

# Research papers

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Just transition  
in Southeast  
Asia: Exploring  
the links  
between social  
protection and  
environmental  
policies



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## **Just transition in Southeast Asia: Exploring the links between social protection and environmental policies**

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### **Résumé**

Le lien entre protection sociale et environnement est appelé à devenir un domaine d'intervention politique croissant en Asie du Sud-Est. Sur la base d'une revue systématique de la littérature académique et institutionnelle, cet article propose d'identifier les différentes visions du lien entre protection sociale et enjeux environnementaux, ainsi que leur opérationnalisation. En regroupant les articles sur la base d'une grille de lecture, la recherche montre que cette littérature est peu développée à ce jour en ce qui concerne le bassin du Mékong et que la plupart des articles semble principalement s'appuyer sur l'étude de la réponse aux catastrophes et de l'assistance. L'article pose également la question du périmètre et de la définition de la protection sociale et montre qu'il devient nécessaire de construire des systèmes socio-écologiques communs à plusieurs niveaux.

### **Mots-clés**

Transition juste, protection sociale, environnement, changement climatique, Asie du Sud-Est, revue systématique

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### **Abstract**

The link between social protection and the environment is expected to become a growing policy intervention area in Southeast Asia. Based on a systematic review of the academic and institutional literature, this article proposes identifying the different possible visions of the link between social protection and environmental issues and their operationalization. By clustering the papers based on a reading grid proposed by the authors, the research shows this literature for the Mekong area is not very developed to date and most of the selected papers' approach seem only to leave room for disaster response and assistance. The article also raises the question of the perimeter and very definition of social protection in these changing contexts and shows it is becoming necessary to build multilevel common socio-ecological systems.

### **Keywords**

Just transition, social protection, environment, climate change, Southeast Asia, systematic review

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# Introduction

In recent times, social protection in the Global South has been the subject of growing interest. Social models are represented by a multitude of sometimes rival typologies that attempt to capture very different institutional set-ups and governance structures across countries. However, no matter the analysis grid chosen, the link between social protection and environmental protection is expected to become a growing policy intervention area in some parts of the world, including Southeast Asia (SEA). Many countries in SEA are already experiencing a great deal of intensive local pollution, which risks being further aggravated by climate change in the near future. The question thus arises of how new frontiers in policy making should take into consideration both social and environmental protection. This question is becoming central and recent literature highlights the value of social protection in low and middle income countries to tackle climate change issues by helping mitigation through measures to compensate for adverse impacts of environmental actions as well as through incentives for pro-environmental behaviour (Györi et al., 2021). Social protection could also reduce vulnerability to poverty and climate risks (FAO and RCC, 2019). The article discusses how social and environmental protection systems could be combined, and asks to what extent taking environmental protection into account may or may not represent an asset in terms of social development in SEA.

The paper is based on a systematic review of the academic and institutional literature examining the links between social protection and environmental issues in the Lower Mekong Basin: Cambodia, Viet Nam, Lao PDR, Myanmar, and Thailand. It proposes a political economy analysis of these two concepts.

As shown in Table 1, these countries are rather different, both in size and level of development<sup>1</sup>. But all five face important environmental threats. First, climate change could lead to more extreme weather events in the region, such as floods, especially in the Mekong delta region. Rainfall and monsoon regimes may

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<sup>1</sup> Cambodia, Lao PDR, Myanmar, and Vietnam are classified as lower-middle income countries by the

also be modified by global warming (IPCC, 2021). The region has also been home to significant deforestation, even though it is known for tropical forests and mangroves that are extremely valuable in terms of biodiversity and carbon reduction (Estoque et al., 2019). The region is also subject to air pollution due to urban emissions of local air pollutants. Even if less developed than in Indonesia and Malaysia, the question of haze pollution—caused mainly by the practice of slash-and-burn agriculture—is also present in inland SEA (ASEAN, 2017).

We start by examining the literature around the “just transition” concept, which focuses on the social dimension of the ecological and energy transition of our societies. Just transition began as a trade union demand for managing the transformation toward a low carbon economy (see Galgóczi (2019) for more details). This approach has now become an international mainstream policy tool aiming to promote decent work for all in an inclusive society, with the goal to end poverty. These transitions need to be well managed to ensure that they are just and that nobody is left behind. Consequently, the important role of social dialogue is highlighted in the 2015 International Labour Organization (ILO) Guidelines (ILO, 2015), which broaden the concept’s horizons and highlight the need to secure the livelihoods of all those who might be negatively affected by the green transition, also stressing the need for societies to be inclusive and employment to be decent. With this as a starting point, we propose identifying the different possible visions of the link between social protection and environmental protection, and their expression and operationalization in the existing literature on SEA.

Section 1 explores the theoretical and institutional fields of social protection and environmental protection in order to highlight different approaches and definitions in both domains. These conceptual issues lead to the analysis of the emerging links between social and environmental protection. The intertwining of these concepts in social sciences is recent, but it builds on a rather voluminous literature

World Bank. Thailand is an upper-middle income country.

that is not limited to the corpus on just transition and reflects various ways of viewing both the tools and actors needed to apprehend this nexus.

Section 2 delineates the methodology used: a systematic review methodology, aiming to identify a series of specific links through research outputs and delineate several frontiers of the social-environmental protection nexus. The different steps of the systematic review and the selection mode for relevant articles are provided, so the reader can understand the choices made at each stage.

Section 3 outlines the main findings, and presents in detail the 30 references that were selected and analyzed. Based on the systematic review criteria applied, we develop a 4-category typology that takes into account the area, the type of measures or policies put in place, the implementing actors, the links between social policy and environment, and the beneficiaries of the identified policies. Through this lens of analysis, the study attempts to draw some conclusions and hypothesize some possible pathways for the development of this nexus in the Lower Mekong.

**Table 1. Background information on the selected country sample**

	Cambodia	Lao PDR	Myanmar	Thailand	Vietnam
Total population	16,486,542	7,169,456	54,045,422	69,625,581	96,462,108
Individuals in the population aged 65 years or older (%)	4.5	4	5.7	11.9	7.2
Life expectancy at birth men/women (years)	67.3/71.6	57.9/65.8	63.7/69.8	73.2/80.7	71.2/79.4
Female labor force participation (%)	76.3	76.7	47.5	59.2	72.7
Self-employed in total employment (%)	50.4	80.6	62.1	51.2	56.1
Informal employment (%)	90.6	75.5	79.6	51.9	54.2
No. of poor at 1.90 USD a day (2011, PPP) (millions)		0.7 (2018)	0.7 (2017)	0.1 (2019)	1.7 (2018)
Poverty headcount ratio at 1.90 USD a day (2011 PPP) (% pop.)		10 (2018)	1.4 (2017)	0.1 (2019)	1.8 (2018)
Gini index (WB estimates)		38.8 (2018)	30.7 (2017)	34.9 (2019)	35.7 (2018)
Out-of-pocket expenditure (% of current healthcare expenditure, 2018)	57.5	48.5	76.4	11	44.9
GDP per capita PPP (current international \$)	4,360	7,439	6,674	19 051	7,447

**Sources:** ILO, World Social Protection Database, based on SSI; ISSA/SSA, Social Security Programs Throughout the World; ILOSTAT, ECLAC, IMF, WHO, WB, UNDP, UNICEF, completed with national data sources, last year available; and the World Bank DataBank.

# 1. What is the nexus between social and environmental protection? Conceptual issues

Social protection and environmental protection both have broad, multiple definitions. It is therefore necessary to identify these notions and their definitions in terms of the specific context of this study. In the case of countries that are not members of the Organisation for Economic Co-operation and Development (OECD), it is also necessary to ask questions about the circularity of models, particularly with respect to their applicability across the Global North and Global South. Section 1.1 examines the evolution of social protection models for welfare analysis and provides a brief description of the social security schemes implemented in Cambodia, Lao PDR, Myanmar, Thailand, and Vietnam. Section 1.2 highlights the possible links between social and environmental dimensions.

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## 1.1. Different approaches to social protection in developing countries

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At the end of the twentieth century, social protection started to become a priority for international development policy. The idea of extending non-contributory social security to informal workers, which was considered too expensive until then, emerged as a consensus among international organizations including the World Bank (WB), which had rejected social protection programs<sup>2</sup> in the 1980s (Merrien, 2013). Such a consensus in favor of social protection represents a fundamental paradigm shift (Merrien, 2013).

As a result, there was an increasing interest in comparative and international social policy scholarship in explaining the dynamic development of welfare regimes in the Global South. These studies were often accompanied by attempts to apply criteria used in the Global North, as those used by the Danish sociologist Esping-Andersen in his famous threefold typology. These attempts were criticized by Gough (2004) and other scholars. The fruitful debates that followed gave rise to a great deal of literature, briefly outlined below. However, clear differences remain between the social security schemes in the five countries studied here, with varying levels of development. These statutory schemes are described in section 1.1.2.

### 1.1.1. Esping-Andersen's analysis and the "Welfare modelling business"

In Europe, social protection systems date back to the end of the nineteenth century (cf. the Bismarckian system in Germany). Since the Second World War, a great amount of research has been carried out on this topic, and some typologies have emerged to interpret the differences between national models.

Beyond the common distinction between social risk insurance and assistance, one of the first typologies was that of Richard Titmuss (1963), the leading academic spokesman for Britain's post-war social policies. He distinguished between residual welfare states (WS), i.e., safety nets, and institutional WS (a more comprehensive institutional system often based on the notion of social rights).

The most influential attempt to create a WS typology was that of Esping-Andersen in his famous 1990 book *The Three Worlds of Welfare Capitalism*. The key features of his typology are the degree of de-commodification, the kind of social stratification fostered by social policies, and the relationship between state and market (welfare mix). Esping-Andersen described three types of WS: liberal, conservative, and social-democratic. They correspond to different social protection definitions and objectives, which aim to fight poverty in the liberal WS, cover social risk by maintaining standards of living in the conservative WS, and reduce inequalities in the social-democratic WS.

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<sup>2</sup> The argument for rejection at that time stood on such programs being economically harmful and socially unjust.



Esping-Andersen's typology has given rise to numerous criticisms, including: "Eurocentric," "Swedocentric," "Ethnocentric Western social research," "Western lens," and "Social democratic bias" (Powell et al., 2020).<sup>3</sup> Some of these comments are made by academics trying to transpose these conceptual approaches to developing countries, raising the question of the relevance of these models in the Global South. In other words, are these models exportable? Such a question feeds into a "welfare modelling business" (Powell and Barrientos, 2011).

One of the first attempts to extend the analytical and methodological tools of comparative welfare research to Global South regimes was that of Gough and Wood, incorporating more insights from development studies (Roumpakis, 2020). According to Gough and Wood's major works (2004), in concentrating on class analysis, Esping-Andersen ignores other sources of stratification such as religion or ethnicity. He also neglects the growing constraints of the global political economy and the growing role of supranational institutions. This is why Gough and Wood consider WS as a special case of welfare regimes.

Gough (2004) distinguishes between three broad groups of welfare regimes: WS regimes, informal security regimes, and insecurity regimes. The WS regime paradigm is characterized by capitalism and market, formal employment, and the existence of a relatively autonomous state. It applies to the developed countries described by Esping-Andersen. According to Gough, the SEA regimes could be defined as "informal security regimes." An informal security regime reflects a set of conditions where people rely heavily upon community and family relationships to meet their security needs, to greatly varying degrees. The welfare mix is broader than in Esping-Andersen's typology and includes the public sector, the private sector, and households.<sup>4</sup>

In an informal security regime, capitalism is not the only mode of production. International market forces and transnational actors play an important role, too, and the idea of livelihood replaces that of wages and salaries. Accordingly, security is achieved in conjunction with kin, family, and communities. The state is more unstable and clientelist, and also disposes of a lower capacity and of lower financial resources. Its institutional landscape is broader and includes communities, informal groups, and NGOs, economic actors as multinational firms, and international actors such as the International Monetary Fund (IMF), the WB, and the World Trade Organization. International aid and remittances also provide important resources. As economic behavior is not commodified, the very notion of decommodification that is central in Esping-Andersen's theory does not make sense (Gough, 2004).

Yörük et al. (2019) argue that there is a "variable selection problem", since Esping-Andersen's original variables (statutory provisions as public pension expenditure or social security spending) have been rarely used when applied to developing countries. Development outcome variables such as human development index or life expectancy are more commonly used. This is also the case for the so-called "contextual variables" such as ethnic diversity and population size. Yörük et al. believe this is a reflection of scholars' tendencies to use available variables without them necessarily being conceptually relevant. However, there are numerous debates against their argument. Taking into account the difference in context, Roumpakis (2020) recommends instead that analyses should not be limited to WS variables. He argues that the focus on social security and social assistance alone overlooks the role of informal and non-statutory provisions, as well as the importance of transnational relationships and historical legacies (e.g., colonialism). According to Roumpakis, comparative social policy scholars need to learn from the insights of development studies by incorporating both relations of dependence and the importance of informal and non-statutory provisions in conjunction with statutory ones.

