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2.6. Rural-urban migration and environmental change: vulnerability nexus from the Vietnamese Mekong Delta to Ho Chi Minh City

Clara Jullien, Ngo Thi Thu Trang, Gwenn Pulliat

The Mekong Delta in Vietnam is a major agricultural area increasingly exposed to a wide range of environmental changes and hazards resulting both from climate change and local human intervention. Local inhabitants who live mainly off agriculture must adapt, either on site or through migration. The development of the industry and service sectors in urban areas attracts most rural inhabitants who decide to migrate. This chapter examines the interplay between the environment and socioeconomic inequality in spontaneous migration patterns through the perspective of vulnerability. It aims to understand the out-migration trajectories that connect the Mekong Delta to Ho Chi Minh City, while highlighting the inequalities that both produce and result from the exposure to intensifying environmental hazards. The paper draws on a literature review on migration and environment in the Mekong Delta, as well as the results from a 2019 research project conducted by the Oxford Committee for Relief Famine (Oxfam). It is revealed that migrants come to the city searching for higher and more stable incomes, although environmental factors may also be hidden behind economic factors influencing the decision to migrate by affecting income sources in the delta. However, migrants are likely to find themselves facing economic, social, legal, and environmental precarity and insecurity in the city.

Considering the attention it attracts from local and international researchers in all fields related to the environment, the Mekong Delta could be considered a global laboratory of environmental change. Indeed, it is exposed to a wide range of environmental changes and hazards, among which some are probably related to climate change. The sea level rise, for instance, is particularly alarming in this low-lying area irrigated by the nine branches of the Mekong River, especially as this rise is one of the causes of water and soil salinization in the area.

The crucial importance of the Mekong Delta for the agricultural economy of Southeast Asia partly explains the concerns regarding these changes. Thanks to the precipitation regime, on the one hand, and the Mekong River carrying sediments from upstream — over more than 4,700 km — on the other hand, the Mekong Delta is one of the most fertile areas of the globe. The floods during the rainy season are essential to the delta's agri-

culture. Therefore, in this specific deltaic context, flooding is not univocally considered as a threat, but also as a resource. While floods cause deaths, disruption, and damages, they also contribute to alluvial deposition, rice field agrosystems, and water management (Danh and Mushtaq, 2011). These favorable conditions for agriculture are linked to the delta's high population density. From the 1970s, and especially since the opening to an international market economy in 1986 — the Đôi mới set of reforms — and subsequent decollectivization, the delta has experienced a major economic take-off. It rapidly turned into the "rice bowl" of Vietnam and a major region of international exportation.

In this context, the combination of sea level rise and land subsidence, rising salinity of soil and water, and increasing un-predictability of precipitation regimes and drought cycles appear as major threats to the local agricultural economy. Meanwhile, the large majority of delta inhabitants earn their living from agriculture. According to the 2016 rural, agricultural and fishery census, 81% of households in the Mekong Delta were engaged in agriculture activity (GSO, 2018a). In 2019, the Mekong Delta was home to 48% of the country's grainy food crop surface area, 54% of the rice field surface area, and 72% of the aquaculture surface area, while accounting for only 12% of the national surface area (GSO, preliminary results 2019^[43]). Therefore, delta farmers must adapt in order to maintain their incomes and livelihoods. One option is to change farming practices: in the Mekong delta, these practices have been studied extensively from various perspectives, from agronomy to social sciences to computer-based modeling. For instance, Chapman and Darby (2016) analyzed rice farming adaptation strategies: in the upper region of the delta, the transition from low dikes to sedimentexcluding high dikes results in a change from double to triple cropping, which reveals itself to be more advantageous for wealthy large land farmers than for poor small land farmers. A major shift is also visible from rice production to shrimp farming, which proves to be more suitable to brackish water (Smagjl et al., 2015). In addition, local inhabitants can turn away from agriculture and find employment in other sectors, such as industry. However, local job opportunities outside the agricultural sector remain scarce, and accessing local industrial areas often requires moving within the delta.

Another option for farmers to adapt to environmental issues is to migrate outside the Mekong Delta entirely. The present chapter focuses on this strategy. We include both voluntary migration and displacement forced by the impossibility to stay — but, in both cases, where the household nonetheless decides for itself when and where to go. In contrast, relocations that are organized by public authorities, aiming at resettling at-risk households in safer areas, are not considered in this paper: since households do not choose whether to migrate or not, nor where to resettle, this category of movement is considered outside the scope of spontaneous migration. More specifically, this chapter studies the migration path from the Mekong Delta to the metropolis of Ho Chi Minh City, located at the limit of the delta.

Farmers are not all equally exposed to environmental events, nor do they possess an equal capacity to respond to those events. Likewise, farmers who choose to migrate do not all have the same assets to settle in a new area and obtain new livelihoods. In this chapter, we want to address the linkages between environmental pressures and socioeconomic inequalities. To do so, we examine the interplay between the environment and socioeconomic inequality in migration patterns through the perspective of vulnerability. Does uneven vulnerability to environmental changes translate into socioeconomic inequalities after migration?

The Intergovernmental Panel for Climate Change gives a general definition of vulnerability as "the propensity or predisposition to be adversely affected" (Field et al., 2014). However, the definition of vulnerability as a socially constructed, Westernoriented, multidimensional concept is far from consensual among the various fields of research from physical, to social and psychological sciences. Following Cardona (2003, 1), we define vulnerability as "the physical, economic, political or social susceptibility or predisposition of a community to damage in the case of a destabilizing phenomenon of natural or anthropogenic origin." The vulnerability of a system exposed to a hazard encompasses the notions of sensitivity and adaptive capacity, understood as the ability to absorb a shock, to self-organize, and to adapt (Adger, 2006). Adger highlights the inherent paradox of vulnerability, simultaneously involving powerlessness and the ability to adapt. Vulnerability, being objective or perceived, dynamic over time and multiscale, brings up governance issues (ibid.). Moreover, Gallopin adds that vulnerability is specific to a certain perturbation, but that multiple perturbations interact together (Gallopin, 2006). Brooks points out a main source of confusion in the use of vulnerability: the need to differentiate between biophysical vulnerability and social vulnerability. The

first would be function of the probability of the occurrence of a specific hazard, whereas the last would encompass "all those properties of a system independent of the hazard(s) to which it is exposed, that mediate the outcome of a hazard event" (Brooks, 2003, 5). The definition proposed by Gallopin allows to join the two: "a property of a system expressed/revealed when the system is exposed to the perturbation" (Gallopin, 2006, 297).

