems, and such reforms must address particular vulnerabilities of migrant to bridge any gaps in adequacy and long-term security.

Skills development is also highlighted as a just transition tool, by addressing the labour market changes that arise from the green transition and the subsequent changing skills needs. Well-aligned skills systems can help manage job creation, transformation and loss by linking education and training to climate and environmental policies, labour market needs, and labour mobility pathways. The chapter highlights growing efforts in the ADD corridor and beyond to strengthen skills recognition, mutual qualification frameworks, and bilateral and regional skills partnerships, including initiatives in construction, renewable energy and other emerging sectors. It is important to account for inclusivity, for example with regards to particularly for women, middle-skilled workers, and in linking certification to wages and employment outcomes. There are various skills partnerships, both regional, bilateral and private sector led, and green skills partnerships could be modelled on the best practices from the ADD region and beyond.

¹⁶² World Bank. (2023). *The Gains and Pains of Working Away from Home: The Case of Pacific Temporary Migrant Workers in Australia and New Zealand*.

¹⁶³ OECD. (2025). *Pacific Australia Labour Mobility scheme case study*.

3. Conclusion and recommendations

Climate change is increasingly reshaping labour markets and labour mobility dynamics across the Abu Dhabi Dialogue (ADD) corridor, intensifying existing vulnerabilities while also creating new opportunities for economic transformation. Both sudden-onset events (such as floods, storms, and extreme heat), and slow-onset processes, (e.g. sea-level rise, drought, and environmental degradation), are already affecting productivity, livelihoods, and working conditions in both origin and destination countries. At the same time, climate action is transforming labour markets by creating employment in emerging green sectors and displacing or restructuring jobs, for example in carbon-intensive occupations. Most jobs will require policies which both promote coherence, anticipation, and resilience across the labour market. This paper highlighted social protection and skills development as just transition policy areas, which can maximize the opportunities and minimize any negative consequences from the transition to environmental sustainability.

Climate change is already influencing labour mobility within this corridor. Origin countries such as Bangladesh, Nepal, and the Philippines face increasing climate risks (such as coastal flooding, salinisation, heatwaves, and declining agricultural productivity) that erode livelihoods and intensify labour migration as a coping and adaptation strategy. Meanwhile, in ADD destination countries, specifically in the GCC, climate impacts include rising temperatures, water scarcity, and extreme weather events that may introduce new (and worsen existing) occupational risks for migrant workers, especially those in outdoor and climate-exposed sectors.

In addition to climate impacts, climate action and policies represent both opportunities and challenges. Decarbonisation and environmental protection measures are expected to generate substantial employment opportunities in renewable energy, green hydrogen, electric mobility, and climate-resilient infrastructure, while employment in carbon-intensive and climate-sensitive sectors may decline or change in nature. Migrant workers are often over-represented in both categories: in sectors exposed to transition risks and in those expected to drive green growth. Ensuring that these transformations lead to decent work outcomes, rather than new forms of exclusion or inequality, is therefore central to achieving a just transition.

Therefore, labour mobility plays an evolving role within the ADD context. For destination countries, migrant workers continue to be essential across climate-exposed and transition-critical sectors, including construction, logistics, services, care, manufacturing, and emerging green industries. For origin countries, labour migration and remittances remain a vital source of financial support through income diversification, and, increasingly, a mechanism for coping with climate-related livelihood pressures.

The emerging climate–labour mobility nexus in the ADD corridor presents both risks and opportunities for a just transition. Without adequate protections, climate change can exacerbate existing decent work gaps and increase vulnerabilities across the labour migration cycle. At the same time, well-governed labour mobility which integrates rights-based migration governance, provides skills development for green jobs for all workers, including migrant workers, social protection, and recognition of migrant workers' role in climate adaptation can contribute significantly to resilience in both origin and destination countries. Effective policy responses will require coherent integration of labour, migration, and climate agendas; anticipation of climate-driven labour market shifts; and strengthened cooperation across national, bilateral, and interregional governance and consultation frameworks such as the ADD.

The report has analysed the nexus of climate change and labour mobility and highlighted several critical just transition hotspots in the ADD corridor context:

- **Emerging evidence indicates that climate change increasingly influences labour migration patterns in the Asia-GCC corridor.** Labour migration decisions are complex, and with limited data sources it is challenging to establish direct causal links, however indirect impacts of climate change are evident. Climate-induced stressors drive both gradual migration through the erosion of agricultural livelihoods and abrupt displacement following rapid-onset disasters, with labour migration often occurring as a livelihood diversification strategy when local adaptation options are exhausted. Anticipating and preparing for changes in mobility patterns, ensuring social protection and decent work will increase climate resilience.
- **Migrant workers face high exposure to climate risks.** Given their concentration in outdoor, and climate-vulnerable sectors, migrant workers may face increased occupational hazards, for example, from extreme heat or UV radiation or be particularly exposed to declines in certain sectors due to climate policies. Countries across the ADD corridor are already exploring and undertaking important reforms to avoid climate change amplifying these inequities and undermining the resilience for workers and their families.
- **Ambitious climate and industrial policies in the ADD participating states could generate millions of new green jobs.** Emerging green sectors such as hydrogen, renewable energy, Electric Vehicle (EV) manufacturing, and climate-resilient construction present major opportunities for economic diversification. Realizing these gains requires large-scale worker training – and including migrant workers in this reskilling ensures adequate labour supply is available to transition in destination countries and migrant workers can then use their green skills to contribute to transition in origin countries on return. Ensuring green jobs are decent and that workers have access to social protection will also ensure a just transition.