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<sup>3</sup> Other criticisms are related to the lack of consideration of the full range of social services, such as healthcare, education, and social care provisions (Isakjee, 2017). In Europe, in the context of the social protection crisis, Esping-Andersen's typology has given rise to much public debate about the objectives and resources of social protection (see, for instance, Turquet, 2012 and 2015).

<sup>4</sup> An insecurity regime reflects a set of conditions that generate gross insecurity and block the emergence of stable informal mechanisms to mitigate or rectify these (which the author suggests could be explanatory of regimes in Sub-Saharan Africa).

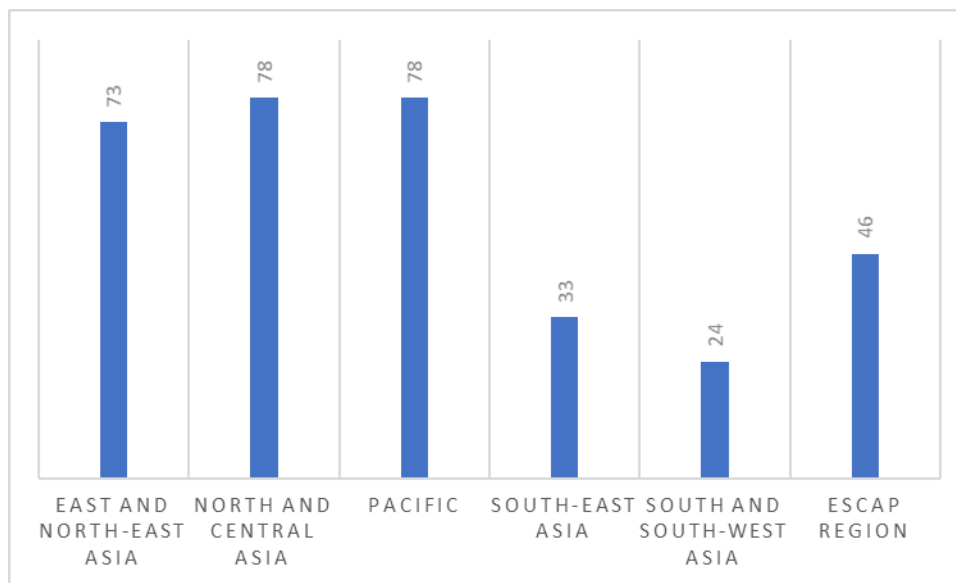
### 1.1.2. Social protection in southeast Asia

Despite growing interest, social protection systems remain fairly underdeveloped in Asia. According to ILO (2021b):

- Public expenditure on social protection (excluding healthcare) accounted for 7.5% of GDP in Asia and the Pacific in 2020 (world average 12.9%; Europe and Central Asia average 17.4%),
- Domestic general government healthcare expenditure accounted for 4% of GDP in Asia and the Pacific in 2020 (world average 5.8%; Europe and Central Asia average 6.7%).

With regard to the SEA countries, the chart below illustrates that the percentage of the population protected in at least one area of social protection only reaches 33% (ESCAP and ILO, 2021, 15).

**Figure 1. Percentage of population protected in at least one area of social protection (excluding healthcare) by subregion, latest available year**



Source: ESCAP and ILO (2021)

Several social protection programs were initiated in Asia (and Latin America) in the wake of the economic and financial crises of the 1990s. Employing the experiences of Indonesia, Malaysia, and Thailand, Sumarto (2020) interprets their different pathways mainly in light of their different historical-colonial legacies. The welfare regimes created tend, however, to be less secure for vulnerable groups, who rely heavily on family and community for completing their welfare provision. In a nutshell:

- most social spending is through social insurance schemes that only cover formal workers (ADB, 2016);
- healthcare remains largely funded by user fees, with means-tested support for the poor;
- employment support is not widespread (ADB, 2016).

More generally, financial support in the case of sickness, maternity, and unemployment sometimes critically depends on employer financing, and around one-third of the region's countries do not have statutory provisions toward family allowances (ILO, 2017).

However, there are considerable variations between the five SEA countries we study here (Cambodia, Lao PDR, Myanmar, Thailand, Vietnam) with respect to their levels of expenditure on social protection benefits (excluding healthcare) relative to GDP. As shown in the Table 2, this ratio peaked at 4.3% in Vietnam, followed by Thailand with 3%. The ratio of expenditure on social protection benefits (excluding healthcare) relative to GDP is 0.9% in Cambodia, 0.8% in Myanmar, and 0.7% in Lao PDR. The same differences exist for healthcare (% GDP). There are also notable gaps with respect to the level of effective coverage.

**Table 2. Social protection coverage<sup>5</sup> and expenditure**

		Cambodia	Lao PDR	Myanmar	Thailand	Vietnam
Public social protection expenditure by function	All functions excluding healthcare (% GDP)	0.9	0.7	0.8	3	4.3
	Healthcare (% GDP)	1.4	0.9	2.5	2.9	2.7
Effective coverage (% pop.)	% pop. affiliated to a social protection scheme excluding healthcare	6.2	12.1	6.3	68	38.8
	% pop. affiliated to a social health protection scheme	31.4	93.6	2.5	98	90.2

**Sources:** ILO, World Social Protection Database, based on SSI; ISSA/SSA, Social Security Programs Throughout the World; ILOSTAT, ECLAC, IMF, WHO, WB, UNDP, UNICEF, completed with national data sources, last year available; and the World Bank DataBank.

The same comment applies to the level of coverage by function (see Table 3).

**Table 3. Effective coverage by function of social protection, excl. healthcare (%)**

	Cambodia	Lao PDR	Myanmar	Thailand	Vietnam
Aggregate (excl. healthcare)	6.2	12.1	6.3	68	38.8
Maternity/Children	4.5	12.7	1.6/2.1	40/21	44
Unemployment	0	7.6	0	61	66.6
Work injury	17.2	8	8.5	31	26.2
Disability	70.1	0.3	10.6	92	83.5
Old age	0.1	6.3	14.9	89.1	40.9
Contributors to pension	2.9	7.9	8.4	42	26.2
Vulnerability	4.3	7.7	1.1	54.3	24.6

Sources: ILO, World Social Protection Database, based on SSI; ISSA/SSA, Social Security Programs Throughout the World; ILOSTAT, ECLAC, IMF, WHO, WB, UNDP, UNICEF, completed with national data sources, last year available; and the World Bank DataBank.

These differences are partly attributable to the level of economic development (GDP, informal employment, etc.) but the significance of political choices should not be overlooked. However, some countries with low or medium level of social coverage, such as Cambodia and Vietnam, have developed national social protection policies in order to expand social protection programs and to reach the “missing middle,” i.e., people who do not qualify as extremely poor, and people employed in the informal sector who do not have access to social assistance programs and do not benefit from social security schemes.<sup>6</sup>

In the following tables, we review the five countries studied and briefly describe the main features of the statutory social security systems based on information provided by ILO. The more informal solidarity provisions and several non-contributory programs are not discussed.

In January 2016, **Cambodia** launched mandatory health insurance for all formally employed workers. In November 2017, the government expanded the eligibility of the scheme to workers of all enterprises, regardless of their size (Ortiz, Schmitt and Loveleen, 2019). By September 2018, the health insurance scheme had registered 1.4 million employees of large enterprises. The National Social Security Fund (NSSF) manages civil servants’ and formally employed workers’ health insurance schemes. It covers workers in large enterprises (more than 8 employees) and, as of 2018, workers in small and medium-

<sup>5</sup> Population covered by at least one social protection cash benefit (effective coverage): proportion of the total population receiving at least one contributory or non-contributory cash benefit, or actively contributing to at least one social security scheme.

<sup>6</sup> See for instance Sri Wening Handayani, “Expanding Social Protection for the “Missing Middle” in Asia-Pacific,” Asian Development Blog, <https://blogs.adb.org/blog/expanding-social-protection-missing-middle-asia-pacific>.

sized enterprises. It covered 2.6 million workers in 2020.<sup>7</sup> The Health Equity Fund is designed to facilitate free access to healthcare for the poorest. Cambodia now faces the challenge of further expanding coverage to all workers, including those in the informal economy. Significant improvement in healthcare services is also required. COVID-19 caused Cambodia to delay the launch of contributory and non-contributory pensions.

**Table 4. Social security schemes in Cambodia<sup>8,9</sup>**

<b>Cambodia</b>	<b>Regulatory framework</b>	<b>Type of program</b>	<b>Beneficiaries</b>	<b>Funding</b>
<b>Sickness and maternity</b>	1997, 2002, 2011, and 2016	Social insurance (cash sickness and maternity benefits, and medical benefits)	Private sector employees (Exclusion: Self-employed persons, household workers) Special systems for public sector employees, veterans, and military personnel	Employer
		Employer-liability (cash maternity benefit)	Private sector employees (Exclusion: Self-employed persons, household workers) Special systems for public sector employees, veterans, and military personnel	Employer
		Social assistance (cash maternity and medical benefits) system	Maternity grant: formal sector workers; informal sector workers with less than eight working hours a week; casual workers; seasonal workers Medical benefits: Needy residents	Government
<b>Accidents at work and occupational diseases</b>	1997, 2002	Social insurance system and employer liability system	Private sector employees (Exclusion: Self-employed persons, household workers) Special systems for public sector employees and military personnel	Employer; government (only social insurance: finances any deficit)

In **Lao PDR**, only 500,000 workers in the formal economy and their families benefit from comprehensive social protection coverage through the Social Security Fund. Workers in the informal economy lack basic social protection coverage, and there are almost no comprehensive social welfare programs in place for the most vulnerable segments of the population.<sup>10</sup> However, in just a decade, Lao PDR has made progress toward universal health coverage. From 10.8% in 2008, effective social health protection coverage increased to 94% of the population in 2018 according to ILO. This was achieved through merging existing contributory and non-contributory schemes and adopting a tax-based financing model, complemented by direct co-payments. However, these co-payments are high, and the quality of healthcare services remains a challenge. One of the government's priorities is to continue to expand health coverage, but the domestic resources are scarce. In the face of the COVID-19 pandemic, the government is also implementing a long-term universal cash transfer program for pregnant women and mothers with newborns.

<sup>7</sup> ILO Social protection platform, <https://www.usp2030.org/gimi/ShowCountryProfile.action?iso=KH>.

<sup>8</sup> "Country Profiles: Cambodia, International Social Security Association, <https://www.issa.int/node/195543?country=820>.

<sup>9</sup> The Ministry of Labor and Vocational Training provides general supervision for the social insurance program. The National Social Security Fund administers the social insurance program. The Ministry of Health provides general supervision for medical benefits. The Ministry of Planning supervises the identification of households eligible for social assistance medical benefits. Health equity funds administer the social assistance medical benefits.

<sup>10</sup> "ILO Social Protection Platform, <https://www.usp2030.org/gimi/ShowCountryProfile.action?iso=LA>.

**Table 5. Social security schemes in Lao PDR<sup>1112</sup>**

Lao PDR	Regulatory framework	Type of program	Beneficiaries	Funding
<b>Old age, invalidity, and survivors</b>	1999 (employees in enterprises), 2008 (public sector) and 2013 (social security law)	Social insurance system	Employees of private sector and state-owned enterprises; civil servants; police and military personnel Voluntary coverage for self-employed persons	Insured persons; self-employed persons; employer; government (as an employer for civil servants, military and police personnel)
<b>Sickness and maternity</b>	1999 (employees in enterprises), 2008 (public sector) and 2013 (social security law)	Social insurance system	Employees of private sector and state-owned enterprises; civil servants; police and military personnel Voluntary coverage for self-employed persons	Insured persons; self-employed persons; employer; government
<b>Accidents at work and occupational diseases</b>	1999 (employees in enterprises), 2008 (public sector) and 2013 (social security law)	Social insurance system	Employees of private sector and state-owned enterprises; civil servants; police and military personnel Exclusions: self-employed persons	Employer; government (as an employer for civil servants, military and police personnel)
<b>Unemployment</b>	2008 (public sector) and 2013 (social security law)	Social insurance system	Employees of private sector and state-owned enterprises; civil servants; police and military personnel Exclusions: self-employed persons	Insured persons, employer; government (contributes as an employer)

In **Myanmar**, the first democratic, but military-led, government was elected in 2012. It adopted a national social protection strategic framework (Government of Myanmar, 2014). However, according to ILO,<sup>13</sup> 98% of the population in Myanmar did not have access to adequate social protection in 2019. The Social Security Law covers all social protection branches, but only five have at least one national program currently implemented: work injury, child and family, and health insurance including sickness and maternity. These benefits are only currently available to a small formal sector.