The social, economic, and political dimensions of vulnerability stress its structural and anthropogenic roots (O'Keefe, Westgate and Wisner, 1976). Vulnerability reveals socioeconomic as well as spatial inequalities. Socioeconomic inequalities often result in differentiated exposure to environmental hazards, while it may also affect one's ability to cope with and recover after an event. Additionally, the onset of an event often implies cost and loss for affected people, which can be more detrimental to households in a precarious socioeconomic situation. Therefore, vulnerability to environmental events is a lens through which the creation of socioeconomic inequalities in this changing context can be highlighted. Environmental vulnerability, socioeconomic precarity, and migration patterns are intertwined: this chapter sheds light on these manifold relationships. It thus contributes to the understanding of the out-migration trajectories that connect the Mekong Delta to Ho Chi Minh City, while giving a special attention to inequalities that both produce and result from the exposure to intensifying environmental hazards. Various external factors of multidimensional vulnerability in the departure and arrival areas are questioned, as detailed in the chart below (Table 5).

Table 5. Possible vulnerability factors for rural migrants from the Mekong Delta to Ho Chi Minh City

Source: author's construction.

	MEKONG DELTA	HO CHI MINH CITY
Environmental vulnerabilities	Loss of harvests, decrease of land surface or land productivity due to flood, drought, erosion, salinization, sea level rise	Pollution
	Damaged housing due to flood or erosion	Damaged housing due to flood
Economic vulnerabilities	Mechanization of agriculture reducing the need for labor	Job precarity
	Price variations on the farming products market	Cost of daily expenses
	Pressure on the farmland market	Cost of housing
	Land expropriation for infrastructure and development projects	
	Relocation procedures from risk areas	
Social vulnerabilities	Social pressure	Marginalization / isolation
Political and legal vulnerabilities		Residential registration system

This paper draws on a literature review on migration and environment in the Vietnamese Mekong Delta conducted with the French Research Institute for Development (IRD), within the framework of the 2019 Movindeltas Project and the 2020 Inequalities and Environmental Changes in the Lower Mekong River Basin Project. The literature review is followed by results from a 2019 research project conducted by Oxfam focusing on migration from the Mekong Delta to Ho Chi Minh City in a context of environmental change. [44]

^{44.} This research is funded by Oxfam in the framework of the project "Climate change and migration: The status and role of Oxfam in promoting urgent changes and climate change response strategies in the Mekong Delta."

2.6.1. Living in a risky environment

2.6.1.1. Living with floods: A long history of adjustments

It is first necessary to provide some geographical and historical background to the Vietnamese part of the Mekong Delta. The Mekong Delta has been populated relatively recently when compared to its counterpart in North Vietnam, the Red River Delta. From the seventeenth century onwards, human settlements in the Vietnamese Mekong Delta were fueled by migrations from the North and from the western part of the peninsula (Khmer population). They first remained dispersed across the flooded areas, thanks to a relatively light channeling work of watercourses and the foundation of military colonies. Over the nineteenth and twentieth centuries, due to the Mekong Delta's location on historical commercial sea roads, French colonizers shaped the delta by building light dikes and circulation networks in order to foster agricultural development (Biggs, 2010; Fanchette, 2004). This political will to strengthen the agricultural development of the delta remained even after the political switch: after reunification in 1975, the Vietnamese communist government adopted a settlement policy that sent a significant proportion of city dwellers to the countryside in order to root the political regime into the country's rural substrate, including the Mekong Delta. In addition, since this period and particularly during the late 1980s and 1990s, the government has transformed the delta's agriculture to meet the population's food needs and to fit into the global market. This policy has turned out to be successful: the shift from single cropping to double or triple cropping has resulted in a rapid expansion of rice-sown areas. In particular, the area dedicated to short duration, high-yielding rice varieties more than tripled in twenty years. Between 1976 and 1995, the total rice production of the delta increased by 35% (Young et al., 2002). The Mekong Delta has turned into a major region for national and international exports of agricultural products.

Meanwhile, at the pace of these development phases, the inhabitants of the Mekong Delta have learned how to live with hazards, especially with floods, and how to take advantage of them in their farming activity. During the monsoon season, between 12,000 and 19,000 km² of the delta are naturally flooded regardless of climate change, particularly in the northern part which includes the Plain of Reeds and the Long Xuyen Quadrangle (Liao, Le and Nguyen, 2016). Adapted cultures such as floating rice and aquaculture, boat transport, protection infrastructure such as dikes, and housing built on stilts characte-

rize the way of life for many delta inhabitants. The delta is now home to 17.3 million people – 18% of the national population – on 12% of the country's total surface area (GSO, 2020).