- **Labour mobility can be a powerful adaptation strategy - but only when migration is safe, regular, fair and rights-based.** For climate-vulnerable origin countries, labour migration and remittances already serve as essential mechanisms for stabilizing household income, financing adaptation, and reducing poverty. However, high recruitment costs, debt burdens, and gendered constraints limit the adaptive potential of labour migration and, in some cases, increase vulnerability. Ensuring migrant workers have social protection and decent work enables labour mobility to be an effective and fair adaptation strategy.
- **Social protection is a critical instrument to address vulnerabilities and ensure success of transition.** Social protection systems can address or even prevent adverse impacts when applied systematically with national climate policies and measures. Well-designed and funded social protection, that can be iteratively adapted to changing needs of transition can shield all workers, including migrant workers, from the adverse impacts of climate change on living standards, and ensure that successful implementation of climate policies translates into wider societal gains leaving no-one behind.
- **Aligning skills development policies and strategies with private sector needs and ensuring migrant workers can access skills development – especially for workers in carbon-intensive sectors.** Planning for skills development will need to be integrated with climate and mobility policies and regulations, including Nationally Determined Contributions (NDCs), to ensure that skills needs are met and climate commitments are implemented effectively. Migrant workers need to be included in skills development programmes, enabling a green transition that is also just for all.
- **A coordinated, just transition approach is essential to harness opportunities and reduce risks.** Just transition requires policy coherence across several policy areas, across climate and employment policies, and policy for strengthening social protection systems. Expanding fair recruitment and labour mobility pathways, and enhancing regional and interregional cooperation, including through the ADD, are also critical steps. With proactive governance and investment, labour mobility can contribute significantly to climate resilience, economic transformation, and shared prosperity across the ADD corridor.
- Just transition frameworks tend to focus on domestic settings, which may expose transition challenges in countries with high migrant workforce dependency. In the ADD corridor, migrant workers concentrated in sectors impacted by green transition, particularly energy and construction, face substantial risks if not explicitly included in transition planning.

Section 3 of the report analysed two areas of responses to these just transition issues ; social protection and skills development. These two policies areas should be considered in a comprehensive policy mix of all nine policy areas and a broader decent work agenda.

Social protection systems emerge as a foundational pillar for managing climate risks and labour market transitions. Well-designed and adequately financed systems can prevent poverty, protect incomes and health, and enable workers to navigate employment change. Recent reforms across the GCC provide an important measure of progress in social protection for migrant workers in ADD destination countries, but much more comprehensive social protection policies and schemes are needed to fully enable a just transition in the region. Moving forward, social protection reforms should account for particular vulnerabilities amongst migrant workers, women, and those in informal or non-standard employment, especially by putting in place stronger mechanisms to ensure effective access to benefits. Support and innovation in the portability of social protection across borders is needed to adequately address climate vulnerability, especially in relation to long-term risks such as disability, chronic illness, and old age. Addressing these gaps is essential not only for migrant worker protection, but also for strengthening climate resilience across origin and destination countries.

Skills development is a key just transition tool, supporting workers and labour markets to adapt to employment changes arising from the green transition and shifting skills needs. Well-aligned skills systems can facilitate job creation and transformation by linking education and training to climate policies, labour market demand, and labour mobility pathways. The report presented examples from the ADD corridor and beyond, to strengthen skills recognition, qualifications frameworks, and bilateral, regional, and sectoral partnerships, including in construction and renewable energy. Ensuring inclusivity remains essential, particularly for women and semi-skilled workers, as does strengthening the link between certification, wages, and employment outcomes. Existing skills partnerships can serve as an example on which green skills initiatives can be further developed and scaled.

Overall, the findings underscore that just transition frameworks, while primarily designed at national level, must more fully account for labour mobility and migrant workers. Greater policy coherence across climate, labour, migration, skills, social protection, and OSH domains is essential, as is stronger bilateral, regional, and interregional cooperation through platforms such as the ADD. With inclusive governance, coordinated policy action, and sustained investment, labour mobility can support climate adaptation, economic transformation, and decent work. With such coherence, policy frameworks, international dialogue and cooperation can reduce inequalities and vulnerabilities across the ADD corridor in a sustainable and job rich manner. Specific recommended courses of action in relation to social protection, skills development are outlined below. Likewise, within the context of the ADD, the report reflects on policy coherence and cooperation.

3.1. Social Protection

Social protection systems contribute in multiple ways to help realise climate adaptation and mitigation goals and facilitate just transition. With regards climate change adaptation, social protection systems tackle the root causes of vulnerability by preventing and reducing poverty, social exclusion and inequality. Furthermore, social protection enables ambitious climate change mitigation and environmental policies. Yet, migrant workers face significant legal, administrative, and practical barriers to accessing social protection entitlements, both at destination and upon return to countries of origin.

Since the COVID-19 pandemic there have been significant structural transformations in the approach to social protection for migrant workers in the ADD corridor. The current reform momentum in both ADD destination and origin countries provides a strategic opportunity to embed anticipatory and climate-responsive elements into migrant-inclusive social protection systems. Doing so would allow countries to respond more effectively to rising climate-related risks, particularly heat stress, while building on existing institutional investments, preserving fiscal sustainability, and aligning future reforms with international social protection standards and emerging global practice on climate-responsive social protection.