**Table 6. Social security schemes in Myanmar<sup>1415</sup>**

Myanmar	Regulatory framework	Type of program	Beneficiaries	Funding
<b>Old age, invalidity, and survivors</b>	2012 (social security law)		Not yet implemented	

<sup>11</sup> "Country Profiles: Lao PDR," International Social Security Association, <https://www.issa.int/node/195543?country=897>

<sup>12</sup> The Ministry of Labor and Social Welfare supervises the programs. The National Social Security Fund administers the programs.

<sup>13</sup> ILO Social Protection Platform, <https://www.social-protection.org/gimi/ShowCountryProfile.action?iso=MM>.

<sup>14</sup> Country profiles: Myanmar, International Social Security Association, <https://www.issa.int/node/195543?country=927>.

<sup>15</sup> The Ministry of Labor, Immigration and Population provides general supervision. The Social Security Board collects contributions and pays benefits.

<b>Sickness and maternity</b>	1954, 2012	Social insurance system	Employed persons and apprentices. Voluntary coverage for self-employed persons, seasonal farmers or fishermen, employees of non-profit organizations, family enterprises with no employees, street vendors, day laborers, and part-time and casual workers. Special systems for civil servants	Insured persons; self-employed persons employer; government (provides subsidies)
<b>Accidents at work and occupational diseases</b>	1923, 1954, 2012	Social insurance system	Employed persons and apprentices. Voluntary coverage for self-employed persons, seasonal farmers or fishermen, employees of non-profit organizations, family enterprises with no employees, street vendors, day laborers, and part-time and casual workers. Special systems for civil servants	Employer

Against WB recommendations, **Thailand** put in place universal non-contributory programs for healthcare and pensions (Cook and Pincus, 2014). The Universal Care System was launched in 4 provinces in April 2001, in an additional 15 provinces by June 2001, and nationwide by April 2002. This system aims at covering the 76% of the population not covered by other social health protection schemes. This tax-financed scheme provides free healthcare at the point of service. It includes a comprehensive benefit package with a focus on primary healthcare.<sup>16</sup> However, the system remains fragmented, with differences in benefits and contributions. As Thailand is aging rapidly, a non-contributory old age allowance was introduced in 2009 and the country reached universal coverage soon afterwards. However, the degree of coverage for different population groups varies significantly. While civil servants are covered by a PAYG with average benefits per beneficiary amounting to 135% of GDP per capita and a Government Pension Fund, most of the informal private sector is only covered by the old age allowance with average benefits amounting to 4% of GDP per capita (IMF, 2019). The National Savings Fund, which started operations in 2015, aims to reduce the income parity gap for around 30 million informal economy workers.

**Table 7. Social security schemes in Thailand<sup>17,18</sup>**

<b>Thailand</b>	<b>Regulatory framework</b>	<b>Type of program</b>	<b>Beneficiaries</b>	<b>Funding</b>
<b>Old age, invalidity, and survivors</b>	1990, 1994, 1999, and	Social insurance (formal sector)	Employed persons in the formal sector	Insured persons; employer; government

<sup>16</sup> ILO Social Protection Department, "Thailand: Universal Health-care Coverage Scheme" (2016), <https://www.usp2030.org/gimi/RessourcePDF.action?id=54059>

<sup>17</sup> "Country Profiles: Thailand", International Social Security Association, <https://www.issa.int/node/195543?country=988>.

<sup>18</sup> The Ministry of Labor provides general supervision for the social insurance programs, the Social Security Office administers them, and the Ministry of Interior oversees their administration. Old age, invalidity and survivors: the National Savings Fund, supervised by the Ministry of Finance, administers the national pension savings fund program. Sickness and maternity: hospitals under contract to the Social Security Office provide medical benefits for the social insurance program. The National Health Security Office administers universal medical benefits through approved government healthcare units and networks. Accidents at work and occupational diseases: the Workmen's Compensation Fund, under the Social Security Office, administers the program, collects contributions, and pays cash benefits. Hospitals under contract with the Social Security Office that meet the standards of the Workmen's Compensation Fund provide medical benefits. Unemployment: the Department of Employment, under the Ministry of Labor, registers unemployed insured persons for job placement and training through the government's employment service. The Department of Skill Development, under the Ministry of Labour, trains unemployed insured persons for new jobs.

	2015 (Social Security Act) 2003 (Older Persons Act, 2009 (universal pensions) and 2011 (National Savings Funds Act)		(exclusions: certain agricultural, forestry, and fishery employees; temporary and seasonal workers) Special systems for civil servants and employees of state enterprises	
		Social insurance (informal sector)	Voluntary coverage for self-employed persons in the informal sector	Self-employed persons; government
		Provident fund (National Savings Funds)	Voluntary coverage for self-employed persons in the informal sector	Self-employed persons; government
		Social assistance system	Citizens of Thailand	Government
<b>Sickness and maternity</b>	1990, 1994, 1999, and 2015 (Social Security Act) 2002 (National Health Security Act on universal health coverage)	Universal	Citizens of Thailand not covered under any other government health insurance program	Government (the total cost)
		Social insurance (formal sector)	Employed persons in the formal sector (exclusions: certain agricultural, forestry, and fishery employees; and temporary and seasonal workers) Special systems for civil servants and employees of state enterprises	Insured persons; employer; government
		Social insurance (informal sector)	Voluntary coverage for self-employed persons in the informal sector	Self-employed persons; government
<b>Accidents at work and occupational diseases</b>	1972, 1994, and 2018	Employer liability	Employees of industrial and commercial firms. Exclusions: Certain agricultural, forestry, and fishery employees; vendors; self-employed persons Special systems for government employees, employees of state enterprises, and private-school employees	Employer
<b>Unemployment</b>	1990, 1999, and 2015	Social insurance	Employed persons Exclusions: Self-employed persons; judges; employees of foreign governments or international organizations; employees of state enterprises; certain agricultural, forestry, and fishery employees; temporary and seasonal workers	Insured persons; employer; government
<b>Family and household benefits</b>	1990, 1994, 1999, and 2015	Social insurance	Employed persons Exclusions: certain agricultural, forestry, and fishery employees; temporary and seasonal workers Special systems for civil servants and employees of state enterprises	Insured persons; employer; government

<b>Complementary pensions (voluntary)</b>	1987, 1990, 1992, 1996, 1998, 1999, 2007, and 2015	Voluntary scheme Provident funds Defined contribution basis	Employees of private and state enterprises (except civil servants covered by the Gov. Pension Fund) Self-employed persons may make provision for retirement by means of Retirement Mutual Funds and National Savings Fund that are tax-favored personal savings plans	Employee; employer
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According to WHO,<sup>19</sup> as of 2018, 87% of **Vietnam's** population has been covered by social health insurance. The poor, ethnic minorities, children aged under 6 years, those aged above 80 years, and socially vulnerable groups are fully covered via the government full subsidy for premium. Near-poor households are partially subsidized. However, coverage remains inequitable with the low enrolment of the near-poor, irregular contributions, and weak enforcement.<sup>20</sup> The enrolment rates are highest among low- and high-income groups, but persistently low among groups in the middle, due to low enrolment of the near-poor.

The pension system consists of three different schemes, yet the system's coverage rate remains low and has increased only modestly. As a result, the system is not well prepared to support a rapidly growing elderly population. The challenge, therefore, will be in addressing the "missing middle" of people that remain excluded from any pension scheme.

**Table 8. Social security schemes in Vietnam<sup>21,22</sup>**

<b>Vietnam</b>	<b>Regulatory framework</b>	<b>Type of program</b>	<b>Beneficiaries</b>	<b>Funding</b>
<b>Old age, invalidity, and survivors</b>	1961 (public sector employees), 2000 (social-relief policies)	Social insurance	Public and private sector employees with at least a one-month contract, including household workers; employees in agriculture, fishing, and salt production; civil servants; employees of cooperatives and unions; police and military personnel; part-time workers in communes, wards, and townships; certain foreign citizens legally working in Vietnam	Insured persons (including self-employed persons); employer; government (as an employer, subsidies and total cost for workers who retired before 1995)
		Social assistance	Needy persons	Government (the total cost)

<sup>19</sup> "Health financing in Viet Nam," World Health Organization, <https://www.who.int/vietnam/health-topics/health-financing>.

<sup>20</sup> ILO Social Protection Platform, <https://www.usp2030.org/gimi/ShowCountryProfile.action?iso=VN>.

<sup>21</sup> "Country Profiles: Viet Nam," International Social Security Association, <https://www.issa.int/node/195543?country=1008>

<sup>22</sup> The Ministry of Labor - Invalids and Social Affairs provides general supervision. The Viet Nam Social Security Agency collects contributions, administers the social insurance program, and implements policy. Health insurance: the Ministry of Health provides general supervision. Family and household benefits: Ministry of Labour, Ministry of Education and Training, Ministry of Health.



<b>Sickness and maternity</b>	1961 (public sector), 2005 (medical benefits), 2008 (health insurance), 2014 (social insurance), 2018 (social insurance, occupational safety, and health)	Social insurance	<b>Cash benefits:</b> Public and private sector employees, including household workers, with at least a one-month contract; employees in agriculture, fishing, and salt production; civil servants; employees of cooperatives and unions; police and military personnel; part-time workers in communes, wards and townships; certain foreign citizens legally working in Vietnam. Exclusions: Self-employed persons; certain military personnel	Employer; government (as an employer)
			<b>Medical benefits:</b> citizens of Vietnam	Insured persons (including self-employed persons); employer subsidies as needed; contributions for certain groups of insured persons
<b>Accidents at work and occupational diseases</b>	1947, 1950, 2012, 2014, and 2018	Social insurance and employer liability (temporary disability)	Public and private sector employees, including household workers, with at least a one-month contract; employees in agriculture, fishing, and salt production; civil servants; employees of cooperatives and unions; police and military personnel; part-time workers in communes, wards, and townships; certain foreign citizens legally working in Vietnam. Exclusions: Self-employed persons	Employer; government (as an employer)
<b>Unemployment</b>	2006, 2013, and 2014	Social insurance	Citizens of Vietnam who are public and private sector employees with seasonal, job-specific, fixed-term, or permanent contracts; certain military personnel; employees of cooperatives; household businesses. Exclusions: Self-employed persons	Insured persons; employer; government (as an employer)
<b>Family and household benefits</b>	2007, 2010, and 2013	Social assistance	Needy citizens (Benefits also include unemployment benefits, health insurance coverage, vocational training, and job placement support)	Government (the total cost)

More recently, the COVID-19 crisis has shown that countries with social health insurance systems or national health systems that already covered the majority of the population were able to respond in a quick and inclusive manner and that “a more universalistic provision of benefits is also more practicable in contexts with high labor market informality, where the capacity to identify and reach workers is limited” (ILO, 2020a). In Thailand, where social security is more developed:

- COVID-19 patients were granted access to the Universal Coverage Scheme for Emergency Patients, including both nationals and non-nationals;
- the level and duration of the unemployment benefits provided by its Social Security Office, including for self-employed workers, have been increased;
- a monthly allowance of 5,000 THB for informal economy workers has been introduced (22 million workers have registered for the allowance through their mobile phones). (ILO, 2020b).

Other mitigation measures were also taken in other countries during the COVID-19 crisis. Vietnam, for example, provided a one-off benefit of 1,000,000 VND for informal workers who lost their jobs. The same payment was extended to formally employed workers who did not meet the qualifying conditions for the country's unemployment insurance (ILO, 2020a). Cambodia, meanwhile, implemented a temporary cash transfer scheme for poor families identified through the government's Identification of Poor Households Program (IDPoor).<sup>23</sup>

The need for universal protection and for broadening programs based on simple category-related criteria have been reinforced by the COVID-19 crisis.<sup>24</sup> It has become clear that such systems need to reach a broader public.

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## 1.2. Links between social and environmental protection

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The objective of this subsection is to investigate the social and environmental protection nexus, first by presenting the various ways of studying this question, and second by proposing a general framework that we could use for characterizing the articles reviewed for non-integrated social-environment nexus. Lastly, we present the numerous theoretical propositions that try to study integrated social-environment protection and the way these frameworks represent this nexus.

### 1.2.1. Studying the social-environmental nexus: Various angles of approach

Following OECD (2003), we can use a Pressure-State-Response model to divide the dimensions related to environmental issues into different categories. Environmental pressures correspond to the use or overuse by human societies of the planet's sink capacities (by pollution) and resource capacities (by withdrawal). The state corresponds to the quality of the environment and the quantity and quality of natural resources in a defined place. The evolution of the state of the environment depends (but not exclusively) on pressures that are being applied and have already been applied in the same place and in others (especially for non-local pollution). Finally, a response refers to both individual and collective actions that aim to prevent, reduce, or adapt to human-induced negative effects on the environment and to reverse existing environmental damage (OECD, 2003).

