

Article

Not a Security Issue: How Policy Experts De-Politicize the Climate Change–Migration Nexus

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Received: 28 April 2019; Accepted: 30 June 2019; Published: 15 July 2019



Abstract: Policy experts play an important role in coping with the climate change–human migration nexus. They offer expert solutions to decision makers, and thus, they contribute to de-politicizing the issue. The aim of this paper is to find out how different policy experts envision the climate change–human migration nexus. The Netherlands has been nominated as the seat of a Global Center of Excellence for climate Adaptation and aims to become a Global Center of Excellence in the water safety and security domain. Policy experts were selected based on a structured nominee process. We conducted semistructured interviews with policy experts and analyzed policy expert documentation. Interview transcripts and documents were examined via a coding frame. Unlike policymakers who link climate change and conflict, policy experts stress the economic and political factors of migration in which climate change issues happen. The major difference between the view of policymakers and policy experts on the link between climate change and human migration emerges from the frame of the climate refugee. In the context of the climate change–human migration nexus, policy experts act as a countervailing power that prevents the political exploitation of the nexus into a security issue.

Keywords: climate risk; climate refugee; disaster-induced migration; trapped population; policy experts

1. Introduction

The climate change–human migration nexus has been widely discussed. Policymakers have discussed the potential link between climate change and migration as a matter of conflict and security (Bettini et al. 2016; Burrows and Kinney 2016; Nash 2018). The Dutch supreme military, Tom Middelburg, for instance, claims that climate change is the root of tensions and armed conflict, such as in the Middle East; and that global warming endangers safety in Europe (De Volkskrant 2016). Baldwin (2015, pp. 80–81) notes that politicians typically are proponents of the concept of the climate refugee. The climate refugee is addressed as problematic in ‘receiving areas’, and they focus on security and stability (Morrissey 2012; Bettini et al. 2016; Keohane 2019). The users of this concept put the blame on nature rather than on the social causes of climate-induced migration (Oliver-Smith 2012; Piguet 2013; Salehyan 2008). When an established political discourse sets the terms of the debate, it becomes difficult to discuss, for example, whether environmental concerns may be prioritized over economic interests (Holdo 2019, p. 608). The risk of politicization is that environmental concerns are forced into a discursive structure that are unfavorable to public deliberation about complex issues, like ethical questions of justice and responsibility (Keohane 2019).

In public discourses, policymakers typically reveal a tendency to ignore the complex and vital process of climate change and migration (Upadhyay et al. 2015, p. 411). Political actors tend to argue that natural environment is easily distinguishable from the social, political, and economic context (Morrissey 2012) and typically claim that displacement inevitably occurs under climate change (Warner

et al. 2009). In certain circumstances, such perceived impacts of climate change on security may, in turn, increase the risk of violent conflict (Barnett and Adger 2007). As (now former) US defense Minister James Mattis stated, “climate change is our national security challenge and climate change is impacting stability in areas of the world where our troops are operating today” (Science 2017). Such a claim emphasizes the intertwinement between climate change, war, and migration, with Syria typically being used as an illustrative example (Bettini et al. 2016). Political actors tend to emphasize that states are being overwhelmed and overrun by immigrants who potentially bring crime, violence, and disease (Morrissey 2012). As Mayer (2014, p. 31) explains, “they [political actors] argue that environmental migration may give rise to illegal movements, international criminality, terrorism, and conflict.” The security argument is rooted in strong emotions—fear—that compel immediate policy responses. The security argument comes with calls for preventive action, including investment in strategic partnerships with transit countries, border-control technologies, and reinforcement of military presence overseas (Mayer 2014).

In a context of such politicization, a climate change policy that recognizes human migration and displacement as critical societal challenges needs technical and expert solutions to de-politicize the complex character of the climate change–migration nexus (Baldwin 2015). Even though the scientific research community stresses that there are still many unknowns about the nexus—for instance, regarding the drivers of past adaptation efforts or how to mainstream climate into general development policy (Delaporte and Maurel 2016)—policy experts are believed to be of central importance when it comes to bringing scientific knowledge and credibility to the policymaking process (Hayes 2018). Although it is clear what the direction of scientific discourses and political debates on the climate change–migration nexus is, policy experts’ viewpoints on climate-induced migration have as yet been under-researched, even though they are, together with scientists and policymakers, key actors. Policy experts bridge the world of science and the world of politics. They give scientific credibility to claims and de-politicize issues and settle complex problems. But policy experts are also actors in the political arena. They are agents who have their own viewpoints concerning the climate change–migration nexus. The aim of this article is to find out how policy experts envision the relationship between climate change and human migration and whether and how they de-politicize the complex character of the nexus. For this purpose, we conducted seven interviews with policy experts in the Netherlands, and we analyzed fourteen documents to elicit the experts’ opinion within Dutch government agencies.

We opted to focus on Dutch policy experts because in the Netherlands, a field of policy expertise concerning the climate–change migration nexus is well established and demarcated. Climate change adaptation has long been associated with preventing flooding in the Netherlands (Hoppe et al. 2014). This is no surprise since half of the country’s territory is flood-prone, and the Netherlands is therefore considered to be one of the most vulnerable countries of the European Union by the European Environmental Agency (Hoppe et al. 2014). One of the main policy documents outlining the foreign policy position of the Dutch government is international water ambition. Recently, it was announced that the Netherlands should be the seat of a Global Center of Excellence for Adaptation (United Nations 2019). There is also a Dutch Risk Reduction Team—a team of experts tasked with quick response to disasters worldwide. The Dutch government supports and fuels active promotion and networking in several countries in the framework of an international knowledge and experience sharing platform, such as in Bangladesh, Vietnam, Indonesia, Egypt, India, and Mozambique. The Netherlands aims to become a global “center of excellence” in the water safety and security domain (Government of the Netherlands 2018). The country is very active in the field of climate change and security to the point that the Dutch Ministry of Foreign Affairs launched an initiative named Planetary Security in 2015 (Planetary Security Initiative 2017). This initiative is implemented by five key global players in the field of climate change and security, namely, Clingendael Institute and Hague Centre for Strategic Studies (The Netherlands), Adelphi (Germany), Center for Climate and Security (The United States), and Stockholm International Peace Research Institute (Sweden) (Planetary Security Initiative 2018). The discussions of this initiative were recently discussed at the UN Security Council (Planetary Security

[Initiative 2017](#)). An interesting direction for the article is to target it to speak directly to policymaking in the Dutch context. Given such activities, we decided to focus on the opinions of Dutch policy experts, to find out how they perceive the climate change–migration nexus.