Currently climate risks and climate change impacts are not addressed comprehensively by social protection systems across the ADD migration corridor. With the exception of the UAE and Bahrain, migrant workers are excluded from unemployment protection systems that are critical to protect incomes and jobs during structural economic transitions and to cushion livelihoods from the negative effects of climate hazards. Typically work injury compensation schemes at destination do not explicitly cater for climate-related occupational hazards. The measures put in place by origin countries for migrant workers are often fragmented and cannot substitute for comprehensive and adequate coverage at destination, and only some countries of origin have aimed to adapt health protection schemes to explicitly cover climate-related and heat-induced illnesses. As a result, social protection coverage for migrant workers in the corridor continues to remain skewed towards short-term benefits, and long-term costs associated with climate change (including chronic illness, disability, or premature mortality linked to prolonged exposure to climate hazards) are still largely externalised to families and communities in countries of origin. Reliance on end-of-service indemnity schemes as a substitute for comprehensive social insurance leaves migrant workers insufficiently protected against life-cycle risks that are likely to intensify under climate change, undermining both individual resilience and broader adaptation efforts.

Recommendations for discussion with regards to social protection:

- **Embed climate and heat-stress risks explicitly into social protection system design:** Social protection systems should move from being climate-adjacent to climate-responsive by design, by systematically integrating climate risks, particularly heat stress into legislation, eligibility rules, and operational protocols. For example, by explicitly and legally recognise heat stress and other climate-related occupational hazards as compensable risks within social protection laws and regulations; and by aligning social protection schemes with national climate strategies and other relevant legislation.
- **Sustain and accelerate the reform momentum** to shift away from employer liability towards the development of comprehensive national social insurance systems that cover all migrant workers (across all sectors and forms of employment) particularly in ADD destination countries destination, placing particular attention that legal reforms are matched by accessible and transparent systems for access to entitlements at destination and upon return.
- **Adapt unemployment protection to address climate-related work interruptions and transitions:** Unemployment protection should be expanded to cover temporary, recurrent, and climate-induced income disruptions, which are increasingly common under rising temperatures and extreme weather. For example, by introducing short-time work compensations, or enabling temporary activation or extension of unemployment benefits during periods of climate-related work stoppages or reduced working hours (e.g. due to excessive heat); combining unemployment benefits with active labour market measures (reskilling, upskilling, and labour market reintegration), targeting workers displaced by climate impacts or decarbonisation policies; and ensuring migrant workers are explicitly included in climate-responsive unemployment schemes.
- **Explicitly recognise heat-related illnesses and deaths within employment injury insurance schemes:** Employment injury compensation systems must consistently treat heat stress and climate-related occupational risks as compensable contingencies, particularly in high-exposure sectors. For example, by establishing coverage for heat-related illnesses and fatalities for workers in designated high-risk sectors, ensuring employment injury schemes provide both medical care and income replacement for short- and long-term climate-related risks, and strengthening links between employment injury insurance, OSH prevention, rehabilitation, and return-to-work mechanisms, particularly for migrant workers, in the context of climate change.
- **Strengthen health protection and sickness benefits for climate-related health risks:** Social health protection and sickness benefits should be adapted to respond to rising climate-related morbidity, including heat-induced acute and chronic conditions. For example, expanding benefit packages to explicitly cover heat-related illnesses, dehydration, heatstroke, and climate-related diseases; ensuring that sickness benefits provide adequate income replacement; and reducing disparities in healthcare access between nationals and migrant workers, in line with the principle of equality of treatment.

- **Transition from EOSI to long-term, climate-resilient income protection:** Reliance on EOSI leaves migrant workers exposed to long-term climate-amplified life-cycle risks. These can be addressed, for example, by sustaining and accelerating transitions from EOSI towards provident funds, pension savings, and social insurance-based arrangements that provide predictable, portable, and life-cycle protection; ensuring coverage of all workers, across all sectors and forms of employment; and ensuring these schemes cover old age, disability, and survivors' benefits, which are particularly vulnerable to climate change.
- **Strengthen portability and coordination across origin and destination countries:** Climate-related risks often materialise after return, making portability and coordination essential for effective protection across the migration cycle. For example, working towards conclusion of bilateral and regional social security agreements that include employment injury, disability, health, and long-term benefits with administrative protocols in place for portability of accumulated rights and benefits; strengthening coordination between destination-country schemes and origin-country migrant welfare funds to ensure complementarity; and strengthening social protection measures in origin countries that provide adequate basic income and support climate resilience, thereby reducing the need for climate-related labour migration.

3.2. Skills Development

Skills development is essential for advancing just transition. For skills development to enable and accelerate a just transition, skills policies and environmental policies need to be developed and implemented with active involvement of social partners.¹⁶⁴ Governments play a coordinating role across line ministries in ensuring inclusive approaches. Employers' organisations contribute information about skills and learning needs based on labour market intelligence and facilitate workplace learning. Trade unions play a pivotal role in providing skills for green jobs, enhancing recognition of prior learning, and including training clauses in collective agreements. Education and training institutions develop and enhance the relevance of their programmes to labour market needs, preparing learners, trainers, and teachers to be active agents of change.

Recommendations for discussion with regards to skills development:

- **Strengthen skills anticipation and labour market intelligence for climate change and climate action scenarios:** Planning for a just transition requires forward-looking systems to anticipate skills demand arising from climate change and climate policies. For example, establishing or strengthening institutionalised mechanisms for skills forecasting and workforce planning both nationally and across the ADD corridor; integrating climate and decarbonisation scenarios into labour market information systems; and engaging workers and employers' organisations through social dialogue to validate skills needs in high-risk and high-growth sectors.
- **Expand reskilling and upskilling pathways for workers affected by climate change and climate action:** Skills policies should proactively support workers whose jobs are displaced, substituted, and transformed by climate change or climate policies. For example, scaling up modular, flexible, and short-cycle training programmes that enable rapid reskilling and upskilling; linking training access to unemployment protection, income support, or job-transition assistance where available; and prioritising pathways into emerging green and decent jobs rather than low-quality or informal employment. Regional, bilateral and private sector skills initiatives can increasingly account for these skills needs for green jobs too.
- **Strengthen skills recognition, certification, and portability across origin and destination countries:** Skills mobility is central to maximising the developmental and adaptation benefits of labour migration under climate change. For example, investing in mutual recognition of skills, qualifications, and prior learning across the ADD corridor; developing regionally aligned occupational standards for priority green and transitioning sectors; embedding skills recognition provisions within bilateral labour and social security agreements; and ensuring that competencies acquired abroad can be formally recognised and utilised upon return.
- **Ensure equal access to skills programmes:** Skills systems must take account of gender and social inequalities that risk being reinforced during climate transitions. For example, designing targeted training and career pathways for women migrant workers in non-traditional and higher-value green sectors; addressing barriers related to care responsibilities, mobility, and access to finance; and ensuring that skills anticipation and programme design explicitly consider the differentiated impacts of climate change and labour mobility on women, youth, and other vulnerable groups.
- **Invest in lifelong learning systems to support long-term employability and climate resilience:** Given the scale and persistence of climate-driven labour market change, skills development should extend beyond initial training. For example, strengthening lifelong learning frameworks that allow workers to update skills throughout their careers; integrating digital, foundational, and transferable core skills alongside technical green skills; and ensuring sustained public financing mechanisms that support continuous learning for workers in both origin and destination countries.

¹⁶⁴ As per the ILO Just Transition Guidelines.

3.3. Policy Coherence

The ILO Just Transition Guidelines call upon national governments to formulate, implement, monitor and evaluate gender-responsive, inclusive, integrated and coherent just transition frameworks that are coordinated with relevant economic, social and environmental policies and to extend these frameworks. Building on this, it would be important to integrate human and labour mobility scenarios in climate change policies, plans and actions, including in national adaptation policies and national disaster risk reduction policies. Labour migration policies should consider climate change as a driver of labour migration. Key to this will be building linkages between major international policy instruments such as the Paris Agreement, the Global Compact for Safe, Orderly and Regular Migration (GCM), the Sendai Framework for Disaster Risk Reduction 2015–2030, the 2030 Agenda for Sustainable Development and the ILO Just Transition Guidelines, as well as the national-level policy responses that operationalise these agreements.

Recommendations for discussion with regards to policy coherence:

- **Regional and national policy dialogues:** ADD member states can work individually and collaboratively to integrate labour mobility into climate change policies, national adaptation plans, and disaster risk reduction strategies, recognising the interlinkages between the Paris Agreement, the GCM, the Sendai Framework, the 2030 Agenda, and the ILO Just Transition Guidelines. Establishing national mechanisms to include workers' and employers' organisations in policy development will make policy development and implementation more robust.
- **Capacity development:** ADD member states can individually and collaboratively build capacity to collect and monitor data on climate-induced migration and related employment issues, support interregional dialogue for safe and regular migration pathways, and promote fair recruitment in line with ILO standards, principles and guidelines.¹⁶⁵
- **Climate-responsive labour mobility agreements:** Bilateral labour mobility agreements in the ADD corridor could incorporate climate-responsive protections, including enforceable standards, fair recruitment and other non-discrimination measures.
- **Sharing of data and knowledge across countries and regions:** The ADD as an interregional consultative framework can contribute to institutionalising climate-labour mobility governance, including data sharing, joint risk assessments, and coordinated labour market planning.

¹⁶⁵ With regard to fair recruitment, see the ILO. 2019. [General Principles and Guidelines for Fair Recruitment and Definition of Recruitment Fees and Related Costs](#).