2.6.1.2. Rising pressures on the delta's environment: From climate change to local anthropic activity

The delta's environmental situation is changing at a growing speed. The Mekong Delta is considered one of the most exposed regions to the effects of climate change, and the Vietnamese authorities give particular attention to the forecast of environmental changes. These changes are various. In its projections, the Vietnamese Ministry of Natural Resources and Environment (MONRE) expects an increase in average temperature and rainfall (in terms of annual and rainy season levels), while rainfall may decrease during the dry season, especially in the South (MONRE, 2009). According to the envisaged scenarios based on the various levels of carbon emissions estimated by the Intergovernmental Panel on Climate Change (IPCC), the sea level may rise by 28-33cm by the year 2050 and by 65-100cm by 2100, relative to the 1980–1999 baseline period. These estimations are minimal, based only on local observations of the sea level in Vung Tau. They do not consider other factors like waves, tides, storms surges, and floods. The MONRE has established flood maps of the Mekona Delta for each sea level rise (SLR) scenario, showing in particular the exposure of the coastal provinces. Depending on the SLR, MONRE estimates that between 12.8% and 37.8% of the delta area will be underwater by 2100. Temperature and rainfall will increase faster than previously expected, and the different projected SLRs are slightly higher than previously estimated.^[45]

Regarding flood risk, the intensity and frequency of floods tend to increase, hence disturbing farming cycles and threatening settlements. However, it is difficult to map the future risk of floods. For example, using hydrodynamic modeling and a geographic information system, Dinh et al. assessed the extent of flood prone areas in the Long Xuyen Quadrangle: the area located between the Bassac River, the West Sea, and the Cambodian border (Dinh et al., 2012). The model is calibrated based on the 2000 flooding observations and then run to provide 2050 simulations according to the different SLR scenarios defined by MONRE. It includes variations in storm surge levels, cyclone fre-

^{45.} Vietnam updates climate change scenarios," Reliefweb, March 31, 2016, https://reliefweb.int/report/viet-nam/vietnam-updates-climate-change-scenarios.

quency, awareness, preparedness, and recovery time. The multiplicity of factors that play a part in a flood event makes it very challenging to accurately predict the extent of flooding.

Nonetheless, the current environmental conditions and ongoing evolutions in the delta are not exclusively related to climate change. Human intervention in the delta, upstream and downstream, has a significant impact on its ecosystem, especially on land and water, as pointed out by numerous scientific studies conducted in the Vietnamese part of the delta during the last decade (Syvitsky et al., 2009). These anthropogenic factors combine with the effects of climate change to foster floods, submersion, salinization, and erosion.

Land subsidence is an example of such a combination of natural and anthropogenic actions. Recently, the Rise and Fall Project led by Utrecht University provided new data on the situation of the Mekong Delta in the face of climate change. It showed that the delta's ground elevation has been considerably overestimated (Minderhoud, 2019). The usual models using satellite data estimated the elevation of the delta between 2.6m and 3.3m above mean sea level (MSL) while the new model, developed using topographical map elevations, concludes that the average elevation is actually no more than 0.8m above MSL. This new estimation shows the alarming vulnerability of the delta to SLR, much higher than previously assessed by the authorities. Minderhoud points out the impact of groundwater extraction on land subsidence, that adds up to natural subsidence and urbanization weight. According to this model, the current average subsidence rate due to groundwater extraction amounts to 9mm per year, with areas subsiding over 25mm per year. If groundwater extraction is not limited, "extraction-induced subsidence could potentially drown almost the entire Mekong delta" (Minderhoud, 2019, 13). In the same project, Eslami highlights the role of anthropogenic sediment starvation in tidal amplification and salt intrusion (Eslami et al., 2019). This research shows the impact of dam construction upstream on sediment starvation downstream. The lack of sediment results in bed level incisions, which lead to tidal amplification and an increased salinity rate in channeling waters. Moreover, sand mining also contributes to riverbank erosion and tidal variation. These dynamics affect both the delta's agricultural production and living areas.

This shows that environmental changes in the Mekong Delta go well beyond climate change, and combine both the effects of global warming and the results of the local uses of land and water resources. The changes have a negative impact on agricultural production and are forcing those who derive most of their livelihoods from agriculture to adapt. Farmers are

often among lower-income households, who have difficulties coping with hazards and adjusting to a changing environment. In 2018, 5.8% of households in the Mekong Delta were considered to be suffering from multidimensional poverty, despite the fact that the delta is one of the better-off regions in the country (GSO, 2019). Multidimensional poverty affected 6.8% of households at the national level, including the extremely poor population of the Northern Midlands and Mountains as well as the Central Highlands (GSO, 2019). Therefore, these figures suggest that households are unequally vulnerable to environmental changes and have unequal resources to adapt. Among the coping and adapting strategies are livelihood diversification or a change in livelihoods, including changing location for better access to non-agricultural jobs.

2.6.2. Migration as a response to environmental changes

2.6.2.1. The environment as a factor in the rural-urban migration decision

For delta inhabitants, migration is one way to react to these environmental changes. Previous research showed that the decision to migrate can result from a combination of social, economic, political, and environmental factors (Miller, 2019; Dun, 2011; UNDP, 2014; Warner et al., 2010). For individuals, or more likely for households, this decision-making process might be influenced by access to resources such as economic resources, land, information, social networks, communication technologies, or public services (Van der Geest, Nguyen and Nguyen, 2014; Nguyen, Grote and Sharma, 2017). Indeed, migrating requires a certain level of assets, leaving this option out of reach for some people (Kniveton, Smith and Wood, 2011).