Thus, the paper aims at finding to make sense of the world of expert debates in the field of the climate change–human migration nexus. With this research aim, we developed an interpretation of what the differences between policy experts' and policymakers' perceptions on the climate change–human migration nexus stem from. Moreover, we figured out how policy experts perceive climate change and human migration. Once it was clear what policy experts mean by climate change and human migration, we investigated how policy experts relate climate change to human migration. Furthermore, we clarified the differences between the policy experts' as well as policymakers' perception on the nexus. With these research objectives, we contribute to the body of knowledge in understanding the tensions between the framing of climate displacement among two professional settings. In particular, we focus on integrating research institutes and national government to investigate the issue of how policy experts countervail the political exploitation of the nexus in the pursuit of a security agenda.

2. The Climate Change–Human Migration Nexus and Policy Expertise

Scientists have widely argued that migration is a very context-specific process ([Black et al. 2011](#); [Gray and Bilsborrow 2013](#); [Hunter et al. 2015](#); [Ocello et al. 2015](#); [Upadhyay et al. 2015](#); [Warner et al. 2010](#)). Migration and nonmigration are part of wider environmental and social dynamics ([Black et al. 2011](#); [Gemenne et al. 2014](#); [Gray and Bilsborrow 2013](#); [Hunter et al. 2015](#); [Ocello et al. 2015](#)). The academic climate change–human migration literature has long gone through two fundamental theoretical baselines (see [Morrissey 2012](#)): (i) Environmental trends and changes can stimulate both migration and nonmigration, and (ii) migration and nonmigration are part of wider environmental and social dynamics ([Kelman et al. 2019](#), p. 2). The literature on climate change and migration revolve around themes of “climate refugees”, “environmental refugee”, or “climate change refugees” ([Upadhyay et al. 2015](#), p. 396). The frame of security already in term of ‘climate refugees’ has been very influential in policy areas ([Bettini et al. 2016](#)). The “refugee” and “forced migration” trope highlights the supposed situation of movement being involuntary and leaving one’s country of origin directly because of impacts from climate change ([Kelman et al. 2019](#)). There also remains a significant issue of those who are less likely to move in the face of environmental change and may be trapped in areas that expose them to serious risk.

The environmental change can drive migration, although its effects are likely to be observed through its interaction with and effects on these other systems ([Kelman et al. 2019](#), p. 11), particularly economic drivers (see [Table 1—Geddes et al. 2012b](#), p. 963; [Black et al. 2011](#)). The study of the causes and consequences of famine has been reversed by economic and political theories of why and how they occur, not least through Sen’s (1982) study on the subject, which demonstrated that famines have political roots and are overwhelmingly caused by failures of entitlement to food and resources than with their absolute scarcity ([Gemenne et al. 2014](#)). Most obviously, the breakdown of governance can lead to the emergence of forms of conflict beyond acceptable levels, trigger a decision to move or lead to displacement ([Black et al. 2011](#)), such as in Syria ([Ide 2018](#)). Additionally, regulated migration has aggravated the incidence of rural violence in Northern Nigeria ([Okoli and Lenshie 2018](#)). Therefore, migration within and between states is constituted by governance systems and their characteristic features, particularly the inequalities of wealth and opportunity embedded within the global politics of unequal development ([Payne 2005](#); [Lee 2016](#)).

The distance that people move will be linked to the social, physical, and financial resources that they possess ([Geddes et al. 2012b](#), p. 953) and ineffective political structure ([Linke et al. 2018](#)). Especially where slow-onset environmental change occurs, poor individuals, e.g., day laborers and temporary workers, may become ‘trapped’ because they cannot diversify their livelihoods, or they do not have the resources and capacity to migrate ([Koubi et al. 2016](#), p. 11). Through interaction with other drivers, it potentially leads to a movement towards and not away from risk and also has the potential

to destroy household resources and make migration more difficult with the attendant risk of trapped populations (Geddes et al. 2012a, p. 1079). Past studies (Koubi et al. 2016) and recent ones (Kumasi et al. 2019) show that most people prefer to stay and deal with the environmental problem by implementing adaptation techniques, especially when faced with slow-onset, longer-term environmental events.

Table 1. Climate change migration.

Theme	Staying Put	Out Migration
Political/governance		
Food and resources have political roots rather than climate impacts (Gemenne et al. 2014). Migration between states is constituted by governance systems and their characteristic features, particularly the inequalities of wealth and opportunity embedded within the global politics of unequal development (Payne 2005).	Ineffective political structures may contribute to instability where environmental degradation and drought are worsening, forcing struggling populations to adapt in Kenya (Linke et al. 2018).	The breakdown of governance can lead to the emergence of forms of conflict beyond acceptable levels, trigger a decision to move (Black et al. 2011). Unregulated migration has aggravated the incidence of rural violence in Northern Nigeria (Okoli and Lenshie 2018).
Economic		
The distance that people move will be linked to the financial resources (Geddes et al. 2012b). Migration to diversify income base can increase capacity to cope with hazards and reduce poverty at the sending location through remittances (Warner et al. 2010).	Where slow onset environmental change occurs, poor individual, day laborers and temporary workers may be trapped because they do not have resources and capacity to migrate (Koubi et al. 2016, p. 11). Results from the upper east region of Ghana shows that farmers adapt to climate change under agriculture, water management, communal pooling, and livelihood diversification techniques (Kumasi et al. 2019)	The study of environmental violence provides a framework that we can understand a form of structural violence, in which most of the violence occurs from economic powers doing everything they can to justify and maintain a global system that unequally privileges them (Lee 2016). The inadequate reactions of the Assad regime to existing political, economic, and ethical tensions, to the drought to the rural-to-urban migration, and to the initial, legitimate protests were the principal drivers of the conflict (Ide 2018).
Social		
Strong kinship networks can provide cash or other support to recover and rebuild post-hazard or to migrate (Lindley 2014). In some instances, migration of some family members can lead to greater vulnerability for women and children left behind to manage households (Battistella and Gastardo-Conaco 1998).	A proper wealth distribution along with access to electricity and education in Bangladesh will provide poor households the capacity to adapt to climate change (Delaporte and Maurel 2016).	Labor migration appears to be a strategy to reduce vulnerability to environmental changes mainly for individuals with no formal education or with primary education, whereas the better educated primarily migrate for education or vocational training (van der Land and Hummel 2013).
Demographic/cultural		
Households composition and social networks shape households' use of migration (Hunter et al. 2015).	Being sick or disabled, belonging to a marginalized or discriminated group, being female in a highly patriarchal society, age and fatalistic attitudes towards disasters can increase vulnerability when a hazard occurs, reduce options for coping in place and for recovery (Kelman and Stough 2015; Wisner et al. 2003).	The propensity to migrate is generally higher among younger people (Black et al. 2011). With the current population growth of about 2.6% a year, the Egyptian government faces several challenges in providing for the basic requirements of its citizens, including jobs, suitable housing, sanitation, health care, and education (Khedr 2017).
Environmental		
The environmental change can drive migration, although its effects are likely to be observed through its interaction with and effects on other systems (Kelman et al. 2019, p. 11).	If the past provides any insights into what may happen in the future, most people prefer to stay and deal with environmental problem by implementing adaptation techniques, especially when faced with slow-onset, longer-term environmental events (Koubi et al. 2016).	The impact of climate on conflict and asylum flows is limited to specific time and context (Abel et al. 2019). The extent to which environmental change is causing the migration of Africans to Europe, the rise of extreme terrorist groups such as Boko Haram, cattle raiding in East Africa, Pastoral-agrarian conflict in the Sahel (Freeman 2017).