4. References

- Abdur Rahman, A., Bilo, S., Chatterjee, S., & Cheng, N. F. L. (2024). *Migration, Automation, and the Malaysian Labor Market*. W. Bank. <http://documents.worldbank.org/curated/en/099110424210537110>
- ADBI, ILO, & OECD. (2024). *Labour migration in Asia: trends, skills certification, and seasonal work*. https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/05/labor-migration-in-asia_519732dd/9b45c5c4-en.pdf
- ADBI, OECD, & ILO. (2025). *Labor Migration in Asia: Fair recruitment, training, and development*. <https://www.ilo.org/sites/default/files/2025-09/Labor%20migration%20trends%20in%20Asia%20-%20recruitment%2C%20training%2C%20and%20development.pdf>
- Ahmed, M. N. Q., Givens, J., & Arredondo, A. (2024). The links between climate change and migration: a review of South Asian experiences. *SN Social Sciences*, 4. <https://doi.org/10.1007/s43545-024-00864-2>
- Al-Kazi, L. A. (2025). Challenges to Kuwaiti Women's Integration in the Private Sector. In F. De Bel-Air & N. M. E. Shah (Eds.), *The future of migration to GCC countries*. https://doi.org/10.1007/978-981-96-9928-5_6
- Alahmad, B., Al-Hemoud, A., Al-Bouwarthan, M., Khraishah, H., Kamel, M., Akrouf, Q., Wegman, D. H., Bernstein, A. S., & Koutrakis, P. (2023). Extreme heat and work injuries in Kuwait's hot summers. *Occupational and Environmental Medicine*, 80(6), 347. <https://doi.org/10.1136/oemed-2022-108697>
- Alfarhan, U. F. (2018). Earnings Differentials and Nationalisation Policies in GCC's Private Sector Labour Market. In P. Fargues & N. M. E. Shah (Eds.), *Migration to the gulf: policies in sending and receiving countries*. Gulf Labour Markets, Migration and Population Programme (GLMM).
- Almulhim, A. I., Alverio, G. N., Sharifi, A., Shaw, R., Huq, S., Mahmud, M. J., Ahmad, S., & Abubakar, I. R. (2024). Climate-induced migration in the Global South: an in depth analysis. *npj Climate Action*, 3(1), 47. <https://doi.org/10.1038/s44168-024-00133-1>
- ASEAN, & IOM. (2024). *ASEAN Migration Outlook: second edition*. https://asean.org/wp-content/uploads/2024/09/ASEAN-Migration-Outlook-SECOND-edition_Final.pdf
- Aun, L. H. (2025). *Facilitating gainful labour migration in Southeast Asia remains an elusive task* [Current Events Analysis](ISEAS Yusok Ishak Institute Perspective, Issue. I. Y. I. Institute. https://www.iseas.edu.sg/wp-content/uploads/2025/04/ISEAS_Perspective_2025_37.pdf
- Baruah, Nilim, Ratna Mathai-Luke and Weiming Chen (2024). Middle-skilled Labor Migration in the Construction Sector: Migration Pathways and Certifying Skills of Migrant Workers in Singapore and Thailand, in: ADBI, ILO, and OECD. *Labor Migration in Asia: Trends, Skills Certification, and Seasonal Work*, pp. 38-61. ADBI, ILO, OECD, Tokyo.
- Bharadwaj, R., Chakravarti, D., Karthikeyan, N., Islam, S., & Tanni, U. (2024). *Exposed and exploited: climate change, migration and modern slavery in Bangladesh*. https://www.iied.org/sites/default/files/pdfs/2025-02/22604_iied.pdf
- Dempsters, H. & Huckstep, S. (2024). *Options for Green-Skilled Migration Partnerships: A Guide for Policymakers*. <https://www.cgdev.org/publication/options-green-skilled-migration-partnerships-guide-policymakers>
- De Bel-Air, F., & Shah, N. M. (2025). *The future of migration to GCC countries: migrants' aspiration, labour reforms, and politics*. Gulf Research Center Cambridge. <https://doi.org/https://doi.org/10.1007/978-981-96-9928-5>
- DIIS. (2024). *Climate migration amplifies gender inequalities* (DIIS Policy Brief, Issue. <https://reliefweb.int/report/nepal/climate-migration-amplifies-gender-inequalities>
- ETF. (2024). Migrant women call for skills: What education and training systems can do. https://south.euneighbours.eu/wp-content/uploads/2024/12/1-ETF_Policy-brief_Migrant-women_2024.pdf
- GLMM. (2022). *UAE: Total labour force in the private sector by economic activity (2017-2022)* (<https://gulfmigration.grc.net/uae-total-labour-force-in-the-private-sector-by-economic-activity-2017-2022/>)
- GLMM. (2023a). *GCC: Employed population and percentage of non-nationals in employed population in GCC countries (2015–2023)– private sector* (<https://gulfmigration.grc.net/gcc-employed-population-and-percentage-of-non-nationals-in-employed-population-in-gcc-countries-2015-2023-private-sector/>)
- GLMM. (2023b). *GCC: Employed population by nationality (nationals / non-nationals) and sector of employment (mid-2022)* (<https://gulfmigration.grc.net/gcc-employed-population-by-nationality-nationals-non-nationals-and-sector-of-employment-mid-2022/>)
- Government Office for Science (2011), *Foresight: Migration and Global Environmental Change, Future Challenges and Opportunities*. London, Government Office for Science.
- Government of Bangladesh. (2022a). *Mujib Climate Prosperity Plan 2022-2041*. Dhaka.
- Government of Bangladesh. (2022b). *National Adaptation Plan of Bangladesh (2023-2050)*. Dhaka.
- Government of Bangladesh. (2025). *Bangladesh's third Nationally Determined Contribution (NDC 3.0)*.
- Government of Nepal. (2025a). *International migration in Nepal*. Kathmandu. <http://censuseducation.nepal.gov.np/results/files/result-folder/International%20Migration%20in%20Nepal%20Report.pdf>
- Government of Nepal. (2025b). *Nationally determined contribution (NDC) 3.0*. Kathmandu. <https://unfccc.int/sites/default/files/2025-05/Nepal%20NDC3.pdf>
- HRW. (2025, 1 June 2025). *Gulf States: Protect Workers from Extreme Heat* [News Release]. <https://www.hrw.org/news/2025/06/01/gulf-states-protect-workers-extreme-heat>