In the present article, we focus on the sociopolitical dimensions at the heart of our nexus analysis and are only indirectly interested in the question of environmental pressures, i.e., the material aspects of environmental issues. Moreover, we should note the emergence of concepts that allow us to talk about all environmental policies in a same time, such as the notion of environmental state or ecostate (Meadowcroft, 2005, 2012). An environmental state can be defined as a sovereign state that possesses a significant set of institutions and practices dedicated to the management of the environment and societal-environmental interactions (Duit et al., 2016). If it is a question of endogenizing institutional forms (Cahen-Fourot, 2020), then the inclusion of environmental issues in the political sphere can take various forms depending on historical and geographical contexts:

- the environmental issues can be ignored;
- the environmental issues can be treated separately through specific institutional measures;
- the environmental issues can be integrated, and can influence other social relations (wage-labor nexus, etc.).

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<sup>23</sup> "Country Profiles: Cambodia," International Social Security Association, <https://www.issa.int/node/195543?country=820>.

<sup>24</sup> Enforcement were reported to be lengthy due to administrative process. And an important part of support, both in cash and in kind have been added from charity and self-organized supports of individuals and organizations during the pandemic.

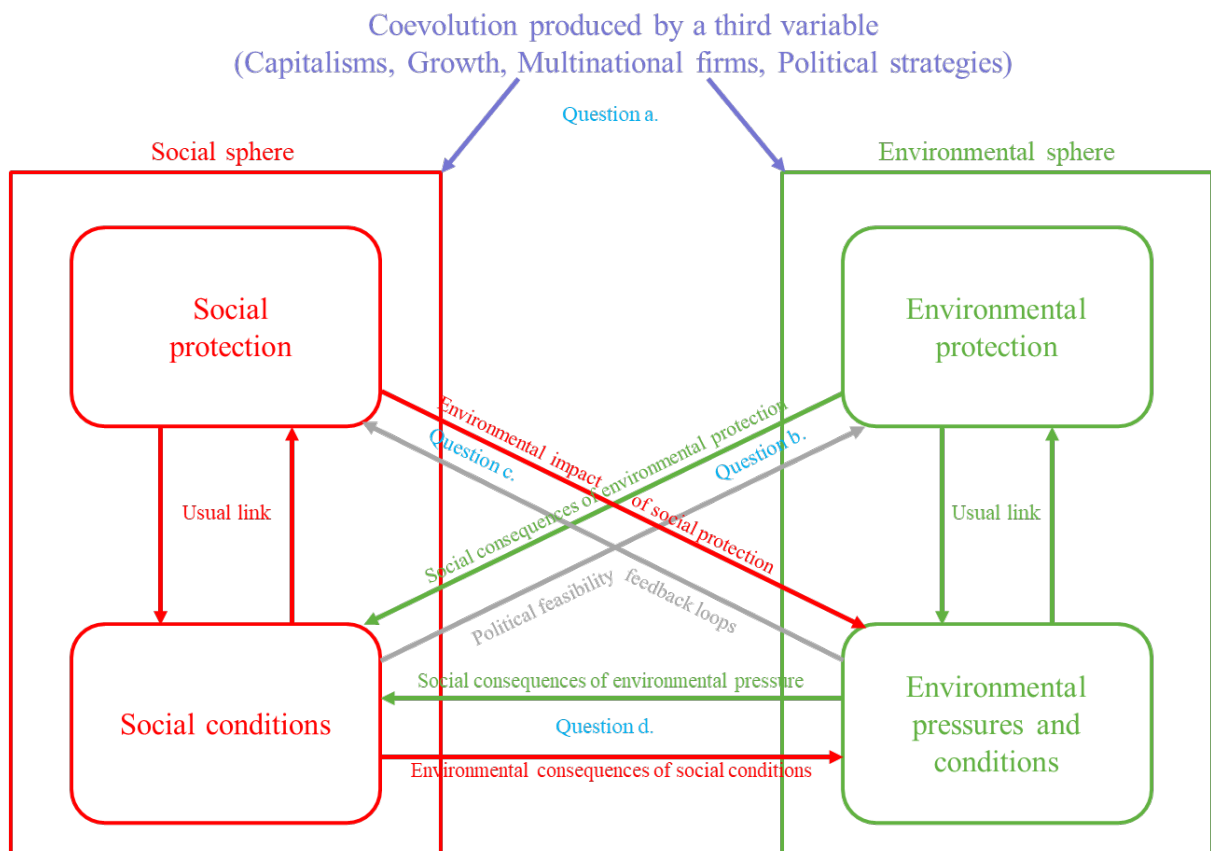
With the development of environmental issues and policy responses, the links between social and environmental protection are increasingly at stake. Three angles of analysis exist to perceive the link between social and environmental issues and to define the study of associated policies.

The first angle focuses on existing situations and the ways in which social and ecological issues interact in a quasi-fortuitous way, i.e., without having been the object of policies and/or discourses aimed at their integration. It is then a question of studying practices and their environmental and social consequences without dwelling on their common dimension. Two other ways of conceiving this nexus may come at a later stage, when politics brings forth the need to make social and environmental policies align with each other. This (as is visible in Figure 2) would imply having only one circle concerning social-environmental policies, leaving room for two different ways of conceiving such policies. Thus, a second angle for analyzing the social-environmental nexus consists in conceiving the environmental issue as a new pillar of social protection, in the context of new social risks linked to current major environmental changes. The environmental issue is then considered as a tool to enable good social living conditions. This vision redefines social protection and the associated narratives, but does not rely much on the complementarities between social and environmental policies. The last angle for approaching the issue is then based on trying to understand how social and environmental issues are linked and to make public policies only in function of this, which would lead to a new possible schematization.

### 1.2.2. A typology of mechanisms linking social and environmental protection

Looking at the interactions between environmental and social policies initially designed and put into practice separately leads to the study of a multiplicity of links between these two dimensions, as shown in Figure 2.

**Figure 2. Multiplicity of social-environmental links**



Source: Authors.

Within this Figure, we can identify four research questions of interest concerning the links between the social and environmental pillars of sustainable development.

a. *What are the variables influencing both the implementation of social and environmental protection in a given country?*

This field of research focuses on what could be defined as the role of third-party variables that may influence the provision of both social and environmental protection in a given country. These variables are diverse, but each time show the need to move away from a causal analysis of the social-environmental nexus, by considering that the management methods of these two dimensions can form a system (Elie et al., 2014; Cahen-Fourot, 2020). This also makes it possible to focus on the specificities of the countries studied and to understand the difficulties of reproducing foreign experiences in a particular context.

Social science research considers the various third-party variables that could influence this relationship. First, from an economic point of view, regulation theory has produced various analyses on the fact that the diversity of capitalisms could be based on similar modes of regulation of environmental and social issues (Elie et al., 2014; Cahen-Fourot, 2020). Next, the literature on the Kuznets curve and the environmental Kuznets curve could also lead to a consideration of growth as a third cause of changes in the level of social and environmental protection. Further, the role of firms, and multinational firms in particular, should be taken into account. For example, in the context of the Global South, recent literature on environmental and social upgradings focuses on understanding how multinational firms can influence the production of their suppliers by adding environmental and social criteria to the production process (Ponte, 2020). It remains to be seen whether these elements change the environmental and social state of the regions concerned or whether it is merely a strategy announced without real consequences in the countries concerned (Ponte, 2020). From a political science perspective, Carter (2013) proposes that the existence of strategies of green and left-wing political parties could lead to stronger environmental and social policies in the same countries.

b. *What are the social consequences of environmental policies?*

This literature raises the question of the social justice issue associated with implementing environmental policies. It also raises questions about the feasibility of environmental policy from a social perspective. In fact, the social and inequality issues associated with a public policy can hinder its implementation. This interaction can lead to the design of specific mechanisms for the social adjustment of environmental policies such as green vouchers, mechanisms that correspond to the integration of social and environmental policies using compensation as developed by Gough (2013).

c. *What are the links between the social and environmental situations of individuals in a particular context?*

This is a two-way question at the heart of the literature on environmental justice. It concerns the issue of environmental inequalities, i.e., the question of how the rise of environmental issues and environmental degradation influences the social situation of individuals, and especially whether or not it aggravates pre-existing inequalities (Berthe and Ferrari, 2015). Conversely, this question also focuses on the consequences of a degraded social situation, particularly inequalities, on the preservation of the environment (Berthe et Elie, 2015).

d. *What are the environmental consequences of the social protection policies implemented in a given country?*

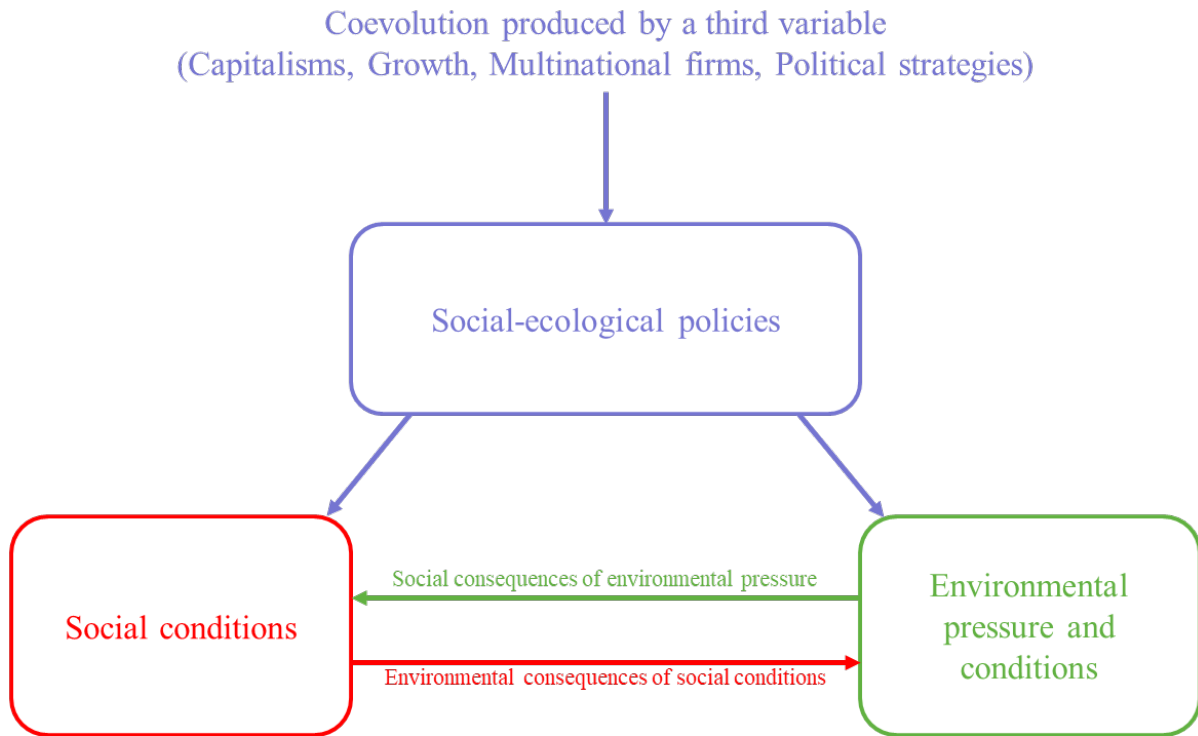
This little-addressed question is becoming increasingly important. Without highlighting the possibility of low environmental impact social protection, we would risk sacrificing social protection in the name of preserving the planet.

These four questions concern environmental and social policies when they are not thought about together at the stage of policy development. Moreover, the links between environmental and social policies in a common framework have already been widely discussed in the literature as shown below.

### 1.2.3. The frameworks of integrated views of social–environment protection: An historical view

The last important issue regarding an integrated view of social–environmental protection is to identify the various theories that try to unify the study of social and ecological issues. In the case of unified frameworks, the previous scheme can be changed as follows:

**Figure 3. Social–environmental nexus with integrated social–ecological policies**



Source: Authors.

In what follows, we endeavor to identify the different frameworks that propose to integrate social and environmental policies.

#### ***The nineteenth-century roots of the social–environmental policies nexus***

In the nineteenth century, the European continent’s desire for sanitization can be considered as the first evidence of the political consideration of the link between poverty and poor environmental conditions. In particular, the hygienist and social medicine movements at this time demonstrated the links between poverty and morbidity/mortality due to the environmental conditions of the poorest populations (Cornut et al., 2007). In this context, the environmental conditions of the poorest are not posed as a problem in themselves, but as a cause of disease and epidemics. In England, Edwin Chadwick’s report (1842) identifies the fact that poor sanitary conditions lead to a more frequent occurrence of death from infectious and epidemic diseases. In this report, sanitary conditions include air and water pollution, overcrowding, and poor sanitation. The report presents a link between poor sanitary conditions, working class membership, and mortality (or morbidity). Both public and private cleanliness and hygiene became a priority in order to solve the health problems of the most vulnerable populations. Governments put prophylactic and sanitary policies in place (Hudeman–Simon, 1999), linked also with moral hygiene by imposing “morals practices” defined as beneficial for disadvantaged populations. Unhealthy crafts were moved out of city centers and sanitation systems were developed. The discovery of bacteriology at the end of the nineteenth century diminished the importance given to environmental issues related to the unfavourable health conditions of the poor.