The scientific discourse and the political discourse on the climate change–migration nexus are two different worlds. The political discourse is highly politicized and typically presents the nexus as a security issue that requires security interventions. Policy experts play a leading role in bridging the two discourses, to bring scientific credibility to the political discourse and to de-politicize the political discourse. Policy experts are with one foot in science and another in the political arena. They are key knowledge workers, who, in contrast to university-bound scientists, have a direct impact on policymakers. Policymakers typically borrow their understanding from policy experts. Hence, their perceptions matter for seeing how a scientific discourse is perceived, translated, and transformed into policy action. [Weber \(1946\)](#) and [Weiss \(1982\)](#) claim that “experts, science, evidence, knowledge, and policy-making have long been linked” ([Baekkeskov 2016](#), p. 396). Scientific, evidence-based information and knowledge is necessary ([Ingold and Gschwend 2014](#)) for an effective policy ([Baekkeskov 2016](#)) and a high-quality decision ([Ambrus et al. 2014](#)). Especially today more than ever, almost all major policy issues are complex, such as environmental protection ([Dunlop 2014](#)) and asylum policy, which requires a considerable scope of knowledge to halt imprudent policy measures ([Boswell 2008](#)).

Experts often see themselves as heroes in an epic: They must swim seven seas (‘bridge gaps between science and policy’), climb seven mountains (‘overcome barriers to adaption of research’), and translate their wisdom into a foreign tongue for the king to understand (‘engage in knowledge translation’) ([Löblová 2018](#)). The combination of intellectual engagement is needed to put the issue concerning expertise to interface between science and politics ([Hukkinen 2016](#)). Such actors are described as ‘between worlds’ ([Bielak et al. 2008](#); [Lomas 2007](#); [American Association for the Advanced of Science \(AAAS\)](#)) and ‘invisible’ ([Meyer 2010](#)). Experts and policy-makers are two distinct communities, separated by barriers and gaps that need to be bridged in order to achieve evidence-based policy ([Löblová 2018](#)). Recent decades have seen evidence-based policy take center stage in recommendations for how to improve public policy effectiveness and efficiency ([Baekkeskov and Öberg 2017](#)). Expertise can be produced at universities, research institutes, consultancies, think tanks, public authorities or other organizations ([Weible et al. 2012](#)). Therefore, such experts produce ‘useful’ knowledge to solve today’s problems, including environmental and migration problems ([McNie 2007](#)).

3. Methods

We conducted a content analysis in order to find out how different policy experts in the Netherlands envision the climate change–human migration nexus. Firstly, we used the Scopus digital search engine to identify the fifty most widely known authors on environmental policy in the Netherlands. We limited the research to the 2006–2016 period to find experts who have recently published on the topic. The fifty most published authors we found in the area of the environmental policy were included in this search engine. We assumed that these authors were aware of the latest discussions in this field. Secondly, an email was sent to these fifty experts with a request to nominate three to five specialists in the field of the climate change–migration nexus, located in the Netherlands. In total, forty authors responded and nominated fifteen experts. However, eleven of them were within the scope of this research: the research partners of the two Dutch ministries, Infrastructure and the Environment and Foreign Affairs (73% of nominated experts were within the framework of this study). An invitation email was sent to the eleven experts to participate in the research. When experts did not respond to the first email, two reminders were sent by email. After these reminders had been sent, nonrespondents received a follow-up email where they were asked to demonstrate their reason for not participating. In total, seven experts agreed to participate in the interview session (91% response rate). All of them hold a PhD degree (see [Figure 1](#)).