- ILO. (2019a). *Assessment of occupational heat strain and mitigation strategies in Qatar*. Beirut: ILO Regional Office for Arab States. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@arabstates/@ro-beirut/documents/publication/wcms_723545.pdf
- ILO. (2019b). *Skills for a Greener Future: A Global View*, 2019. <https://www.ilo.org/publications/skills-greener-future-global-view>
- ILO. (2021). *World Social Protection Report 2020-22: Social protection at the crossroads – in pursuit of a better future*. Geneva: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%4oed_protect/%4osoc_sec/documents/publication/wcms_817572.pdf
- ILO. (2022a). *Human mobility and labour migration related to climate change in a just transition towards environmentally sustainable economies and societies for all*. Just Transition Policy Brief. Geneva: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%4oed_emp/%4oemp_ent/documents/publication/wcms_860606.pdf
- ILO. (2022b). *Skills needs in Kuwait following the COVID-19 pandemic*. Beirut: ILO Regional Office for Arab States. <https://www.ilo.org/media/371556/download>
- ILO. (2022c). *Skills needs in the Oman labour market: An employer survey*. Beirut: ILO Regional Office for Arab States. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@arabstates/@ro-beirut/documents/publication/wcms_862345.pdf
- ILO (2022e). *Just Transition Policy Brief. Skills development for a just transition. Skills development for a just transition*. Just Transition Policy Brief. Geneva: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%4oed_emp/%4oemp_ent/documents/publication/wcms_860617.pdf
- ILO. (2023a). *Social Protection for a just transition*. Just Transition Policy Brief. Geneva: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%4oed_emp/%4oemp_ent/documents/publication/wcms_867426.pdf
- ILO. (2023b). *Occupational safety and health in a just transition*. Just Transition Policy Brief. Geneva: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%4oed_emp/%4oemp_ent/documents/publication/wcms_895605.pdf
- ILO. (2023c). *Climate change and human mobility in Bangladesh*. Policy Brief. <https://www.ilo.org/resource/policy/climate-change-and-human-mobility-bangladesh>
- ILO. (2023d). *Resolution V: Resolution concerning a just transition towards environmentally sustainable economies and societies for all*. International Labour Conference, 111th Session, Geneva, 2023. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%4oed_norm/%4orelconf/documents/meetingdocument/wcms_886647.pdf
- ILO. (2023e) *Extending social protection to migrant workers in the Arab region: An analysis of existing barriers and good practices in light of international social security standards*, Beirut: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%4oarabstates/%4oro-beirut/documents/publication/wcms_886164.pdf
- ILO, (2023f) *Social protection for migrant workers in countries of the Cooperation Council for the Arab States of the Gulf (GCC): A regional mapping of provisions on paper and in practice*, Beirut: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%4oarabstates/%4oro-beirut/documents/publication/wcms_903672.pdf
- ILO. (2023g). "Review of the National Social Protection Legislation and Legal Frameworks for Migrant Workers in the Gulf Countries". Beirut: ILO.
- ILO. (2023h) *Social protection spotlight, Guidance note: Using Migrant Welfare Funds as a social protection instrument – potential and limitations?* Geneva: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_protect/@protrav/@migrant/documents/publication/wcms_893056.pdf
- ILO, (2023i) *Access to social protection for Nepalese migrant workers in countries of the Cooperation Council for the Arab States of the Gulf (GCC)*, Beirut: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%4oarabstates/%4oro-beirut/documents/publication/wcms_903674.pdf
- ILO. (2023k). *Signing ceremony on technical assessment report for skills certification in skills bricklaying and plastering between Thailand and Cambodia*. 6 April 2023. <https://www.ilo.org/resource/news/signing-ceremony-technical-assessment-report-skills-certification-skills>
- ILO. (2023l). *Abu Dhabi Dialogue: Matching labour mobility with labour market needs in ADD corridors*. <https://www.ilo.org/resource/abu-dhabi-dialogue-matching-labour-mobility-labour-market-needs-add>
- ILO. (2023m). *Far-reaching reforms in Oman set new benchmark for social protection in the region* | International Labour Organization. <https://www.ilo.org/resource/article/far-reaching-reforms-oman-set-new-benchmark-social-protection-region>
- ILO. (2023n). *Social protection for migrant workers in the Gulf Cooperation Council countries: A regional mapping of provisions on paper and in practice*. <https://www.ilo.org/publications/social-protection-migrant-workers-gulf-cooperation-council-countries>
- ILO. (2023o). *Reforming end-of-service indemnity for migrant workers in Member States of the Cooperation Council for the Arab States of the Gulf (GCC)*. <https://www.ilo.org/publications/reforming-end-service-indemnity-migrant-workers-member-states-cooperation>