With that in mind, several major recent studies have focused on the relationship between the environment and migration in Vietnam. We can name three major recent projects here. In 2007, the project EACH FOR, funded by the European Union and the International Organization for Migration, disputed this question in the case of the Mekong Delta, along with other international study cases. Focusing on flooding, the study shows that environmental change is a trigger for independent migration decisions (whether internal or international) when livelihoods are negatively affected (Warner et al., 2012; Dun, 2011; Warner et al., 2010). The German-Vietnamese WISDOM project (Phases I and II), conducted between 2007 and 2013, also addressed this question in the framework of a broader mission: to provide the delta with an information system encompassing hydrology,

environment, land use, and population changes.^[46] The project studied in particular the case of peri-urban areas in the delta as an "interface", for these areas are the meeting points of structural transformations including migration and environmental change. Interestingly, the project highlights the blurred boundary between rural and urban in the Vietnamese context, and the multiple "hybrid mosaics" that it composes (Garschagen, Renaud and Birkmann, 2011, 9). Later, the MECLEP project, led by the Erasmus Rotterdam University and Can Tho University, highlighted poverty and livelihood insecurity as the main reasons for migrating from the rural Mekong Delta areas to Can Tho and Ho Chi Minh City, including migration from a relocation site (Chun, 2014, 2015). The results emphasized the multiplicity of factors involved and the ambiguity that can exist between environmental and economic factors (Nguyen, Leonardelli and Dipierri, 2017; Anh, Leonardelli and Dipierri, 2016; Entzinger and Scholten, 2016). Environmental factors do not necessarily stand out as factors of migration identified by households themselves, but can be indirect factors through affecting means of livelihood.

Other research provided insights on this topic in the context of central Vietnam (Haemmerli et al., 2016) and the Mekong Delta (Oanh and Truong, 2017). Another study conducted by Koubi et al. (2016) on the same topic took the Mekong Delta and the Central Coast as departure areas, with Ho Chi Minh City and Hanoi as the destinations. It stood out that rapid-onset and short-term events were significantly likely to lead to a decision to migrate, whereas slow-onset and long-term events had little to no influence (ibid.). The speed of an event and its temporal perception by inhabitants play a major role in the migration decision process. This observation is consistent with the results of other studies. Berrang-Ford, Ford and Paterson (2011) report that climate variability and short-term events, such as floods or droughts, appear to lead more frequently to adaptive responses than long-term changes in seasonal or annual temperature or precipitations. Likewise, the consequences of a specific flood or other weather-related event may be the trigger for the decision to migrate, although certainly not the only factor.

With the economic transition toward industrialization and the development of the services sector within or close to cities, migrations tend to lead people out of rural areas toward urban areas (Nguyen and Luu, 2016). In 1996, based on a study in the region of Hanoi, Li already explained how, from the late 1980s and 1990s, while restrictions on mobility were being eased and transportation was developing, rural migrants moved to cities seeking

for jobs after the increase in agricultural productivity had left many farmers unemployed (Li, 1996). According to a study conducted by the Mekong Migration Network and the Asian Migrant Centre in 2013, Ho Chi Minh City attracts more than 60% of migrants coming from the Mekong Delta (MMN and AMC, 2013). The Mekong Delta is characterized by a very high out-migration rate. The results from the last national statistical census conducted in 2019 reveal that the out-migration rate of the Mekong Delta is now up to 4.5%, which puts its net-migration rate at - 4%. This is the highest out-migration rate and the lowest net-migration rate out of all the country's regions. Only Can Tho and Long An in the Mekong Delta keep a positive net-migration rate. Most of the migration flow heads to the Southeast Region including Ho Chi Minh City and other industrial provinces such as Binh Duong (GSO, 2020). In 2019, the in-migration rate of Ho Chi Minh City was up to 9.1% (GSO, 2020). Officially, 714,000 people migrated in this direction between 2004 and 2009, out of the delta's 16.7 million inhabitants in 2004, creating a major migration corridor (GSO, 2009, as cited in Entzinger and Scholten, 2016). The 2014 intercensal survey on migration and urbanization counted the number of inter-provincial in-migrants and out-migrants by regions in the same year - i.e., people over the age of 5 who reported having a different province of residence 5 years prior to the time of the survey. Out of all the out-migrants from the Mekong Delta recorded on that date (762,555 people), 76.5% had moved to the Southeast Region (583,358 people) (GSO and UNFPA, 2016a).

2.6.2.2. Economic development, land tenure, and vulnerability in the Mekong Delta

Small local farmers in the Mekong Delta are not only exposed to environmental changes but also to globalization. O'Brien and Leichenko designate this situation as "double exposure," highlighting that these perturbations are in constant interaction. Both trends can no longer be considered separately as they converge to increased exposure and multidimensional vulnerability (O'Brien and Leichenko, 2000). The opening to a global market economy has consequences on both the agricultural products market and the land market. Concerning the agricultural market, local farmers might suffer from fiercer competition from international producers and price variations due to fluctuations in demand. Since the end of the 1980s, Vietnam has emerged rapidly as an important producer and exporter of agricultural goods on the international market. This has resulted in a higher exposure to price variations, while safety nets remain scarce.

Concerning the land market, Vietnam's history has resulted in a hybridity between collectivism and liberalism (Mellac, Fortunel and Dac, 2010), which has led to vulnerability for local farmers. Vietnam is a socialist country with a market economy. While politically ruled under a socialist authoritarian regime, economically it tends to play a significant role in an international liberal economy. This double face of Vietnam translates into complex mechanisms in the land market.

After the 1975 reunification, the socialist land management system was extended from the northern part of the country to its southern counterpart. From that time, agricultural lands were managed by cooperatives which were later progressively dismantled. From the Land Law of 1989, users were granted the first short-term land use rights by contract with the cooperatives. Four years later, the Land Law of 1993 recognized individual long-term land use rights and land management rights — the right to exchange, cede, rent, bequeath, and mortgage land. Since then, a land use rights market has emerged. Nonetheless, the land remains administered by the state, which decides the duration and conditions of land use rights granted to Vietnamese citizens. These rights differ according to the classification of the land – rural or urban – and the function of the land – agriculture, built, forest, future construction, etc. By allowing individual transactions of land use rights, the 2003 revision of the national land law made land tenures for rural and urban lands diverge (To et al., 2019). On the one hand, rural land refers to plots of land attributed for 20 years tax-free, the value of which is based on the value of agricultural production. On the other hand, urban and peri-urban land are treated as market goods in a liberal economy in order to support national economic growth (Mellac et al., 2010). Farmland in the Mekong Delta has increasingly entered these market dynamics. According to a 2009 survey, only 5.1% of households in two provinces of the Mekong Delta acquired their land by state allocation, rather by inheritance or purchase, a proportion much lower than in two provinces of the Red River Delta (94.5% of state allocation) (Bui and Dang, 2011, as cited in Tran, 2018). In 2014, another survey conducted in Tien Giang and An Giang with rice-growing Vietnamese households found that only 1.9% of the land was granted by the state while 41.6% was inherited from parents, 54.3% was acquired by purchase, and 1.7% was reclaimed land (Tran, 2018). For the vast majority, small plots of land (1 ha or less) are mostly inherited, and large ones (more than 1 ha, and usually more than 5) are mainly purchased.