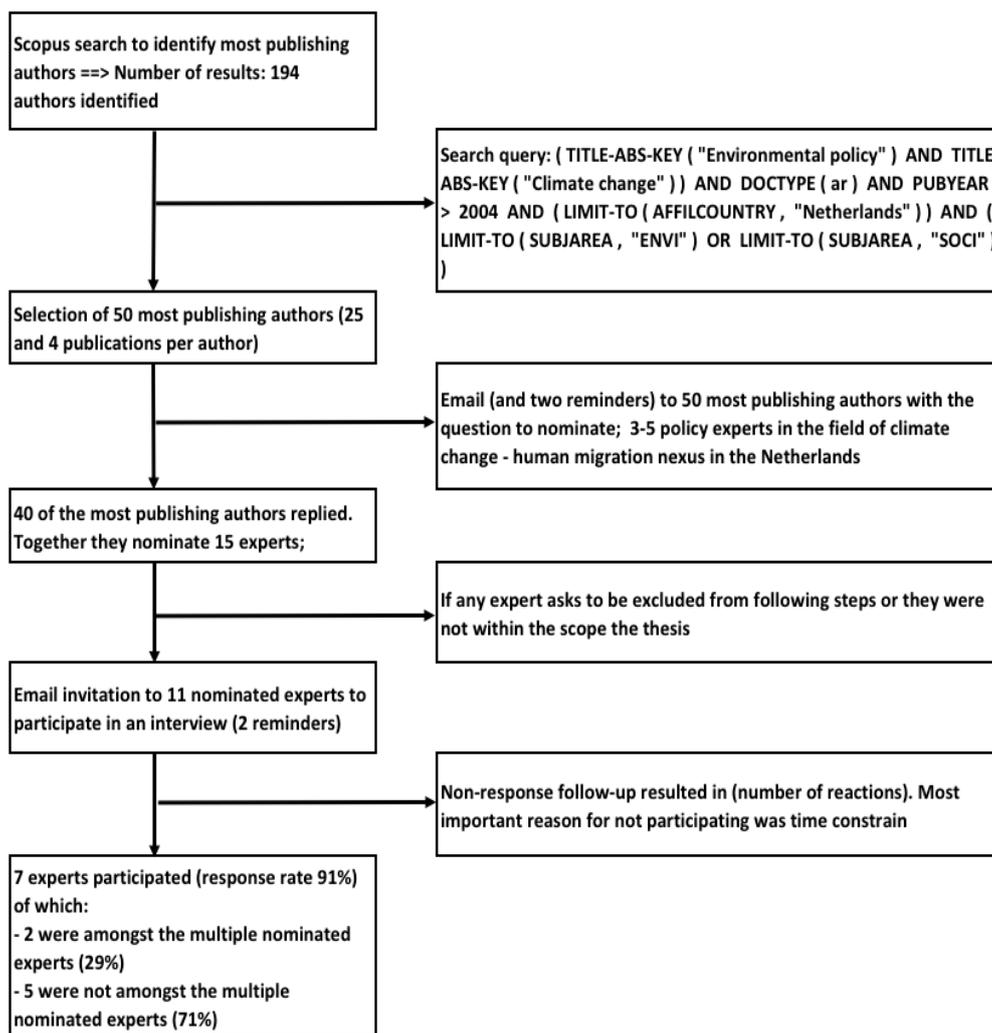


Figure 1. Flow diagram outlining the expert nomination and selection process, adapted from [Spruijt et al. \(2016, p. 3\)](#).

The interviews were audio-taped and transcribed directly after each interview. In each interview, the same interview topic list was used. The topics were defined and explained carefully to the interviewees, to make sure the interview questions were interpreted in the same way. Table 2 provides the question guide used.

Secondly, fourteen documents (twelve research reports and two advisory letters) were analyzed. These documents were written by the Dutch Ministry of Environment and Infrastructure and the Ministry of Foreign Affairs, as well as by their European partners. These are documents that provide additional information on the perception of the climate change–migration nexus, in the sense that they communicate the perceived issues at stake in the nexus as perceived by policy experts. These fourteen documents were written by experts who conduct policy-oriented research. In other words, we analyzed these fourteen documents to sensitize ourselves to the variety of policy topics that are connected to the climate change–migration nexus. We used the same procedure for handling the information derived from the documents as we did for organizing the interview data. We collected the documents from the websites of two of the ministries’ agencies (PBL and AIV) and their partners. Their partners include Clingendael Institute—The Netherlands, Potsdam Institute (PIK)—Germany, International Institute for Applied Systems Analysis (IIASA)—Austria, Fondazione Eni Enrico Mattei (FEEM)—Italy, and the Directorate–General for research and innovation—EU. The countries were not selected as such; instead, they are all the research partners of the Dutch government. Table 3 provides the list of documents used.

Table 2. The question guide used.

Research Questions	Topic List	Interview Questions
1. How do policy experts define climate change and human migration?	A. What climate change is, and who are the environmental refugee	1. How do you perceive 'climate changes'? and which one has the most serious influence on migration? 2. What are the advantage and disadvantages of migration as a strategy for climate change adaptation? 3. How 'environmental refugee' can be defined?
2. How they explain the relationship between climate change and migration, and what are the differences?	B. Ways that climate change influence on migration decision/simple or complex	4. Can you explain what factors can influence on migration? please provide some examples? 5. How do you distinguish environmental from other factors of migration? 6. How would you identify somebody as 'environmental refugee'?
	C. Possible problems caused by environmental refugees	7. Which problems can be caused by environmental refugees?
	D. Possible solutions for environmental refugees/prevention or protection	8. How do you look at the solutions of environmental refugee?

Table 3. List of documents used.

PBL and Its Partners	
1	The report of Fondazione Eni Enrico Mattei (FEEM), which is titled 'Migration and Climate Change in Rural Africa. February 11, 2015'
2	The report of Fondazione Eni Enrico Mattei (FEEM), which is titled 'Development, Climate Change Adaptation, and Maladaptation: Some Econometric Evidence. September 2015'.
3	The report of International Institute for Applied Systems Analysis (IIASA), which is titled 'the human core of the shared socioeconomic pathways: Population scenarios by age, sex and level of education for all countries to 2100. 7 June 2014'.
4	The report of International Institute for Applied Systems Analysis (IIASA), which is titled 'Women, Weather, and Woes: The Triangular Dynamics of Female-Headed Households, Economic Vulnerability, and Climate Variability in South Africa. 2016'.
5	The research article of International Institute for Applied Systems Analysis (IIASA), which is titled 'Universal education is key to enhanced climate adaptation. 28 November 2014'.
6	The research article of International Institute for Applied Systems Analysis (IIASA), which is titled 'Social Participation and Disaster Risk Reduction Behavior in Tsunami Prone Areas. 2014'.
7	The report of Postdam Institute for Climate Impact Research (PIK), which is titled 'THE IMPACT OF CLIMATE CHANGE ON COSTS OF FOOD AND PEOPLE EXPOSED TO HUNGER AT SUBNATIONAL SCALE. No. 128. 2015'.
8	The research article of Netherlands Environmental Assessment Agency (PBL), which is titled 'Environmental drivers of human migration in drylands - A spatial picture. 11 December 2014'.
9	The background studies of Netherlands Environmental Assessment Agency (PBL), which is titled 'Food Security in Sub-Saharan Africa: An Explorative Study. 2012'.
10	The scientific support to policies of EACH-FOR, which is titled 'Environmental Change and Forced Migration Scenarios. 14 May 2009'.
AIV and Its Partners	
11	The advisory letter from Adviesraad Internationale Vraagstukken (AIV), which is titled 'Climate Change and Security'. No. 14, January 2009'.
12	The advisory letter from Adviesraad Internationale Vraagstukken (AIV), which is titled 'The Protection of Civilians in Armed Conflict'. No. 102, July 2016'.
13	The research report from Clingendael, which is titled 'Terra Incognita: land degradation as understanding threat amplifier. January 2014'.
14	A book chapter from Clingendael, which is titles 'Climate change strategic monitor'.