- ILO. (2024a). *Effective matching of the demand for and supply of migrant workers between Abu Dhabi Dialogue countries of origin and destination* [Research paper]. Abu Dhabi Dialogue. http://abudhabidialogue.org.ae/sites/default/files/document-library/Effective%20Matching%20of%20Demand%20and%20Supply_ILO_Research%20Paper.pdf
- ILO. (2024b). *ILO global estimates on international migrants in the labour force*. 4th Edition. Geneva: ILO. <https://www.ilo.org/sites/default/files/2025-09/MIGRANT%E2%80%93ILO%20Global%20Estimates%20on%20International%20Migrant%20Workers.pdf>
- ILO. (2024c). *Assessment of Labour Migration Statistics in the Arab States: A Baseline for Strengthening Data Collection and Analysis*. Beirut: ILO. <https://www.ilo.org/publications/assessment-labour-migration-statistics-arab-states>.
- ILO. (2024d). *Arab States Employment and Social Outlook - Trends 2024: Promoting social justice through a just transition*. Beirut: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@arabstates/@ro-beirut/documents/publication/wcms_912980.pdf
- ILO. (2024e). *World Social Protection Report 2024-2026: Universal Social Protection for Climate Action and a Just Transition*, Geneva: ILO. https://www.ilo.org/sites/default/files/2024-09/WSPR_2024_EN_WEB_1.pdf
- ILO. (2024f). *Strategy on Extending Social Protection to Migrant Workers, Refugees, and their Families*, Beirut: ILO. <https://www.ilo.org/sites/default/files/2025-03/Strategy20250314.pdf>
- ILO. (2024g). *Asia-Pacific Employment and Social Outlook 2024: Promoting Decent Work and Social Justice to Manage Ageing Societies*. Geneva: ILO. Available at <https://www.ilo.org/publications/major-publications/asia-pacific-employment-and-social-outlook-2024-promoting-decent-work-and>
- ILO. (2025a). *Climate change, environmental degradation and labour mobility in the ASEAN region* (ILO brief, Issue. <https://www.ilo.org/publications/labour-mobility-asean-region>
- ILO. (2025b). *NDC review in the Arab States: Regional report of the integration of just transition themes in the NDCs across the Arab States*.
- ILO. (2025c, 24 October 2025). *New ILO factsheets reveal linkages between climate challenges and green job opportunities in the Arab States region* <https://www.ilo.org/resource/news/new-ilo-factsheets-reveal-linkages-between-climate-challenges-and-green-job>
- IOM. (2024). *Recruitment and mobility of migrant women in the health sector in the Abu Dhabi Dialogue Corridors* [Research paper]. Abu Dhabi Dialogue. http://abudhabidialogue.org.ae/sites/default/files/document-library/Recruitment%20and%20Mobility%20of%20Women%20in%20Health%20Sector_IOM_Research%20Paper.pdf
- ILO and IOM. (2022). *Climate change and labour mobility in Pacific Island Countries*. Pacific Climate Change Migration and Human security: Policy Brief, ILO: Suva, Fiji. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40asia/%40ro-bangkok/%40ilo-suva/documents/publication/wcms_856083.pdf
- ISSA. (2024). *Social security reforms in Arab countries in the Middle East*. ISSA Analysis. <https://www.issa.int/analysis/social-security-reforms-arab-countries-middle-east>
- IPCC. (2022). *Climate Change 2022: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge University Press, Cambridge, UK and New York, NY, USA, 3056 pp., doi:10.1017/9781009325844
- IPCC. (2023). Summary for Policymakers. In: *Climate Change 2023: Synthesis Report*. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)] IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001
- Khadri, S. A. (2018). *Highly-Skilled Professionals in the GCC: Migration Policies and Government Outlook*. In P. Fargues & N. M. E. Shah (Eds.), *Migration to the Gulf: policies in sending and receiving countries*. Gulf Labour Markets, Migration, and Population Programme (GLMM)
- Kjellstrom, T., Maître, N., Saget, C., Otto, M., & Karimova, T. (2019). *Working on a warmer planet: The effect of heat stress on productivity and decent work*. <https://www.ilo.org/publications/major-publications/working-warmer-planet-effect-heat-stress-productivity-and-decent-work>
- KNOMAD. (2025). *Remittance inflows (US\$ million)* (https://data360.worldbank.org/en/indicator/WB_KNOMAD_MRI)
- Kuwait, S. o. (2019). *Kuwait National Adaptation Plan 2019-2030: Enhanced climate resilience to improve community livelihood and achieve sustainability*. Kuwait City Retrieved from <https://unfccc.int/sites/default/files/resource/Kuwait-NAP-2019-2030.pdf>
- Luna, S. S., & Rahman, M. M. (2025). *Feminized migration in the GCC States: the future of Asian female labour migration to the gulf*. In F. De Bel-Air & N. M. E. Shah (Eds.), *The future of migration to GCC countries*. https://doi.org/10.1007/978-981-96-9928-5_6
- Makhlouf, F., & Selmi, R. (2024). 'From aspirations for climate action to the reality of climate disasters': Can remittances play key role in disaster response? *World economy*, 47(8), 3487-3510. <https://doi.org/10.1111/twec.13586>
- Malaysia, F. G. o. (2023). *National Energy Transition Roadmap: Energising the nation, powering our future*. Kuala Lumpur Retrieved from <https://ekonomi.gov.my/sites/default/files/2023-08/National%20Energy%20Transition%20Roadmap.pdf>
- Malaysia, F. G. o. (2024). *National Climate Change Policy 2.0*. Kuala Lumpur Retrieved from <https://www.nres.gov.my/ms-my/pustakamedia/Penerbitan/National%20Policy%20on%20Climate%20Change%202.0.pdf>
- Ministry of Environment, S. L. (2025). *Nationally Determined Contributions 3.0 (2026-2035)*. Retrieved from <https://unfccc.int/node/650098>