The recent land law evolutions give a new orientation to this dual system, as they allow land accumulation in rural areas and facilitate speculation on farmland. Provinces have strongly implemented the policy of exchanging or merging farming plots to foster large-scale fields (Government of Vietnam, 2016). During the land transactions process, farmers appear as the less powerful actors in a chain that increasingly involves foreign and Vietnamese investors and large-scale landholders. This leads some authors to see the emergence of agribusinesses as a potential threat to household-based agricultural production (To et al., 2019). In this context, some farmers might be deprived of their land use rights or become bound by debt. In addition, parents tend to encourage their children to seek higher incomes in sectors other than agriculture, resulting in a strong intergenerational shift in occupation. As a consequence of this outmigration trend, the lack of labor available in rural areas and the higher cost involved with hired labor tend to force farmers to either use agri-machines or sell the land. According to Garschagen et al., the economic transformations in rural and urban areas (industrialization, mechanization of agriculture, land accumulation) force many farmers into landlessness (2012; Marsh and MacAuley, 2002). In 2011, 14.2% of households in the Mekong Delta were landless (GSO, 2012). Deprived from land use rights, landless farmers seek wage employment, often shortterm or seasonal jobs in the farming sector. Tuan demonstrates that a strong correlation exists between poverty and land title and size (Tuan, 2010, as cited in Garschagen et al., 2012). According to Tran, based on a survey conducted in 2014, a process of social differentiation is occurring among farmers in the delta: between well-off large-scale farmers, and landless farmers contracted for farming work on others' land (Tran, 2018). Therefore, Mekong Delta farmers face a double trend: the economic transition that strengthens competition in the agricultural, land, and job markets, as well as the rapid environmental changes that threaten the quality and even future existence of their land. Their vulnerability to environmental risks translates into a socioeconomic precariousness that could be a factor influencing the decision to migrate.

2.6.3. From environmental vulnerability to socioeconomic vulnerability?

2.6.3.1. Socioeconomic vulnerability of the migrants in the city

How does migrant exposure to environmental risks evolve after migration? Do migrants face specific vulnerabilities at their destination? In order to track the interplay between environmental change and vulnerability along migrants' trajectories, we study the living conditions of migrants in the city. To do so, we draw upon a study that Oxfam conducted in Vietnam in 2019, which dealt with climate change and migration from the Mekong Delta to Ho Chi Minh City. The study aimed to provide preliminary data to develop recommendations on the public response to the migrations occurring in a context of climate change in the Mekong Delta.

In this research, two locations in the Mekong Delta were selected: Dong Thap and Ben Tre. They were identified as departure areas, with Ho Chi Minh City as the destination. The departure sites were selected based on the importance of the environmental changes they face: landslides in both provinces, and salt water intrusion particularly in Ben Tre. Ho Chi Minh City was selected as the region's main site of attraction based on migration statistics. The study combines 28 in-depth interviews, 2 focus group discussions, and a questionnaire-based survey with 240 households. The survey targeted households in the departure sites — 60 in Ben Tre and 60 in Dong Thap — and in the destination site – 20 in Ho Chi Minh City. The migrants surveyed in Ho Chi Minh City were selected based on three criteria: being over 18, currently working in Ho Chi Minh City, and originating from Dong Thap or Ben Tre. The survey was conducted in Binh Tan District, located on the western periphery of the metropolis, bordering the Mekong Delta. Binh Tan is a peri-urban industrial district with a rapidly growing population due to a high immigration rate. The participant selection method does not provide a representative sample of the general migrant population, as this population is very diverse and its size cannot be accurately estimated. Nevertheless, the study provides interesting insights into the trajectories and living conditions of the particular migrants surveyed. Out of the 120 survey participants in Binh Tan, 59.2 % were male and 40.8% female. The average age of the sample is 36 years, with 74.1% of participants aged under 40, and 96.6% under 60.

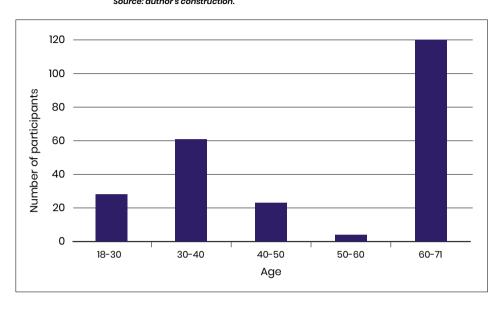
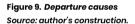
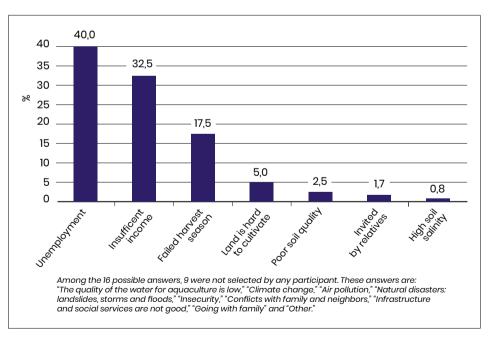


Figure 8. Participant distribution by age range Source: author's construction.