The interview transcripts and documents were analyzed through the use of a coding frame. All codes were derived from the interview transcripts and documents. The coding frame consists of three main topics which are all categorized in codes and subcodes (see Table 4). The themes of the coding frame have been marked with a color.

Table 4. Flow diagram outlining the expert nomination and selection process, adapted from (Source: Authors' own illustration).

Main Topics	Codes (Themes)	Sub-Codes
1. Climate refugee	Impact of climate change	Rise in sea-level, Extreme weather events, Drought and water scarcity
	Movement Time scale	Leave their habitant Immediately, Gradually
2. Policy experts' advice	Environmental sustainability	Responsibility, Climate justice
	International security	Border-control technologies, Military
	International assistant	Disaster risk reduction, Resilience
	Protection of forced migrants	Responding to essential needs, International protection
3. Drivers of migration	Environmental	Risk to be harmed, Productivity of land, Food/Energy/water scarcity, Habitability
	Political	Freedom/governance, Discrimination, Insecurity/conflict, Policy incentives
	Demographic	Population size, Disease control
	Economic	Employment opportunities, Income/well-being/wages, Producers prices, Consumers prices
	Social	Seeking education, Family obligation
	Household characteristics	Wealth, Age, Sex, Education, Ethnicity, Marital status, Language, Religion
	Obstacles or facilitators	Social network, Technology, Cost of moving, Diasporic link, Legal framework, Political framework

At the sideline of the interview transcriptions, the kind of subcode was added to categorize the themes. After that, all the constructed codes were reported in a clarifying scheme, which was designed for purposes of pattern recognition. The coding frame enabled us to identify particular issues in the data, such as the issue of the climate refugee and the issue of international security. After that, all the constructed codes were reported in a clarifying scheme, which was designed for purposes of pattern recognition. The coding frame enabled us to identify particular issues in the data, such as the issue of the climate refugee and the issue of international security.

4. Results and Discussion

To concatenate respondents' views with regards to climate-induced migration, Table 5 provides a matrix describing respondents' perceptions of the climate–migration nexus. The respondents who participated in the research shared their experience from various regions. For example, one of the participants has a project that is called environmental-related issues because instead of climate, she looks at daily realities in Bangladesh and Kenya. She investigates how people respond to floods, drought, and other climate risks in these countries. The interviewees mentioned slow-onset climate risk as a minor push driver of migration. According to [Perch-Nielsen et al. \(2008\)](#), in the case of sea-level rise, the overall connection between climate change and migration is stronger because sea-level rise is caused to a large extent by climate change (in contrast to floods).

Apart from the impact of climate risks, economic, as well as political instability are the main drivers of migration. Still, microdrivers of migration such as wealth, cost of moving, social network, religion, and education play a lasting role in migration decision. As many scholars have already claimed the complexity of the climate change–human migration nexus ([Black et al. 2011](#); [Gray and Bilsborrow 2013](#); [Hunter et al. 2015](#); [Ocello et al. 2015](#); [Warner et al. 2010](#); [Upadhyay et al. 2015](#)). As shown in Table 5, they highlight the impossibility of defining the concept of a climate refugee. A study by [Biermann and Boas \(2012, p. 292\)](#), however, conceptualized climate refugees as “people who have to leave their habitats, immediately or in the near future, because of sudden or gradual alternations in their natural environment related to at least one of three impacts of climate change: rise in sea-level, extreme weather events, drought and water scarcity.” In fact, a precise definition of ‘climate refugees’ does not so far seem to exist ([Baldwin 2015, pp. 3–4](#)). Migration is a complex process, and the emphasis is on the role of economic and political factors of migration in which climate change issues happen.

Table 5. Drivers of migration or staying in the face of climate risks (Source: Authors' own illustration).

Country (Region)	Impact of Climate Change	Macro Drivers of Migration	Micro Drivers of Migration
Bangladesh	Flood	Economic (income)	Social network, Community structure
Nigeria, Ghana, Kenya	Flood/Drought	Economic (income, food), Political instability	Cost of moving, Age, Sex, Education, Social network, Lack of solidarity, Religion
Egypt, Syria	Water Scarcity, Land degradation, Food	Economic (food price, trade liberalization), Political (war, policy incentives: regression systems, climate-smart agriculture, water management), Demographic	Wealth

4.1. Forced Migration in the Light of the Sea-Level Rise

The starting point of the conversation with the policy experts was the issue of climate change and how they perceive it in the context of migration. We sought to shed light on the figure of the climate refugee in the perception of policy experts. They focused on climate change uncertainty. Respondent 7 most explicitly stated that climate change is unpredictable, stating that:

“Climate change and its impacts are not clear, and even the models themselves may not be true anymore with climate change.”

Respondent 2 mentioned that it is very difficult to prove to what extent flood is caused by climate change in Bangladesh. Respondents stressed that the impact of climate change on small countries is potentially much bigger than it is on large countries. As Respondent 3 explained:

“If it comes to the small developing state that is really disappearing as a result of the sea-level rise, it is more obvious and also more important because they lose their nation.”

The policy experts often mentioned the classical but critical notion of environmental uncertainty. Climate change has become particularly susceptible to this kind of politicization (Bolsen et al. 2019). One of the assertions made by the so-called sceptics against the scientific consensus on climate change is that because climate science is so uncertain, there is no basis for taking action (Meah 2019). Policy experts described climate change scenarios as uncertain, with sea-level rise being identified as the only possible environmental push factor of displacement. Such actors explain phenomena like drought and water scarcity as the less obvious drivers of migration. In contrast to previous literature, sea-level rise, extreme weather events, and drought and water scarcity push people to migrate (Biermann and Boas 2012, p. 292). The policy experts mentioned that a person who lives on a small island like the Solomon Islands has to leave their habitat immediately, because of rising sea-level. Nonetheless, there is already evidence that the inhabitants of small islands are more resilient to sea-level rise, such as in Isla Batasan in the Philippines (Yamamoto and Esteban 2017) and in the Maldives (Kelman et al. 2019, p. 11). The policy experts described climate change scenarios as uncertain and sea-level rise as dependent on local context, like the development level. For example, Respondent 5 mentioned that:

“The Netherlands is the best example because it is partly under water and if sea-level increases by 2 cm, they can protect themselves, but if this happens in Bangladesh, it will go under water and disappear.”