### ***Environmental justice and inequalities movements***

Since the re-appearance, in the early 1960s, of environmental stakes, social issues have emerged in a fight against the middle and upper classes' monopolization of environmental issues and of the ecological movement. It was on this basis that the concept of environmental justice developed in the United States, from an activist movement challenging the disproportionate presence of polluted sites in areas where disadvantaged populations, particularly ethnic minorities, lived. Although there was some early environmental justice work in the late 1970s (McCaul, 1976), the first well-known cases appeared in the early 1980s, for instance the case of polluting industries in northern California's Warren Township (Bullard, 2004). This environmental justice movement was based on recognizing the poor environmental conditions that ethnic minorities were experiencing. The movement carried with it a need to rectify the situations that these communities were facing, as well as a demand for the systematic involvement of ethnic minorities in political decisions concerning the environment. The arrival of this movement in Europe led to these themes being developed in the direction of the conditions experienced by poor populations rather than ethnic minorities. Scholars then focused on the study of environmental inequalities, their potential unjust nature, and the possibility of developing public policies to respond to this injustice. Closer to the political ecology movement, the concept of "environmentalism of the poor" was developed to refer more directly to the situation in the Global South and the potential injustice they experienced with regard to the environment (Martinez-Alier, 2002). The possibility of an ecological debt, or an ecologically unequal exchange between the Global North and the Global South, are then highlighted by this movement. In this approach, the role of social movements and the state are both considered to interact in, and have the capacity to affect, the implementation of environmental justice.

### ***Sustainable development and associated frameworks***

The sustainable development approach, in its most common representation with three pillars, also considers the existence of social and environmental objectives in the achievement of sustainable development in the long run. Therefore, it shifts the focus from the economic objective of growth to the necessary consideration of integrating social and environmental objectives. In an operational vision of sustainable development, the United Nations Development Programme (UNDP) adopted the Sustainable Development Goals framework in 2015. This framework includes 17 objectives that provide a guide to enable countries to achieve sustainability by 2030. Some objectives could be fostered through environmental policies (e.g., sustainable cities and communities) and others through social protection measures (e.g., reduced inequalities).

### ***Adaptive Social Protection (ASP)***

Nowadays, the most often used model in the Global South that links social protection to climate change adaptation (CCA) and disaster risk reduction (DRR) is Adaptive Social Protection (ASP), a concept first produced by the Institute of Development Studies (IDS). Davies et al. (2009) suggest that CCA, DRR, and social protection be integrated, as each one makes up for shortcomings in the others. The model assumes that combining these three disciplines will make interventions more efficient, counter underlying causes of vulnerability, and promote adaptive capacity. This approach sets itself as grounded in an understanding of the structural causes of poverty in a particular region or sector, putting an emphasis on transforming productive livelihoods as well as protecting and adapting to changing climate conditions rather than simply reinforcing coping mechanisms. It aims to provide long-term solutions to address the underlying causes of vulnerability and help people to prepare for the impacts of climate change. It is positioned as a rights-based rationale, aiming to add equity and justice to the instrumentalist rationale of economic efficiency (Davies et al., 2009).

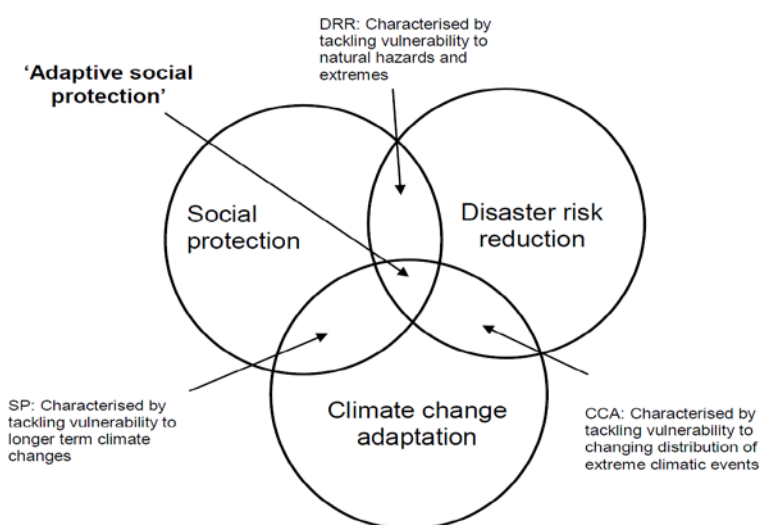
ASP is based on Devereux and Sabates-Wheeler's (2004) definition of "transformative social protection."<sup>25</sup> It plans to strengthen the design of social protection measures, which include weather-

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<sup>25</sup> These authors present social protection itself as a fundamental right, and emphasise a social justice approach in their "transformative social protection" framework (Devereux and Sabates-Wheeler, 2004). Nevertheless, their analysis focuses on "poor, vulnerable and marginalised individuals and groups" (Devereux and Sabates-Wheeler, 2004, 26) and on justifying this approach with the limited financial capacity of the states.

indexed crop insurance, social pensions, employment guarantee schemes, asset transfers, and cash transfers, by taking into account current and potential future climate related shocks. According to Devereux and Sabates-Wheeler, these measures can enhance the resilience of vulnerable communities, and are viewed as contributing to fostering households' adaptive and transformational capacity to climate change. By increasing the resilience of poor households, cash transfers play a key role in such a strategy: they are supposed to increase the poor's asset base, facilitate mobility, and foster off-farm livelihood diversification (Devereux and Sabates-Wheeler, 2004). This conception is clearly in line with that of the WB, based on a human capital approach and the theory of incentives. Here we find that the IDS adopted, in the early 2000s, an approach involving individual choices and empowerment based on Sen's analyses.

**Figure 4. Adaptive Social Protection: Link with CCA and DRR**



Source: Davies et al., 2009

The “transformative social protection” framework (Devereux and Sabates-Wheeler, 2004), while being rights-based, focuses on the poor and vulnerable. For its part, the WB introduces the concept as follows: ASP “helps to build the resilience of poor and vulnerable households to the impacts of large, covariate shocks, such as natural disasters, economic crises, pandemics, conflict, and forced displacement” (Bowen et al., 2020). This approach is also reiterated by ASEAN, which considers that social protection must be adaptive to different risks, including climate change and disasters: social protection has the potential to be more closely integrated with both CCA and DRM; they complement and re-enforce shared objectives (ASEAN 2021, 5). This framework is based on the observation of new social difficulties associated with climate change and connects to the need for social protection for the poor. Strictly speaking, it does not focus on environmental policies but rather on the necessity to adapt social protection to the climate change context. Moreover, even if the role of communities is often invoked, this approach seems more an approach for the poor than by the poor. In other words, it relies on top-down functioning and could end up replacing pre-existing, traditional forms of solidarity in the future.

### ***Ecosocial states (or new welfare states)***

In recent years, the idea of an ecosocial state has also emerged. This idea is included in a three-step classification of the ways ecological and social issues could interact in public policy development. This three-step classification, proposed by Gough (2013), allows us to further understand the different ways in which social policy could be integrated with environmental issues: compensation, co-benefits, and ecosocial policies. Social policy as compensation means that social policy could take into account the fact that environmental policies have differentiated social consequences. Social policy as co-benefits is to focus on “win-win” strategies, i.e., policies that have positive impacts on both social and environmental dimensions. Finally, ecosocial policies further the potential “win-win” situations because

of the necessity to reduce pressure on the environment and identify scenarios that can achieve ecologically beneficial and socially just impacts (Gough, 2013). This leads to the necessity to rethink our vision of consumption and the possibility of social policies without growth. Further, the possibility of an ecosocial state renews the question of the link between social and environmental issues, in particular the link between social and environmental policies and the necessity to include them in the same framework, which will have consequences regarding the identification of feasible and desirable futures.

### ***Non-public frameworks to deal with the management of social and environmental issues***

Other approaches do not focus exclusively on the role of the state in order to identify links between environmental and social protection. These approaches share a focus on the process of production at different scales. First, the common-pool resources framework and the study of socio-ecological systems focus on the role of communities in implementing fair and environmentally sustainable rules in the use of small-scale resources (Ostrom, 1998). Corporate social responsibility, for its part, studies the capacity of businesses to implement, by themselves, rules that are socially enhancing and environmentally preservative.

Finally, the central framework in this paper is that of just transition, an idea promoted in the 1990s by the trade union movement. It is now included in the guides and propositions of numerous international organizations, and especially promoted within the ILO. According to the ILO, a just transition “needs to be well managed and contribute to the goals of decent work for all, social inclusion and the eradication of poverty” (ILO, 2015, 4), with the focus on providing decent green jobs and allowing significant space for traditional social protection measures such as those regarding healthcare. Sometimes, the term “just transition” is also used in a more generic way to envision an inclusive transition to a low carbon and sustainable economy. The idea of inclusiveness is more specifically present in the fact that the objective is not helping the poor, but rather ensuring that everyone finds a place in a transitioning economy.

This framework poses the question of how the social protection-environment nexus could be re-appropriated by various strata of societies and not only captured by elites, who are often considered as responsible for environmental governance and management (Routledge et al., 2018). Considering the framework of just transition makes it possible to question the role of different actors in the implementation of social and environmental protection, going beyond the idea of helping the poor and vulnerable with more inclusive visions, and envisioning various normative perspectives on what a good sustainable society should be.

In the following section, we present the methodology used to identify how these various visions of the social protection-environment nexus are developed in both gray and academic literature, and how a concept such as just transition could become important in the SEA context.



## 2. Methodology of analysis

This section presents the method we used to identify and analyze papers focusing on social and environmental protection issues in inland SEA countries. We first present the systematic method used to gather literature on our subject, and then discuss how we chose to select papers. In the last subsection, we explain how we classified the selected papers.

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### 2.1. Database and methodology of literature collection (PECO)

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We adopted the systematic review method (Armstrong et al. 2011; Petticrew and Roberts, 2008) to study how the multidimensional variables of social protection and environmental policies relate to and interact with each other in the existing gray and academic literature. Scoping and systematic reviews are different from a classical bibliographic review in the way that the search and screening methodology are set up. The process is defined as follows:

“Systematic reviews use a transparent and systematic process to define a research question, search for studies, assess their quality, and synthesize findings qualitatively or quantitatively. A crucial step in the systematic review process is to thoroughly define the scope of the research question. This requires an understanding of existing literature, including gaps and uncertainties, clarification of definitions related to the research question and an understanding of the way in which these are conceptualized within existing literature.” (Armstrong et al. 2011)

The systematic review process is based on constructing an equation in order to find relevant literature from bibliographic databases. The equation was built on the elaboration of three main elements: geographical zone of the study, social protection elements, and environmental elements. 5 SEA countries were included in the search: Cambodia, Lao PDR, Myanmar, Thailand, and Vietnam. Keywords related to social protection were taken from policies, aspects of social protection, and their potential beneficiaries. The formulation of the search equation was inspired by the PECO approach (Population, Exposure, Comparator, and Outcome) of a systematic review, however adaptations were made to make it fully relevant to this paper, due to the fact that exposure has more to do with the outcomes from the linkages between social protection and environment, and social protection-related keywords could be both drivers and outcomes in this context. Thus, the equation below is built for a literature search that fits the nature of this particular topic.

**Table 9. PECO equation for the literature search**

Geographical zones keywords	(Asia OR Southeast Asia OR South East Asia OR Mekong OR Lao OR Cambodia OR Vietnam OR Thailand OR Burma OR Myanmar OR Laotian OR Cambodian OR Thai OR Burmese OR Vietnamese OR Asean)
	<b>AND</b>
Social protection keywords	(social policy OR welfare* OR beneficiar* OR cash OR pension OR retirement OR child* support OR family benefit* OR matern* OR unemploy* OR employ* OR public work* OR sickness benefit* OR old age benefit* OR disability benefit* OR survivor benefit* OR health insurance OR fiscal welfare OR redistribution OR housing OR farm insurance OR weather insurance OR poverty OR informal OR low-income OR means-tested OR CSR OR corporate social responsibility OR agricultur* microinsurance OR crop insurance OR social protection OR social support OR assistance OR assisting)
	<b>AND</b>

Environment keywords	(environment* OR land grab* OR concession OR acquisition OR natur* OR sustainab* OR energ* OR atmosph* OR resource OR circular* OR planet* OR subsidence OR urbanisation OR urbanization OR artificialisation OR artificialization OR urban sprawl OR smart cit* OR agrarian change OR overfishing OR air OR pollution OR CO2 OR SO2 OR particulate OR particle OR air quality OR haze OR fog OR glaciers OR acidification OR ocean OR waste OR wastewater OR coliform* OR pesticide* OR chemical* OR contamination OR erosion OR salinization OR flood* OR rain* OR storm* OR typhoon OR tsunami OR extreme event* OR drought* OR disaster* OR landslide OR water supply OR hydropower OR water regime change OR freshwater OR irrigation OR groundwater OR arsenic OR climate OR carbon OR GHG OR emission* OR warm* OR dam* OR sanitation OR basic services OR sea level rise OR heat OR temperature OR hazard OR cadmium OR lead OR toxic OR ecosystem OR biodiversity OR genetic diversity OR functional diversity OR flora OR species OR fauna OR biological OR national park OR protected OR mangrove OR deforestation OR conservation OR biosphere OR resources OR coast* OR anthropogenic degradation OR forest* OR wood OR deforestation OR fire* OR reforest* OR mining OR transition OR gas exploitation OR sand OR sediment transport OR timber OR Payments for Ecosystem Service* OR PES OR Sustainable Development Goal* OR SDG*)
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We ran the search equations on Web of Science, Science Direct, Wiley Online, Taylor and Francis Online, ProQuest, SpringerLink, SAGE Publications, and JSTOR, adjusting the equation according to the guidelines and limitations of each database, and searching for literature written in English. The searches were entered in the “topic” or “title/abstract/keyword” section whenever possible. Other search exercises were run on various institutional websites. The search included a wide range of topics which helped to build the largest possible net for finding existing literature. There were **1,915** papers collected in total, of which **1,411** were kept after a duplication check.