- Ministry of Human Resources and Emiratisation. (2025a). *Employment Percentage Distribution by Economic Activities 2022 – 2024*. Retrieved from <https://www.mohre.gov.ae/en/open-data/statistical-report>
- Ministry of Human Resources and Emiratisation. (2025b). *Insurance Against Job Loss*. Retrieved from <https://u.ae/et/information-and-services/jobs/insurance/unemployment-insurance-scheme>
- Ministry of Manpower (2025). *Updated list of occupational diseases*, MOM Circular No. MOM/OSHD/2025-07. Singapore: Government of Singapore. <https://www.mom.gov.sg/-/media/mom/documents/safety-health/circulars/2025/circular-20251128-updated-list-of-occupational-diseases.pdf>
- MMC. (2024). *Climate Change Impacts on Mobility in the Middle East: What do we know?* https://mixedmigration.org/wp-content/uploads/2024/04/326_Climate-Change-Middle-East.pdf
- Mukherjee, M., & Fransen, S. (2024). Exploring migration decision-making and agricultural adaptation in the context of climate change: A systematic review. *World Development*, 179, 106600. <https://doi.org/https://doi.org/10.1016/j.worlddev.2024.106600>
- NABTU. (2022). *North America's Building Trades Unions and Ørsted Agree to Build an American Offshore Wind Energy Industry with American Labor*. https://nabtu.org/press_releases/nowa-agreement-orsted/
- ND-GAIN. (2024). *University of Notre Dame Global Adaptation Initiative: Country Index Technical Report*. https://gain.nd.edu/assets/581554/nd_gain_countryindex_technicalreport_2024.pdf
- ND-GAIN. (2025). *Notre Dame Global Adaptation Initiative Country Index (ND-GAIN)* (<https://gain.nd.edu/our-work/country-index/>)
- OECD (2025) *Pacific Australia Labour Mobility scheme case study*, https://www.oecd.org/en/publications/oda-and-non-oda-eligible-activities_5b102172-en/pacific-australia-labour-mobility-scheme_628dfe7e-en.html
- Philippines. (2023). *National Adaptation Plan of the Philippines 2023-2050*. Manila and Quezon City Retrieved from <https://unfccc.int/documents/638996>
- Rigaud KK, De Sherbinin A, Jones B, Bergmann J, Clement V, Ober K, Schewe J, Adamo S, McCusker B, Heuser S, Midgley A. (2018) *Groundswell: Preparing for internal climate migration*. World Bank: Washington DC, USA. <https://www.worldbank.org/en/news/infographic/2018/03/19/groundswell---preparing-for-internal-climate-migration>
- Rudolph, L., Koubi, V., & Freihardt, J. (2025). Environmental change and migration aspirations: Evidence from Bangladesh. *Global Environmental Change*, 91, 102966. <https://doi.org/https://doi.org/10.1016/j.gloenvcha.2025.102966>
- Silchenko, D. & Murray, U. (2023). Migration and climate change – The role of social protection. <https://doi.org/10.1016/j.crm.2022.100472>
- Saha, J., & Iqbal, Z. (2025). The Impact of Remittances on Climate Change: Empirical Evidence from Nepal. *Indian economic journal*. <https://doi.org/10.1177/00194662251332881>
- Tomoiağă, E., Pop Silaghi, M. I., Cheregi, V. I., & Cismaş, L. M. (2025). Could climate change be a driver of migration flows from Asia? A panel data analysis. *Journal of Applied Economics*, 28(1), 2513252. <https://doi.org/10.1080/15140326.2025.2513252>
- Uddin, M. J. (2023). Climate Change, Vulnerabilities, and Migration: Insights from Ecological Migrants in Bangladesh. *The Journal of Environment & Development*, 33(1), 50-74. <https://doi.org/10.1177/10704965231211589>
- UN-DESA. (2024). *International Migrant Stock 2024* (<https://www.un.org/development/desa/pd/content/international-migrant-stock>)
- UN-ESCAP. (2024). *Asia-Pacific migration report 2024: Assessing implementation of the Global Compact for Migration*. Bangkok: UN-ESCAP. https://www.ilo.org/sites/default/files/2025-01/25-001_escap-2024-rp-apmr-2024.pdf
- UN-ESCWA. (2024). *Migration and climate change in the Arab region*. UN ESCWA. <https://www.ilo.org/publications/migration-and-climate-change-arab-region>
- UN-ESCWA. (2025). *Inequality in the Arab region: Rights denied, promises broken*. https://www.unescwa.org/sites/default/files/pubs/pdf/inequality-arab-region-rights-denied-promises-broken-english_3.pdf
- UNESCO. (2023). *Asia-Pacific Regional Convention on the Recognition of Qualifications in Higher Education* (Tokyo Convention). Available at <https://unesdoc.unesco.org/ark:/48223/pf0000387653>
- UNFCCC. United Arab Emirates Just Transition Work Programme. Decision -/CMA.7. Advance Unedited Version. Bonn: UNFCCC, 2025. https://unfccc.int/sites/default/files/resource/cma7_5_UAE%20JTWP_auv.pdf
- UN-WOMEN. (2024a). *Current and potential demand for woman workers in the renewable energy sector in India and the UAE* [Research paper]. Abu Dhabi Dialogue. http://abudhabidialogue.org.ae/sites/default/files/document-library/Current%20and%20Potential%20Demand%20for%20Women%20in%20Renewable%20Energy_UN%20Women_Research%20Paper.pdf
- UN-WOMEN. (2024b). *Gender Assessment of Skills Development and Overseas Employment Opportunities for Women in Pakistan*. Bangkok: UN Women. <https://asiapacific.unwomen.org/en/digital-library/publications/2024/01/gender-assessment-of-skills-development>
- UN-WOMEN (2024c). In search of safety – LGTBIQ+ people on the move. Explainer. 14 June. <https://www.unwomen.org/en/news-stories/explainer/2024/06/in-search-of-safety-lgtbiq-people-on-the-move>
- UN-WOMEN (2024d). *Skilling Women Migrant Workers: Insight from Sri Lanka*. Research Brief. <https://asiapacific.unwomen.org/en/digital-library/publications/2024/01/gender-assessment-of-skills-development-opportunities>
- United Arab Emirates. (2023). *The United Arab Emirates' First Long-Term Strategy (LTS): Demonstrating commitment to Net Zero by 2050*.
- United Arab Emirates. (2024). *The United Arab Emirates' Third Nationally Determined Contribution (NDC 3.0)*. Dubai: Ministry of Climate Change and Environment

- Vigil, S., & Kim, D. (2023). *International labour migration in a changing climate: insights from Malaysia and Thailand*. <https://www.sei.org/publications/migration-climate-insights-malaysia-thailand/>
- World Bank. (2023). *World Development Report 2023: Migrants, Refugees, and Societies*. <https://www.worldbank.org/en/publication/wdr2023>
- World Bank. (2024a). *Climate migration and its impact on women in Bangladesh*. <https://hdl.handle.net/10986/43239>
- World Bank. (2024b). *Nepal development update: International migration and well-being in Nepal*. <https://documents1.worldbank.org/curated/en/099439009302442870/pdf/IDU1bade74731of41144991a576183a9a3eb57d4.pdf>
- World Bank. (2025a). *Agriculture, forestry, and fishing, value added (% of GDP)* (World Bank Open Data). <https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS>
- World Bank. (2025b). *Employment in agriculture (% of total employment) (modeled ILO estimate)* (World Bank Open Data). <https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS>
- World Bank. (2025c). *Personal remittances, received (% of GDP)* (World Bank Open Data). <https://data.worldbank.org/indicator/BX.TRF.PWKR.DT.GD.ZS>
- World Bank. (2025d). *Jobs in a changing climate: Insights from World Bank Group Country Climate and Development Reports covering 93 economies*. <https://openknowledge.worldbank.org/entities/publication/b241b8f1-c77d-4470-9070-514fdc168440>