Respondent 7 added to this statement that:

“If we compare the Netherlands with Bangladesh, we have a lot of technological knowledge and money you can make a lot of structure and you can prevent flooding.”

The importance of technology comes from Respondent 6, who added that people invest in different kinds of technology to stay, such as solar and water conservation in West Africa.

The figure of the climate refugee has been an issue of debate since [El-Hinnawi \(1985\)](#) brought the term into public debate in 1985. Respondent 5 explicitly rejected the notion of the climate refugee, stating that:

“I do not think that the term ‘climate refugee’ is appropriate at all.”

In a similar, albeit less radical, fashion, Respondent 1 stressed that:

“It is very difficult to say how to recognize someone as environmental refugees.”

Respondent 4 provided yet another formulation:

“There is a resistance of labeling of climate change and migration as climate change refugees on top of the other problems”,

and Respondent 7 provided a similar articulation of this viewpoint:

“The climate refugee is a political category.”

Respondent 3 stressed that some politicians in the Netherlands believe that the Dutch government does not do much about the reduction of CO₂ because the Dutch contribution to CO₂ production is very small compared to that of the rest of the world. Climate change tends to be a small priority on the political agenda ([Clingendael 2013](#)). Respondent 3 emphasized that holding the concept of a climate refugee is used as a means of raising awareness for the political agenda of climate change. Respondents’ concern—international security—casts human mobility as a problem on a huge scale ([Meyer 2010](#)), and it is a problem that triggers strong fear that compels immediate military action ([Koubi et al. 2016](#)). Instead, policy experts include policies like reducing CO₂, creating justice between the global North and global South, and protection of forced migrants.

4.2. Indicators of (Non)Migration

In this section, we present the policy expert perceptions of key drivers of migration and how these drivers are discussed by policy experts. This discussion leads to exploring the rationale of staying (nonmigration) and the challenges of adaptation practices.

In their discussion of the climate change–migration nexus, the policy experts included phenomena like economic factors that drive human movement rather than issues of climate impacts as such. Respondent 5 pointed at the food and basic income playing an important role. As Respondent 3 put it:

“It seems that food prices are quite remarkable in Egypt.”

The policy experts perceived the economic policies of a government as a considerable factor in displacement. Especially, arguments like ‘if a person is left hungry and does not receive help for a long time, (s)he might think to move somewhere else to survive’ prevailed. In reports of the Potsdam Institute for Climate Impact Research and the Fondazione Eni Enrico Mattei (Eni Enrico Mattei Foundation), similar perceptions are communicated. In a report on the impact of climate change on costs of food and people exposed to hunger at the subnational scale, the Potsdam Institute claims that:

“The agriculture in the Middle East and North Africa is severely affected by climate change showing the immense challenge of these regions about feeding its population, in the longer term increased outmigration might be necessary as part of the solution”. ([Potsdam Institute for Climate Impact Research PIK](#), p. 41)

And, similarly, in a report on “Development, Climate Change Adaptation, and Maladaptation: Some Econometric Evidence”, Fondazione Eni Enrico Mattei states that:

“Regimes with more democratic qualities and trade openness are more successful in adaptation to climate change”. (Fondazione Eni Enrico Mattei FEEM, p. 16)

One of the important conditions to take into account to achieve food security, as mentioned in a report on food security in sub-Saharan Africa, is political stability and conflict resolution (PBL Netherlands Environmental Assessment Agency 2012, p. 10). Such perceptions are widespread in our interviews. Respondent 5 most explicitly articulated this point of view, making formulations like:

“The prices of food went up and really high in Syria and again it depends on what the government does whether they provide any direction”; and

“There is no hunger in democracies.”

Respondent 5 pointed at the policies of the Assad regime in Syria, arguing that if the Syrian government had pursued a more effective water policy in the past two decades, the Syrian people could have coped much better with drought. Additionally, when the drought hit them, the government decided not to help the farmers, even if it could have done so. Respondent 7 was in full agreement with this point of view, claiming that:

“The current hunger in Africa is not due to climate change and it is because of war.”

Respondent 6 added to this discussion by providing an example from a country like Nigeria, where conflicts between nomadic and farmers have been increasing and not because of ecological instability but because of political instability. Respondent 3 shared his practical experience in Kenya, in which nomads from one group never fight together, and it is between various groups. Not climate change as such, it is perceived, but conflict among different groups forces people to migrate or become refugees. Respondent 5 pointed at the failure of government in despotic regimes:

“People are being affected where the government fails to take appropriate care of climate change and its consequences.”

Likewise, Respondent 6 added that what we see drought create is flows of migrants and refugees:

“Enormous displaced peoples in Northern Ghana needs to accommodate locally and they go to rural areas. This rural migration might lead to various situations.”

Respondent 3 provided Syria as an example of the situation. Syrian people who lost harvest moved to the city, and they were not able to buy a house and food because the prices increased as the result of many displaced Iraqi in the city who saved a lot of money. They became very dissatisfied from the regime, and that provided the ground for unrest. Respondent 6 added that this is the case now in Southern Burkina Faso/Northern Ghana, where the majority of the population is from outside and no longer inside, and this might lead to many political problems, and nobody is watching it.