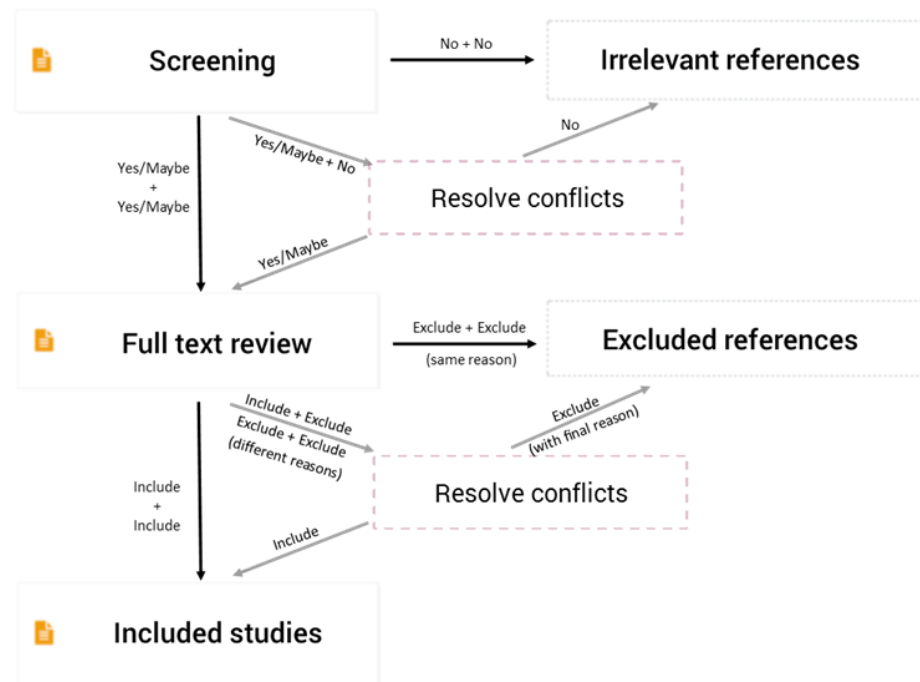
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## 2.2. Screening process

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Covidence, an online tool, was used for the screening process. Covidence tracks the selection of papers and allows for blind analysis, i.e., readers do not know the decision of other readers. The process began by screening the titles and abstracts; based on these, papers were considered relevant or irrelevant. Every paper was analyzed by two judges: Alexandre Berthe and Pascale Turquet. Each of them reviewed all the 1,411 papers previously found, with search criteria that had been previously discussed. Each judge decided whether the paper was relevant or not. If both considered the same article to be relevant, then it was eligible for a full reading. A paper would be rejected if both judges considered it irrelevant. Opposite choices led to a “conflict” (Figure 5).

**Figure 5. Covidence blind double-screening process**



Source: Covidence website

After screening the **1,411** titles and abstracts, **101** papers were considered relevant by both reviewers, with **248** “conflicts.” **1,062** papers were considered irrelevant.

Papers were considered irrelevant for the following reasons:

- no links to Asia;
- literature concerning the natural sciences and health;
- social sciences references that are unrelated to the topic (for example, using the term “social network” but with no link to social policy, or using terms such as “environment of work” or “sustainable” but in a financial, rather than environmental, sense).

We kept a large number of papers, including ones that seemed irrelevant but for which we were reluctant to reject completely, in order to be able to carry out a full text evaluation to assess their relevance.

To resolve the 248 conflicts, the two judges met to discuss every conflicting item. The reasons for exclusion were listed for each excluded paper, with some of these reasons analyzed in the results section, because of their closeness with relevant analyses (these analyses are called peripheral in the rest of the paper). Below is a list of the general themes found in these papers, considered as peripheral:

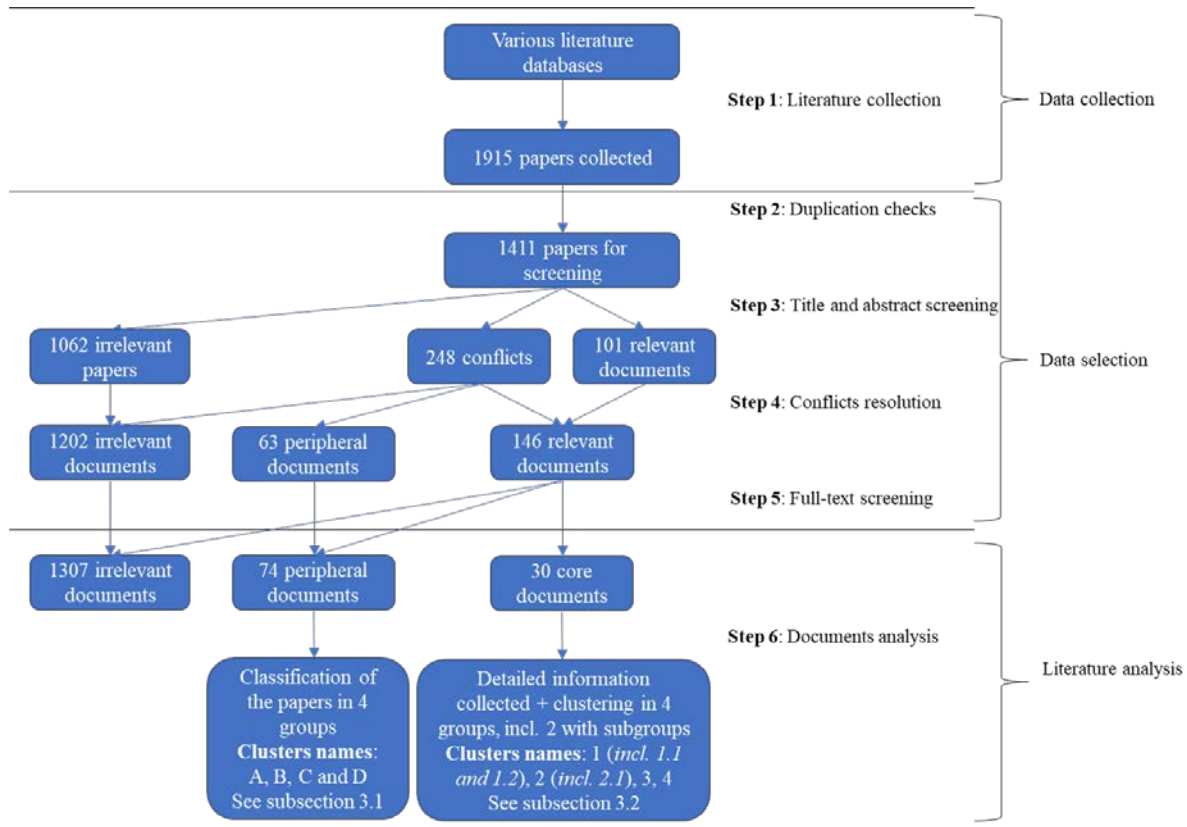
- general literature on social protection in agriculture, aquaculture, forestry;
- DRR without explicit link to climate change;
- social-environmental nexus without policy implications: social impact of environmental degradation, environmental impact of bad social conditions;
- producing environmental goods and restoration (is it always social protection?).

At this stage, **45** papers were considered relevant and **203** irrelevant. The 45 relevant papers were added to the other **101** relevant papers already selected, meaning that a total of **146** papers were selected for the full text review. The selection continued by reading the full texts of these 146 papers, for which we created summaries. The results of this second step are as follows:

- texts not found: **14**
- excluded papers (peripheral or irrelevant): **102**
- selected papers: **30**

As for the former “conflicts,” excluded papers were listed with the reasons justifying their exclusion. The full bibliographic list of relevant papers is given in the Appendix, and the full selection process is described in Figure 6.

**Figure 6. Procedure of paper collection, selection, and clustering**



Source: Authors.

### 2.3. Reading grid of articles for the systematic review

We decided to group the final **30** selected papers into tables (presented in the Results section). To do so, we decided to keep eleven pieces of information for each article, plus the identification key: “Author/s (year).” The first piece of information related to whether the paper belonged to gray or academic literature. Since the nature and objectives of the two literature types differ greatly, we decided to create two separate tables in order to clearly distinguish between papers from the different types.

After that, we started populating the tables with information extracted about the authors (author discipline and/or utilized methods, and institution of affiliation), the countries concerned in the study, and the scale of analysis (local, regional, national, or supranational). We then continued by identifying actors and tools mentioned in the papers.

In addition, for each paper we identified the actors implementing the measures and the beneficiaries of the measures. This provided information on the types of actors involved: public authorities (and, in that case, at which scale), communities, households, and international organizations. The actor-beneficiary variables also made it possible to identify the scales of the studies, both on the implementation and beneficiary sides.

Next, we identified the measures implemented in both social and environmental terms. In the table’s corresponding column, when the authors made a clear reference to it, we kept the information

provided about the social protection and environmental approach utilized, in line with Section 1.1 and 1.2 of the current paper. For the environmental measures, when no explicit policy was mentioned, we kept the information on the environmental pressure or overuse of resources at stake.

After identifying these tools, we extracted information on how the link between social protection and environmental issues was developed in the paper.

Finally, based on these different variables, we clustered the papers in order to identify similarities in the ways in which they created links between social protection and the environment. We used two-level clustering to create sub-clusters. The cluster variables are presented in Table 10.

**Table 10. Paper clustering**

Cluster number	Cluster description
1. <i>including 1.1, and 1.2.</i>	Payments for environmental preservation and the poor  <i>Pro-poor environmental restoration measures: pro-poor REDD+, pro-poor PES</i>  <i>Payments for environmental goods and restoration production made by public institutions: ex-post evaluation of social consequences</i>
2. <i>including 2.1.</i>	Social protection as a mechanism to reduce the vulnerability of the poor  <i>A particular framework: ASP or SP-CCA-DRR (or DRM) combined framework</i>
3.	Taking into account social objectives in green policies
4.	Social and environmental policies that exist within the same general scheme, but still in parallel to each other

### 3. Results: An emerging nexus in movement

This section explains the reasons for excluding 74 papers in the second stage and presents the 30 references finally selected and studied. The 4-category typology developed considers the area, the type of measures or policies put in place, the actors implementing them, the links between social policy and environment, and the beneficiaries of the identified measures. Finally, based on these elements, we provide some descriptive statistics on the 30 selected texts.

#### 3.1. Analysis of peripheral literature

We shall now discuss the reasons that led us to exclude papers in the second stage of this work (i.e., conflicts and full text screening exclusions). Some papers were considered as fully irrelevant based on a better understanding of the text. Others were considered as peripheral: neither fully irrelevant nor fully relevant, having common roots with the papers selected but not directly interacting with the social protection–environment nexus. We regrouped these peripheral papers into the categories presented in Table 11 below (ranked by number of documents concerned). It is similar to what Costella et al. (2021) propose by identifying socio-economic impacts of climate risks. In their list, they distinguish between two types of risks influenced by climate change: “risks associated with changes in the climate system” and “risks associated with broader socioeconomic processes and practices interacting with climate change”. In our paper, these second types of risks can be assimilated with peripheral literature.

**Table 11. Literature peripheral to the social protection and the environment nexus in SEA**

Category	Number of papers	Category description
<i>Category A</i>	40	DRR without explicit link to climate change
<i>Category B</i>	22	General literature on social protection in agriculture, aquaculture, forestry
<i>Category C</i>	7	Social-environmental nexus without policy implications: social impact of environmental degradation, environmental impact of unfavourable social conditions
<i>Category D</i>	5	Producing environmental goods and restoration (is it always social protection?)

*Category A* papers mobilize the question of disasters without linking them to climate change and the necessity of mitigation or adaptation. In some papers, these themes could become relevant if climate change exacerbates the disasters. This is not the case for other disasters, for example, risks related to earthquakes.