The average age when participants arrived in Ho Chi Minh City is 28. More than half the participants arrived between 18 and 30 years of age (52.5%). It is worth noting that I migrant out of 9 arrived before they were 18 years old (11.6%). The survey findings show that the main cause expressed by the migrants for departing their village was related to their economic activity (Figure 9). 32.5% report insufficient income, 40% were suffering from unemployment, and 17.5% had lost a harvest. Environmental causes were explicitly mentioned only by a minority (8.3%): these participants mentioned that the land was hard to cultivate, that the soil was of poor quality, or that the soil had a high salinity rate. However, the loss of a harvest can, of course, also be due to environmental events such as a drought, flood, or storm. Besides climatic causes, disease can also be considered an environmental cause, and insufficient income can result from market conditions but also from some sort of environmental degradation. As pointed out in other studies (Haemmerli et al., 2016), all the economic factors invoked for the decision to migrate can ultimately be found to derive from environmental factors. However, the quantitative methodology used did not shed light on these connections. Interestingly, none of the participants selected "climate change" as their reason for migrating, meaning that they either did not consider themselves to be affected by it or were not familiar with the concept. It is important to note that this question allowed only one answer in the list of possible causes. As a result, the level of detail and nuance of answers was of course limited. For example, it was not possible to answer both "Harvest loss" and "Natural disasters: land-slides, storms and floods," or both "Insufficient income" and "Climate change."

The results are nonetheless coherent with the conclusions from previous studies conducted in 2007, 2008, and 2010 with migrants from central Vietnam (Nguyen, Raabe and Grote, 2015). This research was based on a panel data set of around 2,200 rural households from 3 provinces (Dak Lak, Thua Thien Hue, and Ha Tinh) and a survey of 299 migrants in Hanoi and Ho Chi Minh City. The evidence from these surveys also suggested that rural-urban migration for employment can be a "livelihood support strategy for households coping with agricultural and economic shocks like droughts, floods or loss of job, or with financial debts" (*ibid.*, 88) In this econometric research, the probability of migration decreases as employment opportunities in the village of origin increase.





Just as economic factors appear to be the main drivers for leaving the place of origin, the destination choice is also strongly linked to job opportunities (Figure 10). Hence, respondents reported high salaries (42.5%) and the high number of job opportunities (38.3%) as the main reasons for choosing Ho Chi Minh City. "Good infrastructure" was also mentioned, as well as "Good conditions to raise children," both designating the desire to live in an environment associated with higher living standards and education opportunities.

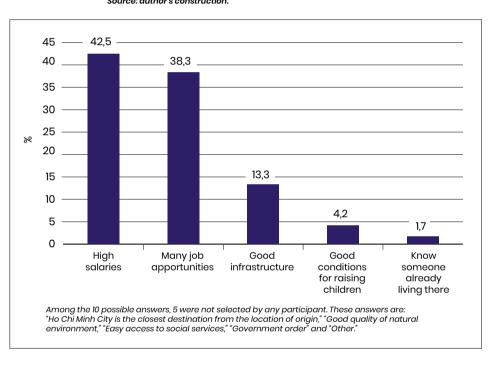


Figure 10. Reasons for choosing Ho Chi Minh City
Source: author's construction.

Migration is a decision that is most often made at the level of the whole household and it is often a collective move. Only 22.5% of respondents declared that they migrated alone, while more than half (57.5%) declared that they migrated with their spouse, and 10% with their entire family. In addition, some migrants moved with their siblings or parents. It is worth highlighting that of the 14 participants who migrated before age 18, 6 did so alone. This proportion (42.8%) is much higher than for the entire sample. This situation of minors migrating alone is particularly alarming as they might find themselves very vulnerable in the city.

The survey shows that migrants receive help from different people during the migration process (Figure 11). Half are helped by friends (48.3%) and 25% by parents or family. In addition, the "homeland councils," which are associations of people coming from the same village or area and now living in the city, serve as a network for mutual aid among their members. None of the participants reported help from the local government (such as the local People's Committee) or religious organizations.

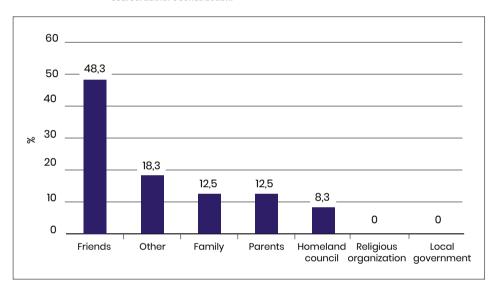


Figure 11. Help received during migration
Source: author's construction.

Help from a social network is often important to settle into the city at the very beginning: migrants received help mostly to find accommodation (56.6%) and a job (26.5%). [47] Moreover, the main way for them to find housing is through friends (76.7%), and, to a smaller extent, through relatives (13.3%) and people coming from the same hometown (6.7%). Friends help less frequently with finding a job (20%), whereas relatives and those from the same hometown prove themselves to be more helpful (35% and 30.8%). Migrants also use social media for that matter (12.5%). Meanwhile, the large majority have not heard about recruiting agencies (9 out of 10 respondents). In the survey, only 8 migrants reported having received help from these agencies. Finally, the

^{47. 113} answers were considered for this question, as 7 respondents did not answer.

local government is mentioned by almost all participants as a source of information regarding the administrative procedure, but never as a way to access housing or jobs.