In other words, such policy experts put the emphasis on political inequalities and the role of despotic governments as the main drivers of conflict rather than climate change as such. Such perceptions sharply contrast with a recent study conducted by Proceedings of National Academy of Sciences of the United States of America (PNAS), in which it was found that drought has contributed to the conflict in Syria as a “catalytic effect” (Kelley et al. 2015, p. 3241). Policy experts do not ignore the breakdown of governance as the most obvious reason in conflicts which trigger a decision to move or lead to displacement (Black et al. 2011). They perceive the relationship between resource scarcity and violent conflict as “conjectural” (Ide 2015, p. 69). Selby and Hoffmann (2012), who analyzed the relationship between environmental scarcity, conflict, and migration through a comparative analysis of water–migration–conflict linkages in Cyprus and Israel, the West Bank, and Gaza, found little evidence to support the view that water scarcity can lead to conflict or migration. Indeed, policy experts stress the impossibility of relating climate change to conflict and defense issue. Support for this viewpoint comes from the Advisory Council on International Affairs (AIV):

“Given the fundamental uncertainties associated with climate change, it is not possible at this juncture for the AIV to specify the implications of climate change for the role of the Dutch armed forces over the next twenty years”. ([Advisory Council on International Affairs AIV](#), p 10)

The migration decision appears to be a combination of both economic and political factors. Certainly, political drivers are involved in their operation, and they are highly context-dependent: A breakdown in social and political systems can drive migration but may also make it more difficult for people to move ([Geddes et al. 2012b](#)). Similarly, environmental change is widely perceived as a potential migration driver—but, through interaction with other drivers, as potentially leading to the movement towards and not away from risk and also having the potential to destroy household resources and make migration more difficult with the attendant risk of trapped populations ([Geddes et al. 2012a](#), p. 1079). Mainly, where slow-onset environmental change occurs, poor individuals, e.g., day laborers and temporary workers, may become ‘trapped’ because they cannot diversify their livelihoods, or they do not have the resources and capacity to migrate ([Koubi et al. 2016](#), p. 152). Policy experts stressed the role of government as an ample player in developing economic policy to prevent people from being hungry. In other words, it is perceived that governments hold the key for taking away the motive for migrating.

As Respondent 2 pointed out regarding the people who cannot move as the result of climate change:

“These people are trapped population because they do not have money to move.”

Similarly, Respondent 3 claimed that:

“The most affected people are mostly poor people and they do not have the means to migrate.”

Further, in the report on environmental change and forced migration scenarios, European Commission, states that:

“Many of the case studies show unambiguously that individuals who want to leave their villages/regions/country can only do so if they have the necessary financial means and access to networks that support migration”. ([European Commission 2009](#), p. 72)

Policy experts explicitly linked family network to the decision to migrate. Household composition and social network shape households’ use of migration as a livelihood strategy in the face of environmental stress ([Hunter et al. 2015](#); [Lindley 2014](#)). According to Respondent 4, for instance, an alleged situation in Ghana is that nobody seems to trust the elderly males any longer because they cannot predict the right rain season anymore. However, according to Respondent 7, Bangladeshi farmers would prefer to stay in their own community instead of moving, and if we ask them why they do not go somewhere else, they would say that they do not have land somewhere else. In fact, households are not passive victims of climatic shocks in Bangladesh, and they react and adjust their farming practices to cope with climate change ([Delaporte and Maurel 2016](#)).

Respondent 6 explained that education is an important public good but that it raises expectations about the future. If a person is not educated, they know that being a farmer is their job. But if they have primary and secondary education, Respondent 6 pointed out, they can find a white-collar job in town and leave the countryside behind. In the reports we analyzed, it is frequently stated that families with secondary and tertiary education are significantly more likely to migrate, compared to families with basic and no education ([Fondazione Eni Enrico Mattei FEEM](#), p. 12). For instance, it is emphasized that the intention of migration increases substantially when a community has a high proportion of women with tertiary education ([Internal Institute for Applied System Analysis IIASA](#), p. 1). In some instances, migration of some family members can lead to greater vulnerability for women and children left behind to manage households ([Battistella and Gastardo-Conaco 1998](#)). A proper wealth distribution along with access to electricity and education in Bangladesh will provide poor households with the capacity to adapt to climate change ([Delaporte and Maurel 2016](#)).

The emphasis that policy experts put on education is highly manifested. In their perception, education drives migration, and yet, whether education pushes people to migrate depends on local circumstances. This widespread perception contrasts with the view found in Mali and Senegal that labor migration is a strategy to reduce vulnerability to environmental changes mainly for individuals with no formal education or with only primary education (van der Land and Hummel 2013). Rather, individuals with lower levels of education in Vietnam, in contrast to the baseline category of people with tertiary education, are less likely to migrate (Koubi et al. 2016). The probability of migration was about twice as high among respondents in Tanzania with high levels of education as contrasted with those with primary school (by contrast, respondents with no education tended to stay in their district) (Oliver-Smith 2012). Policy experts perceived migration as a complex phenomenon. Respondent 6 corroborated this view, stating:

“We cannot be sure which factors influence on migration decision.”

In sum, policy experts' perceptions of the climate change–migration nexus were marked by a bringing together of the economic, political, social, and environmental factors of migration. Policy experts typically saw them as joint factors of migration (Upadhyay et al. 2015). Migration and nonmigration are part of wider environmental and social dynamics. Respondent 6 confirmed:

“Everything that happens in West Africa has ecological, political, and economic dimension and we need to bring these things together in order to be able to better understand how these things work and then we can address these problems better.”

As the experts agreed, climate change is both not a major driver of migration and also the role of government and economic status in creating a conflict. Thus, other climate policies are required to protect humanity. For example, Respondent 1 mentioned that it is important to ensure the right way of using water, to implement regression systems, and to manage climate-smart agriculture. Respondent 5 agreed with this view, stating that the main solution in slowing climate change is to reduce CO₂, to change our (Western) lifestyle, to carbonize the economy, and to create more equality and justice between North and South. Respondent 5 explained that:

“The biggest emission producers should cooperate to reduce the CO₂ and to apply someone as the refugee is not appropriate.”

This perception can be found in the reports we analyzed as well. For instance, in a Clingendael Institute report, it is stated that:

“Climate change tends to be a little priority on the political agenda. With the opening of new areas of exploration of raw materials and with food and water shortages caused in part by climate change, international relations could be put to the test”. (Clingendael 2014, p. 210)

All policy experts we interviewed were very much aware of the political discussion of the phenomenon of climate refugee, as the citations above illustrate. Yet, as a study of Baldwin (2015, pp. 80–81) revealed, politicians typically are proponents of the concept of the climate refugee. There is a contradiction, accordingly, between policy expertise and political discourse. Moreover, the policy experts agreed on the problematic nature of defining the climate refugee and emphasized that not everyone migrates. Their view contradicts the conventional political narratives found in the policy documents of international organizations, in which it is typically claimed that displacements will inevitably occur due to climate change (Warner et al. 2009). For instance, the International Organization of Migration foresees that a broad range of 25 million to 1 billion people will be displaced by 2050 due to climate change (International Organization for Migration IOM; Myers 2001; Stern 2007). Policy experts, by contrast, emphasized the impossibility of making such estimations. They pointed at the enormous uncertainty about how many people will move and where they will move to (Abel et al. 2013). In their perception, migration occurs and will continue, on the basis of local contexts, in which climate change is not a key factor for migrating. We have illustrated the discussion in Figure 2.