*Category B* papers concern the development of social protection, and social policies more broadly, for people working in agriculture, aquaculture, and forestry. There is no link with environmental issues in these papers, since social protection is linked instead to poverty reduction or harvest improvement. Nevertheless, if the policies studied are linked to environmental objectives or degradation in the future, studying these cases could become relevant.

*Category C* papers study the social-environment nexus without linking it to protection or policies. This literature corresponds to the study of the two bottom arrows in Figure 2. If the question was largely treated in a more systemic manner, these studies could be relevant, but the scope of our paper is not as large as studying all poverty–environment nexuses.

*Category D* papers concern the production of environmental goods without thinking of it as a poverty alleviation solution. Therefore, these kinds of policies cannot be thought of as social protection tools. Nevertheless, in the future, they could be designed to incorporate this dimension.

Working deeply on the contextual analysis of these documents could help to broaden the question of how current policies could change to directly address the social-environment nexus. Nevertheless, this

is a very different question from our starting point, and would necessitate using a larger PECO equation to ensure that all relevant papers are identified.

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### 3.2. The core analysis: Synthetic tables

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In the following two tables, we present a description of the 30 relevant papers. Table 12 represents academic literature and Table 13 represents gray literature. The complete bibliography of relevant papers can be found in the Appendix.

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### 3.3. Descriptive statistics on core texts

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Tables 12 and 13 show 15 academic papers and 15 gray literature documents. 9 papers do not specifically study an inland SEA country and have a broader focus, while others take explicit examples on one of the countries studied in this paper: 9 are about Vietnam in general or a Vietnamese region/city, 4 are on Thailand, 3 are on Cambodia, 3 are on Lao PDR, and 2 focus on Myanmar. With no identified article published before 2007, all the literature is fairly recent.

Turning to actor implementation, 13 papers refer to a range of various actors rather than a single one, often with a significant focus on state intervention but also mentioning firms, NGOs, international organizations, and communities. In 15 papers, the state is the actor implementing the measures; in 2 others, the focus is on international organizations. Almost all the articles focus on the poor and vulnerable. It should be noted that this focus may be performed at different scales (community, household, individual). It can also be noted that some papers make more explicit reference to productive activities, notably agriculture (3 papers). Considering the various measures, in Table 14 we give a synthetic view focusing on the four clusters.

**Table 14. Cluster representation in the literature sample analyzed**

Cluster number	Number of articles concerned	Percentage of the full sample
1	11	35.5 %
<i>including 11,</i>	6	20 %
<i>and 12.</i>	5	16.5 %
2	14	46.5%
<i>including 2.1.</i>	9	30 %
3	1	3,5 %
4	4	13.5%

In the following section, we discuss these results and offer insights based on this current analysis.

**Table 12. Academic literature on social protection and the environment nexus in SEA**

Author/s (Year)	Author affiliation	Discipline/methods	Area studied	Scale of analysis	Who implements?	Social protection approach/tools	Environmental protection approach/tools	Social-environmental linkage	Beneficiaries	Cluster
Browne, 2014	GSDRC, University of Birmingham; Australian Department for Foreign Affairs and Trade	Literature Review	Asia-Pacific Ex. of Cambodia		Any (state/private organizations)	Micro-financing/insurance schemes/CT in Cambodia	Climate change	CCA DRR	The poor, vulnerable, and marginalized	2.1
Chantarat et al., 2011	Univ. of Canberra & Cornell; Mahidol Univ.; Wildlife and Plant Conservation Department, Thailand; Biodiversity-based economy development office, Bangkok	Econometrics	Thailand	Regional	State, community	Pro-poor biodiversity conservation	Biodiversity conservation (hornbills)	Improving pro-poor biodiversity conservation schemes with index insurance	Local poor communities	1.1
Jourdain et al., 2009	CIRAD, France; IRRI Social Science Division, Philippines; TUEBA & NOMAFSI, Vietnam	Econometrics	Vietnam	Regional	State	Pro-poor designed PES	Agricultural land use change for watershed services, carbon storage, or biodiversity conservation	Evaluation of poverty impacts of various PES schemes	Focus on poorest households	1.2
Jourdain et al., 2014	CIRAD, France; Dutch universities; IRRI Social Science Division, Philippines; TUEBA & NOMAFSI, Vietnam	Econometrics	Northern Vietnam	Regional	State	PES/programs to fight against poverty	Ex-ante analysis of two alternative PES potential programs: TFF (water-based) and PFF (cash-based)	PES conservation and poverty/design of equitable PES schemes	The poor	1.2
Jourdain et al., 2017	Asian Institute of Technology; Wageningen Univ.; TUEBA & NOMAFSI, Vietnam; CIRAD, France	Econometrics	Northern Vietnam	Regional	State	PES/programs to fight against poverty	Ex-ante analysis of two alternative PES potential programs: TFF (water-based) and PFF (cash-based)	PES conservation and poverty/design of equitable PES schemes	The poor	1.2
Lebel et al., 2011	Chiang Mai University, Thailand; Ateneo de Davao University, Philippines	Conceptual and strategical approach	Thailand	National	State	Assistance for the poor and migrants	Climate change adaptation	Reducing vulnerability to climate change	Socially vulnerable groups	2



Mohamed, 2011	International Institute for Environment and Development (UK)	REDD+ assessment	Vietnam	Local	International organizations	REDD+ with pro-poor benefits	Deforestation	Lessons from a REDD+ initiative and proposition for pro-poor REDD+ mechanisms	Ethnic minorities, small landholders and landless poor, women, children	1.1
Shweta, 2020	Thammasat University, Bangkok, Thailand	Assessment	ASEAN	International (ASEAN Region)	State/public and private insurers	Any index-based insurance (weather index, flood index, crop weather index...)/agriculture	CCA (change in crop calendar, crop diversification, water harvesting), conservation to reduce land degradation and saline water intrusion, adapting drought-resistant crops, etc.	CCA DRR Climate change adaptation and disaster resilience in agriculture sector	Farmers	2.1
Sparkes, 2014	Statkraft A.S., Oslo, Norway	Case study	Lao PDR	Local	State-owned company (Norway), State	Education and programs for the youth	Environmental impacts of hydropower (water sources, erosion, pollution, etc.), new economic activity consequences	CSR program (beyond or not of public requirements)	Local communities impacted by hydropower projects	4
Supawan, 2019	National Institute of Development Administration, Thailand	Economic microsimulation model	Thailand	National	State	Redistribution	Carbon emission, carbon tax	Conditions under which a carbon tax is progressive	Low-income households, the elderly	3
Triet, 2010	International Crane Foundation and University of Science, Vietnam National University	Project assessment	Vietnam	Local	International organizations	Skill training/production equipment	Community-based management of natural resources	Conflict between development and conservation	The poor	1.1
Vathana, 2010	Council for Agricultural and Rural Development (CARD), Cambodia	Analytical description	Cambodia	National	State	Safety nets and public works	Vulnerabilities, including natural disasters	Reducing vulnerability	Poor households	2
Vathana et al., 2015	CARD, Cambodia Economic Research Institute for ASEAN and East-Asia, Indonesia	Socio-economic survey	Cambodia	National	State, NGOs, and CSOs	Safety nets and community-level social protection	Climate related vulnerability	Expanding SP coverage for the poor in order to protect them from	The poor	2.1

										climate change and disasters effects	
Wunder, 2007	Center for International Forestry Research, Brazil	Economic analysis	Latin America and Asia (Vietnam)	International	State	PES		Forest conservation	Evaluation of the effects of PES in terms of fairness	The poor in rural areas	1.2
Zeller et al., 2013	University of Hohenheim Germany, Chiang Mai University, Thailand, Hanoi Agricultural University	Econometrics	Thailand and Vietnam	Regional	State	Credit access, social assistance		Limiting agricultural intensification consequences	Rethinking rural development with environmental preservation	The poor	4

**Table 13. Gray literature on the social protection and the environment nexus in SEA**

Authors (Year)	Authors affiliation	Discipline/ methods	Area studied	Scale of analysis	Actors implementing	Social protection approach/tools	Environmental protection approach/tools	Social-environmental linkage	Beneficiaries	Cluster
CARE, 2015	CARE International, Vietnam	Programmatic approach	Vietnam	National (with case studies)	State	Cash transfers, microfinance, agricultural insurance, public works	Climate change adaptation	ASP	The poor	2.1
Cousins, 2014	Trinity College, Dublin	Country studies	Cambodia Lao PDR, Vietnam	International	Several, general approach	Overview of the SP approach in the 3 countries. Index-based agriculture insurance and safety nets	Climate change mitigation	ASP	The poor and vulnerable	2.1
FAO, 2012	FAO-RAP with Asian forest actors	Literature review, institutional interviews, and case studies	Cambodia, Lao PDR, Thailand, Vietnam	Mainly national with local focuses	Government, international agencies, NGOs, etc.	PES, carbon payments	Forest management	Vulnerability and insecurity (food insecurity and floods and droughts)	The poor	1.1

FAO, 2019a	Report for the FAO based on the work of world fish members and consultants	Policy recomm. based on workshops and institutional interviews	Cambodia	National	State	Social assistance (emergency response, human capital dev., vocational training, and welfare provision to the most vulnerable)/social security/labor market programs	Conservation and sustainable use of fisheries (natural resource degradation: illegal fishing and climate change)	Mutually reinforce poverty reduction; and incentivize conservation and sustainable use of fisheries and related natural resources	Small-scale fishers, small-scale farmers	1.1
FAO, 2019b	FAO, Pyoe Pin institute, WorldFish, and consultants	Participatory rural appraisal vulnerability tools	Myanmar	Local case studies	Formal and informal measures (state, NGO, communities)	Absence of formal social protection (possible change with international standards), traditional social assistance in the communities (threatened by migration and changing farm practices)	CCA, overfishing reduction, commons management	Participatory rural appraisal, vulnerability, DRM,	Vulnerable communities and individuals	2
Huynh et al., 2019	Viet Nam National University and IRD (France)	Mainly sociology and anthropology	Vietnam	Local case studies	Public authorities (local and national), NGO, international organizations	Credit program, social workers help, housing programs, compensation for resettlement	CCA, local water pollution (wastewater management)	Reducing vulnerability and power relations through adaptation to climate change (transformative adaptation)	Poor	2
ILO, 2011	ILO Regional Office for Asia and Pacific	Guide based on local experiment and literature	Asia-Pacific region	National and local programs	Mainly state (especially infrastructure and public works)	Qualitative green jobs	Climate change adaptation	Green jobs with decent conditions	The poor, workers	2.1
ILO, 2019	ILO Regional Office for Asia and Pacific	Report based on literature review	Asia-Pacific region	Subnational	Several, general approach	Green jobs and skills (TVET)/Occupational safety and health policy (clothing sector)	Climate change/clean energy	Just transition Climate change mitigation	Vulnerable communities and employment sectors (clothing)	4
MCCA/UN-Habitat, 2017	MCCA/UN-Habitat	Policy guidance brief	Myanmar	National	Action plan (mostly state)	Social transfers, livelihood diversification, weather-indexed/crop insurance and access to credit and assets	CCA	ASP	Vulnerable groups	2.1
Nabangchang, 2014	Center for International Forestry Research	Review of legal and political frameworks	Thailand	National and project scales	Various	PES	Community-based forestry/ assessment of PES	PES contribution to poverty alleviation and creation of markets for biodiversity conservation	The poor	1.2

Obein, 2007	French Development Agency	Assessment based on interviews and surveys	Lao PDR	Local	State, company (VLRC)	Fair cash compensation for loss of land, social protection associated with work at VLRC (maternity, accident, health coverage, pension)	Reducing biodiversity lost, pollution, erosion, and waste production	Assessment of the environmental and social impacts of rubber plantation	Local communities	4
Thuy, 2013	Center for International Forestry Research	Literature review, case study, participatory rural appraisal	Vietnam	Local case studies	State	Pro-poor PES	Forest environmental services	Evaluation of the social impacts of pro-poor PES	The marginalized and poor	1.1
Voladet, 2015	Mekong Economic Research network	Vulnerability assessment (literature review)	Lao PDR	National	State	Community-based social security scheme (health insurance/vocational training program) minimum product price guarantee system, crop, and livestock insurance scheme	Environmental degradation in general and unsustainable land use for farmers (land degradation)	Risks and vulnerability assessment associated with climate change and market integration of smallholders	Small-scale farmers	2
WB, 2010	World Bank Environment Department	Macroeconomic modeling	Global (inc. Vietnam case study)	Global (with national case studies)	Several, general approach	Cash transfers, asset transfers, weather-based crop insurance, employment guarantee schemes and social pensions	Climate change	Vulnerability to CC socially differentiated	The poor and vulnerable	2.1
WFP, 2019	World Food Programme with various partners	Literature review and national case studies	ASEAN (Thailand, Lao PDR)	Subnational (ASEAN)	State	Cash transfers, social insurance, employment-responsive SP, gender-based programs	Climate and natural shocks-climate change	DRM assessment. Synergy between DRM and SP: risk reduction, targeting of assistance, recovery	The poorest and currently non-poor for security	2.1

## 4. Discussion: Insights into the social protection-environment nexus in SEA

This discussion is organized into two subsections. The first subsection extrapolates the links between the clusters identified in the core documents and existing literature described in Section 1.1. Based on this, the second subsection discusses how social protection could be redefined, with the inclusion of related environmental issues.