The migrants surveyed have a very similar economic profile. 87% are workers, with 93.3% of those working full-time, mostly under a working contract (35% with a permanent contract, 61% with a fixed-term contract, and only 4% with an oral contract). However, at the national scale, most of the population (both the rural and urban population, including the farming, fishing, and forestry sectors) works without a contract (MoH, 2017). According to an official study from the Vietnamese Ministry of Labour, Invalids and Social Affairs (MOLISA), in 2016 36% of Vietnamese wage earners had a permanent contract, 23% had a fixedterm contract, 33% had an oral contract and 7% had no contract (MOLISA, 2018). In addition, most of the participants from the Oxfam study (54%) earn between 5 and 8 million VND a month. This income level corresponds to the national average income per capita in urban areas, which was 5.6 million VND in 2018 (GSO. 2019). It is worth noting that this number has been multiplied by 3.5 over 10 years, compared to 2008. However, the profile of the migrants surveyed cannot be considered representative of the migrant population in Ho Chi Minh City given the method used to select the participants: they were contacted by canvassing in the alleys of Binh Tan District. Binh Tan District is where many factories are located, and therefore the migrants encountered in this area are likely to work in them. This may explain why the vast majority of participants work under a formal contract. The sample does not include migrants working in the informal sector or those who are unemployed, who may face even greater economic instability.

In the city, the participants share very similar housing conditions. 96.6% rent their housing (nha tro), and 100% have access to pipe water and private sanitation in the house. Living conditions in the city are partly dependent on the residential status of migrants. As a result of the residential registration policy, migrants are expected to register at the local People's Committee and with the police in order to obtain a temporary status in the new location. There are two categories for such situations: KT3 (long-term temporary permit, between 6 and 12 months renewable) and KT4 (short-term temporary permit, under 6 months). In the survey, 83.3% of respondents hold a KT4 permit, while 12.5% hold a KT3. Among the remaining 4 migrants, 3 had KT1 (full permanent residential registration) and 1 had KT2 (full permanent residential registration, but the household lives in a different sub-district from the one of registration). However, this figure is based on the migrants' own declarations and has not

been verified with the local authorities. Other studies focusing on urban-rural migrations in Vietnam show that migrants sometimes do not hold any registration at all, regardless of how long they have been in the city (Le, Tran and Nguyen, 2011). According to the National Internal Migration Survey of 2015, 12% of the migrants in Ho Chi Minh City at that date were unregistered (GSO and UNFPA, 2016b). In all cases, it is important to note that each status offers a differing number of rights, e.g., access to land property and public job offers, and the ability to enroll children at the local public school with no extra fee. This is an incentive to get registered, but also a structural source of inequality in the access to urban services.

Unregistered migrants cannot access social public services. Only the ones hired by a private employer through a legal contract can benefit from health and social insurance provided by the company. Unregistered migrants working in the informal sector, or whose employers do not respect their contracts, are excluded from health and social insurance coverage and from protection by the Labour Code (Le et al., 2011). And while, as a general rule, households identified as poor by the People's Committee are eligible to free health insurance, without a local registration these households cannot qualify for such insurance in their place of destination, making them particularly vulnerable in case of health issues. In the survey, all participants declared they were covered by health insurance provided by their employers. [48] The working status is critical here: informal workers do not receive such insurance, although they can enroll in voluntary insurance. However, according to data from MOLISA, at the end of 2018 only around 270,000 people out of a total of 34 million workers without social insurance participated in voluntary social insurance—that is around 0.8% (MOLISA, 2018). The results from qualitative analyses show that many migrants are unfamiliar with voluntary social insurance because they think they are ineligible.

69.1% of participants declare being part of a homeland council, which gathers people living in Ho Chi Minh City who originate from the same village or area. At the same time, only 15.8% of participants report attending local neighbor meetings. These results tend to show a different network of solidarity. Within the city, migrants socialize with other migrants from their area of origin, but few participate in groups with local urban residents.

^{48. 120} respondents reported having health insurance, but 8 respondents did not provide an explanation regarding how they obtained this insurance.

The survey also aimed to understand the perceived risks in the city. Participants were asked to report the risks they faced during their three first years after migration. They reported a change in risks over time. During the first year, 70.8% reported having suffered from a severe sickness, with this risk almost completely disappearing in the following years. This can be interpreted as a major sign of the negative impact on health from living in the city. The change of environment could explain some of these cases, but the major pollution rate in the city could also be a significant factor. Workplace accidents and job losses are mentioned, as well as conflicts with family or neighbors. The risk of being robbed is mentioned by a significant part of the participants for the second and third years, perhaps in connection with the possession of a higher number of assets as time goes on. 90% consider that they have a safe place to live in the city, while almost all respondents who did not answer this way associate lack of safety with regular incidences of being robbed. These results show that health issues remain the main source of concern and hardship, followed by a feeling of material insecurity.

In addition, participants were asked to report sources of pressure that they faced during the first three years after moving to the city (Figure 12). Pollution is mentioned by a large majority of the participants for the first year. Low salary is a preoccupation for the first and second years but not the third year, which suggests that salaries might increase over the years or that migrants get used to their salary and adjust their expectations. The subject of costs also appears through the costs for living, education, and health. Overall, pollution in the first year, and then money from the second year appear to be the major concerns. It is interesting to note that discrimination and lack of integration with the local community do not seem to be major sources of concern.

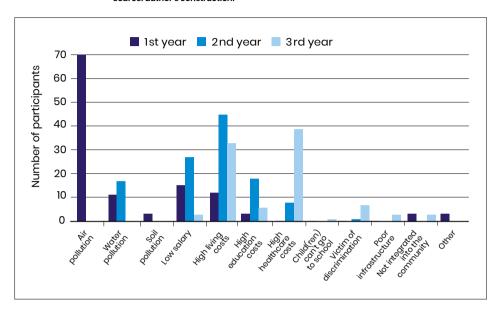


Figure 12. Sources of pressure during the first three years in Ho Chi Minh City Source: author's construction.

Finally, the participants reported positively on their decision to migrate to the city. Almost all of them thought that the decision to leave their village was worth it (92.5%). Most (90%) intended to stay in Ho Chi Minh City over the next five years, showing that the decision to migrate is a long-term one. Interestingly, when asked the question "Do you want to come back to your hometown to live and work?" exactly half of the respondents answered "Yes," and the other half "No." Out of those who answered positively, when being asked when they intended to return to their hometowns, 29.1% selected the answer "When I get old." A fairly common migration pattern seems to apply: migrating to the city while young in order to receive higher salaries and find better job opportunities, and moving back to the countryside in old age.