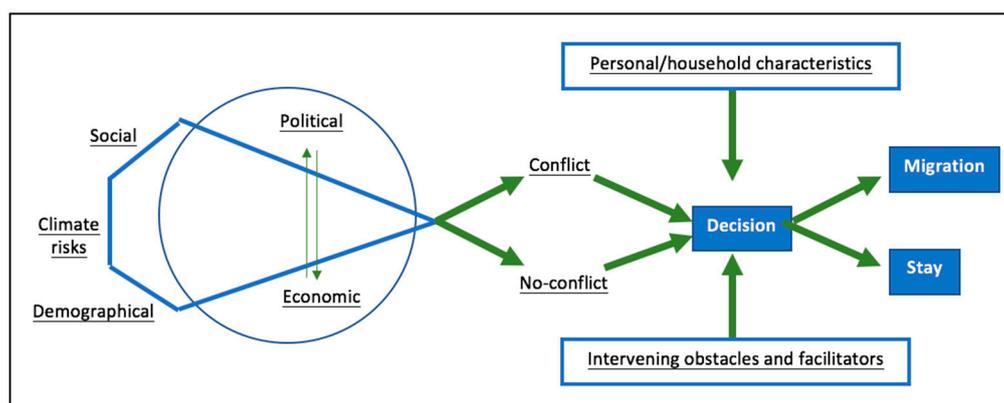


Figure 2. Drivers of migration or staying in the face of climate risks (Source: Authors' own illustration).

In sum, the experts stressed the role of economic and political conditions and interaction between them in which climate change issues happens. The political and economic instability of a country leads to conflict and not climate change as such. Further, migration or staying put is dependent very much on personal and household characteristics or intervening obstacles and facilitators.

There are two main differences between the views of policymakers and policy experts. Unlike policymakers, experts, firstly, do not cast human mobility as a problem, and they criticize the concept of a "climate refugee". Policy experts are certainly aware of the political discussion of the figure of the climate refugee and question the possibility of the existence of the climate refugee. They stressed that climate change includes a lot of uncertainties, to the point that it is impossible to set environmental factors apart from other factors of migration. The politicization of science occurs when the inherent uncertainty of science is emphasized to cast doubt on scientific consensus (Bolsen et al. 2019).

Policy experts also criticized the political and policy discourses that large waves of migration are destined to develop in the future as a result of climate change (Mayer 2014). The complexity of linking climate change to human migration that policy experts pinpointed means that a definition of the alleged climate refugees remains highly ambiguous (Baldwin 2015, pp. 80–81). While politicians typically perceive the climate change–migration nexus as an international security opportunity, policy experts typically do not identify climate change as a security threat. Accordingly, on the basis of this research finding, we make the point that international security is a questionable policy divorced from policy expertise.

5. Concluding Remarks

The common case among policymakers is that there is a link between climate change and human migration and that this link is a source of conflict and, therefore, the climate change–migration nexus must be treated as a security issue with limited concern for the human rights of migrants (Bettini et al. 2016; Burrows and Kinney 2016). If climate change does turn out to be a major driver of conflict and migration, the rationale of staying put is absent. In an attempt to discover alternative perceptions in the policy field, we concentrated on policy experts, to find out whether these agents communicate alternative perceptions. In this article, we have shown how policymakers and policy experts part company. We found that by not seeing the climate change–migration nexus as a security issue, policy experts tend to de-politicize the discourse and add much-welcome scientific substance to the debate. We found that policy experts typically stress the complexity of the climate change–human migration nexus—a complexity that is marked by a diversity of drivers of migration (Black et al. 2011; Gemenne et al. 2014; Gray and Bilsborrow 2013; Hunter et al. 2015; Ocello et al. 2015). They stress that migration as adaptation occurs, but there is no exceptionalism today or for climate change (Stojanov et al. 2016). The major difference between the view of policymakers and policy experts on the link between climate change and human migration emerges from the frame of the climate refugee. Unlike policymakers, who link climate change and conflict, policy experts stressed the economic and political factors of

migration in which climate change issues happen. A famous example is in a countries like Syria. People could have coped much better with drought if the policies of the Assad regime had pursued a more effective water policy in the past two decades. Further when the drought hit them, the government decided not to help the farmers, and this is a case now in Southern Burkina Faso/Northern Ghana.

An important consideration in understanding and promoting framing in the context of climate displacement is that there might be tensions between frames preferred by international organizations, NGOs, and national governments—such as human rights frames—and those which are prevalent within local, customary forms of law and justice (Arnall Alex and McKinnon 2019). Especially, with the apparent research, domination in the field urgently needs to be supplemented by more integration across various professional settings like research, the public sector, national government, NGO, media, and private sector (Thornton et al. 2018). This paper generates new insights that indeed there are different preferred frames by expanding the partnering with participants from two professional settings: research and the national government. The issue is how policy experts offset the political exploitation of the nexus in the pursuit of a security agenda. Policy experts' viewpoints on the existence of a degree of climate change uncertainty appear to be the cause of anxiety among politicians. Science and policymaking are different realms characterized by a very different culture, styles of reasoning, and methods (Löblová 2018). As several authors have pointed out, the implications of evidence are less straightforward when applied to contested political problems (Parkhurst 2016, 2017). An interesting direction for future research can be exploring how the science of complex problems (climate change and migration) can be advised to policymakers, under the condition of the uncertainty of knowledge. A promising link could be made with the recently prospering discourse on “Science Diplomacy”, fueled by the Royal Society and the American Association for the Advancement of Science, and more recently by the European Commission (various projects, including S4D4C and InsSciDE).

Author Contributions: Conceptualization, S.H.E. and M.O.; methodology, S.H.E. and M.O.; validation, S.H.E. and M.O.; formal analysis, S.H.E. and M.O.; investigation, S.H.E.; resources, S.H.E.; writing—original draft preparation, S.H.E.; writing—review and editing, S.H.E. and M.O.; supervision, M.O.; project administration, S.H.E.

Funding: This research received no external funding.

Acknowledgments: We would like to express our gratitude to anonymous respondents who shared their scholar information, data, and knowledge.

Conflicts of Interest: The authors declare no conflict of interest.

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