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### 4.1. What conceptions are present in the existing literature on the social protection-environment nexus?

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The clusters identified could be linked with the various ways of understanding and representing the relation between social protection and the environment. Cluster 1 comprises 11 publications, and focuses on the social benefit of the production of environmental services by the poor. Sub-cluster 1.2 corresponds to the study of the ex-post potential benefits of payments for environmental services that are already in place. Since the question of social protection of the poor comes after measures are implemented, this sub-cluster corresponds to non-integrated frameworks, and especially the necessity to identify the social consequences of environmental protection (Figure 2, question b). For Cluster 1.1, environmental measures are designed to be pro-poor from the beginning. As in the second stage of Gough's vision (2003), this could then be associated with the willingness to develop "win-win" public strategies, i.e., the case of social policy as a co-benefit of environmental policy (see ecosocial state in Section 1.2.3). More generally, the remaining question is: how can we classify these tools, and what kind of social protection do they refer to? The answer clearly depends on the effect on poverty alleviation and inequality reduction, the social or environmental reasons that push the development of these measures, and the broadness of the chosen definition of social protection.

The studies in Cluster 2 focus on the necessity to reduce the poor's vulnerability to climate change. They correspond to a public willingness to respond to the stake of the adaptation to environmental degradation, despite the fact that policies to mitigate pollution are rarely invoked. This is logical due to the global dimension of greenhouse gas emissions. In consequence, these papers study the development of social policies linked with the disproportionate consequences of environmental degradation on poor and marginalized communities and individuals. The policies studied address a standard problem of corrective environmental justice. The objectives of these policies are to develop integrated measures that respond to a pre-existing link between social and environmental issues, i.e., the disproportionate consequences of environmental degradation on the poor (see environmental justice in Section 1.2.3 and Figure 2, question d).

Cluster 3 includes only one paper which analyzes the possibility of developing a progressive carbon tax. The idea of a progressive carbon tax relies on the willingness to develop integrated socio-ecological policies using a "win-win" strategy, i.e., reducing carbon emissions and tackling social inequalities at the same time. It can even go further by creating a truly ecosocial state, as defined by Gough (2003), because carbon tax can lead to a global reduction in consumption and the necessity to design new understandings of what "prosperity" means for society (see ecosocial state in section 1.2.3).

Finally, Cluster 4 comprises a diverse range of papers that all try to imagine general policy schemes or action plans as including both environmental and social policies. These schemes include a variety of actors, especially firms practicing corporate social responsibility (CSR) or just transition measures. Despite this, these papers mainly discuss social and environmental policies as separate issues. For instance, a paper might present the promotion of healthcare and waste reduction in a same CSR plan without considering the potential links between these two dimensions. These schemes correspond to integrated frameworks, i.e., plans that include both social and environmental protection measures, that paradoxically ignore the potential links between social and environmental issues. It looks as if, in

the nexus framework reported in Figure 2, we avoid thinking about the arrows linking the red and green boxes. This could lead to proposals of inefficient or incompatible social and environmental measures.

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#### **4.2. Acknowledging the environment in social protection: Toward what social protection model?**

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Beyond the characterization of these clusters, it seems appropriate to distinguish between academic and gray literature since gray literature, especially of the institutional kind (ILO, FAO, WB, etc.), accounts for half of the selection. As highlighted by the literature on welfare models, the institutional landscape is broader in developing countries and includes international actors able to influence, support, and sometimes fully finance social policies. Their framework includes an operational dimension and allows these bodies to make recommendations after having analyzed the national or regional context. To do so, they apply their own definitions and analysis grids. They commonly use the ASP framework described in Section 1. Sometimes, scholars also use this framework, but in general academic papers tend to assess the effects of environment or social tools using microeconomic/econometric analysis, while institutional reports logically emphasize the programmatic dimension.

In the selected papers, the actors implementing or funding the measures are essentially the state, international bodies, and/or NGOs. Surprisingly, private companies such as multinational firms are quite absent, as well as CSR measures, which theoretically aim at improving both social and environmental conditions. Is this because it has been little studied, or does this reveal a bias in our analysis? It is possible that the lack of literature on this subject reflects the existence of a blind spot resulting from the absence of private companies in the social debate, which is rather played out between public actors, NGOs, and international organizations. The latter conduct a great part of the studies and are clearly more focused on climate change and natural disaster management. Other consequences of human activities on the environment, such as greenhouse gas emissions, are only marginally addressed in the papers studied.

In fact, the poor and vulnerable are always the target of the described measures, even when the approach is supposed to be more inclusive or rights-based. The institutional approaches taken by different international organizations do not seem so far apart: the vulnerable groups identified are small-scale farmers, small-scale fishers with a high exposure to climate or environmental change and, more generally, informal workers, while the described tools are generally assistance-based and pro-poor. This means that the measures described or studied in the selected papers have no link with existing social schemes, which are mostly insurance-based and often leave the poor and the disadvantaged behind. However, in most countries, the authorities seek to broaden the scope of social protection and try to develop universal coverage, especially in the healthcare field. But the question of introducing environmental risks and/or measures in existing or future schemes is rarely posed, even though the broadening of social protection schemes could provide an opportunity for this. This focus on poverty and vulnerability issues could also explain the papers' lack of evidence on the link between health coverage and the environment. As previously mentioned, the issue of social insurance<sup>26</sup> is hardly addressed, which is consistent with the absence of occupational welfare and private companies' social policies.

Accordingly, the analyses focus more on tools than on broad policy or social welfare models. No paper was found about welfare systems in general, including systems that integrate both social and environmental protection.<sup>27</sup> Selected references rarely include a comprehensive view of social protection, nor a reflection about the context of implementation (existing schemes, colonial heritage, etc.). This view is shared by Costella et al (2021): "efforts to build climate resilience have mostly been small-scale, 'projectised', and ad hoc (...) while policy options for addressing future needs at scale via social protection remain under-emphasised" (p.20). The literature described in Section 1.1. seems quite absent. Other subjects that are not particularly discussed are the transposability of social models, the

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<sup>26</sup> Contribution-based schemes.

<sup>27</sup> However, as demonstrated by Costella et al. (2021) in the context of climate change, existing social protection schemes can be helpful to people dealing with new environmental stakes, and new social protection measures can also address new social stakes associated with environmental pressures. This vision requires looking at social policy as a whole.

relevance of context variables (also mentioned in Section 1.1.), and the definitions and objectives of social welfare policies.

The approaches remain rather instrumental and residual if referring to Esping-Andersen's analysis. The international organizations' framework can be regarded as a large toolbox including measures that are not usually considered as social protection measures, such as crop insurance and credit schemes. Under what conditions could they be taken as such, and be included in the social protection schemes? The place and role of private insurance, which is mentioned on the same level as public insurance by certain organizations, will also have to be questioned. These observations raise the question of the nature and scope of solidarity, especially when the pooling scope is narrow. A further question is accordingly that of the perimeter and very definition of social protection in these changing contexts. However, most of the selected papers' approach seem only to leave room for disaster response and assistance.

However, it seems necessary to place these socio-environmental arrangements in a broader perspective, to enable us to understand why such measures are more developed in certain SEA countries—namely Thailand and Vietnam, according to our results.<sup>28</sup> While the level of economic development has been taken into account, the fact that Thailand and Vietnam are more concerned also confirms that, as underlined by ILO (Section 1.1.), specific measures are easier to put in place when social schemes already exist. This is underlined also by FAO and Red Cross Red Crescent Climate Centre (2019) who believe that “Disaster assistance delivered through existing social protection systems can be potentially faster and most cost-effective than conventional humanitarian responses when scalable, well-functioning, shock-responsive systems with high population coverage are in place” (p.27).

Like social protection characteristics, environmental features also need to be taken into account for future work. Based on this review, we can make three remarks. First, there is a particular prominence in these papers of climate change-related issues, which is usual in literature on the environment. Going beyond the study of climate change exclusively is often presented as a major challenge for a better understanding of environmental issues, however this is perhaps less crucial in a region such as SEA, which will be among the most affected by climate change. Second, we note an important presence of the issue of natural disasters, especially floods and their reinforcement by climate change, as well as that of sustainable forest management. Third, the results show a weaker presence of local pollution and waste management in the papers—although these issues are sometimes mentioned.

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<sup>28</sup> Regarding the papers which concern only one country, 10 of them are about Vietnam and 5 about Thailand, with 3, 4, and 1 respectively about Lao PDR, Cambodia, and Myanmar.

## 5. Conclusion

This paper attempts to identify how the presence of the just transition framework in literature that links social protection and environmental issues, in order to argue that the inclusion of environmental issues in social protection could be implemented in various ways and is influenced by existing social schemes and conceptions. We identify some interpretations of the social-environmental protection nexus, whether integrated or not. We show that even for an integrated understanding, this link can be conceptualized in various ways—based on environmental justice, ASP, an ecosocial state, CSR, or just transition—thereby offering several possibilities of viewing this nexus. These frameworks give different places to social protection actors, such as the state or firms on the side of implementing measures, and workers or the poor on the side of the beneficiaries. Moreover, each framework focuses on different aspects of the environment, including climate change adaptation and developing cleaner productive sectors.

By identifying a diversity of conceptions, our paper develops a systematic review analysis to identify how the social-environmental protection nexus is taken into account in both academic and gray literature. We show that the literature for the Mekong area is not very developed to date, with 30 references identified that match our criteria for selection, even if many more papers exist on close subjects that did not directly address the question. This peripheral literature allows us to see that studies could switch to studying these topics in the near future. On the core text analysis, we provide a reading grid that makes it possible to classify the different studies on the subject. We use a tools/actors identification grid to identify the clusters. Further studies could easily be added to this table as the field of research develops. We show that analyses tend to focus on the region's most developed countries, and when the nexus is studied, it usually relates to the most disadvantaged situations. This puts at the heart of our analysis a discussion on what social protection in a Global South context could be, and how it could include new issues, such as those relating to the environment.

Based on this systematic literature review, we highlight two avenues of research. First, in the SEA context, the possibility of linking social protection with environmental issues is nascent, and inclusive projects do not seem to be numerous yet. Nevertheless, the region is becoming increasingly concerned with environmental issues, and the development of formal social protection is envisioned in some places. Therefore, it is becoming necessary to build common socio-ecological frameworks, tools, and projects for various actors in those countries. Based on this necessity, it would be useful to conduct participative research to collect reflections from experts and institutional and field actors, which would allow for an identification of the different ways in which these actors develop representations of the future. From this, a common ground could be constructed for feasible, appropriate scenarios in the region.

Second, the productive sector is little represented in the analyses identified above, except in the case of small-scale fisheries and farmers, which are often cited. This lack of information advocates for further comparative sectoral case studies on social-environmental protection nexus to be conducted in the region. The sectors studied could include agriculture, for instance, as well as sectors with global value chain issues such as clothing production. In addition, public and private initiatives by local or multinational private companies could be highlighted, to be linked with the ecosocial state, CSR, or just transition frameworks.

Finally, while this article offers an initial framework for discussion, further research is crucial. This will ensure that, when creating isolated policies on either social or environmental protection, no harmful long-term consequences are generated for whichever the policy does not concern. Hence, there is a need for either integrated policies, or policies that at least take into account their consequences on the other dimension.



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# Appendix

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## List of acronyms and abbreviations

<b>AFD</b>	Agence française de développement
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>ASP</b>	Adaptive Social Protection
<b>CCA</b>	Climate change adaptation
<b>CSR</b>	Corporate social responsibility
<b>DRR</b>	Disaster risk reduction
<b>ESCAP</b>	United Nations Economic and Social Commission for Asia and the Pacific
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>GDP</b>	Gross Domestic Product
<b>IDPoor</b>	Identification of Poor Households Program
<b>IDS</b>	Institute of Development Studies
<b>ILO</b>	International Labour Organization
<b>IMF</b>	International Monetary Fund
<b>NGOs</b>	Non-Governmental Organisations
<b>NSSF</b>	National Social Security Fund
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PECO</b>	Population, Exposure, Comparator, and Outcome
<b>PAYG</b>	Pay-as-you-go
<b>SEA</b>	Southeast Asia
<b>UCS</b>	Universal Care System
<b>UNDP</b>	United Nations Development Programme
<b>WB</b>	World Bank
<b>WHO</b>	World Health Organisation
<b>WS</b>	Welfare states



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