The survey results presented in this chapter show that the economic factor appears as the main reason for migration, in coherence with previous studies identified in the literature review. Migrants coming from the rural Mekong Delta who are highly affected by environmental perturbations migrate to Ho Chi Minh City seeking job opportunities and income diversification. Because of the methodology used, it is important to keep in mind that this study focuses on migrants working in the industrial sector with working conditions that the migrants surveyed

themselves found decent: with a working contract, health insurance coverage, and average incomes.

However, the results also show that even though they find jobs in Ho Chi Minh City, the migrants surveyed in Binh Tan are often confronted with various forms of precarity and vulnerability. First, the average income does not necessarily translate into good living conditions which, according to the study, are decent but rather basic for migrants. This can be explained by the importance of remittances coupled with the high costs of city living (Le et al., 2011). In addition, while almost all migrants surveyed work under a contract, most are under a fixed-term contract, even though their average year of arrival in Ho Chi Minh City is 2010, nine years prior to the survey. The predominance of fixedterm contracts can be source of job insecurity, especially in a period of economic instability such as the COVID-19 pandemic which started one year after the study was conducted. Moreover, the difference in registration status, though it is no longer a major limitation, remains an obstacle in accessing urban services. Finally, the study highlights poor social integration with non-migrant city dwellers, whether voluntary or not.

These preliminary results are coherent with previous studies conducted on the conditions of different populations of rural migrants in Vietnamese cities (Nguyen et al., 2012; Le et al 2011; Agergaard et al., 2010). Again, vulnerabilities that may occur when arriving in the city may present themselves in a variety of forms including social, economic, legal, and environmental (Adger, 1999, 2006). It seems that formal and informal sectors of employment in the city result in two levels of vulnerability. However, this vulnerability does not impede the wish of most migrants to stay in the city long-term.

2.6.3.2. Environmental risk in the city

Beyond socioeconomic vulnerability, do migrants face specific environmental risks while in the city? Flood exposure is of particular interest, which is one of the main hazards in Ho Chi Minh City, further exacerbated by poor drainage systems (Nguyen et al., 2019). Lasage et al (2014) highlighted the risk of flooding in Ho Chi Minh City and the dynamic of the risk according to SLR and economic development. Ho Chi Minh City, like most Asian cities located near coasts and deltas, is facing an accelerating subsidence rate, owing to several factors including natural compaction, ground water exploitation, and the construction of high-rise buildings (Ho, 2008). Therefore, the city is increasingly vulnerable to SLR. In 2011, Storch and Downes (2011) estimated that only 55% of the current area of Ho Chi Minh City

lay more than 1m above MSL, and only 28% more than 2m above MSL. Ho (2008) also noticed a statistically significant increase in heavy rainfall in Ho Chi Minh City over the second half of the twentieth century. In addition to external factors such as heavy rains and SLR intensifying flood impacts, the urbanization process is also a major driver for increased exposure (Storch and Downes, 2011). The city was originally developed on relatively high ground, and has since expanded and densified on low-lying land and former wetland. Impermeabilization of the ground contributes to the occurrence of floods. According to the authors' simulations, in 2011 32% of residential and industrial built-up land would have been exposed to flooding in the event of maximum tide (150cm above MSL). A rise of the MSL by 100cm combined with projected land use plans was expected to flood 60% of the planned total built-up residential and industrial area by 2025. Moreover, the authors stress that in the past, the city's development had not followed land use designations, and the development of spontaneous urbanization was likely to increase exposure. Similarly, Garschagen, Renaud, and Birkmann (2011) developed some potential loop effects that can appear between environmental changes and urbanization fostered by migration in the case of Can Tho, the main city of the Mekong Delta. The city is facing an increase of slow-onset tidal flooding as well as a rising frequency and intensity of heavy rains. Migration from rural areas to the Cai Rang peri-urban area in Can Tho results in uncontrolled development that could lead to intensified flooding in the future (Garschagen et al., 2011). The current pattern of urban development, fueled by natural demographic growth and positive migration, which will lead to increased exposure to flood risks in the future. The relationship between environmental risks and migration is two-way: on the one hand, environmental conditions might be a factor influencing the migration decision, and on the other hand, migration may result in human pressure on the environment, potentially intensifying environmental risk.

Economic precarity in a context of high population density and a competitive housing market can potentially push migrants to settle in at-risk areas in Ho Chi Minh City (Nguyen et al., 2017). Areas exposed to flood risks may be possible locations for informal settlements for the urban poor, including low-income migrants. In 2010, the Asian Development Bank (ADB) estimated that extreme flooding affected about 43% of the nonpoor population of Ho Chi Minh City and about 47% of the poor [49] (ADB, 2010). According to this study, the poor will be more exposed

These data are extrapolated from the inter-ministerial poverty mapping task force data, collected in 2003.

to flooding by 2050 than other urban dwellers, but they may benefit marginally more from the construction of flood control infrastructures. The modeling projections for extreme flooding suggested that, without the implementation of flood control infrastructures, by 2050 about 53% of the nonpoor population and 57% of the poor would be affected. With the planned flood control infrastructure completed, the proportion of the nonpoor at risk would decline by around 15%–38%, and the number of the poor at risk by around 18%–39%. However, the ADB's study refers mostly to the rural poor in Ho Chi Minh City who depend on natural resources for their living. Migrants working in factories may not face the same difficulties. Nevertheless, poor housing quality and substandard hygiene conditions can expose migrants to health risks, which is reinforced in flood prone areas. The adaptation plan of the city also includes resettlement projects in order to protect populations living in risk areas. However, these operations also come at a cost. The disruption of local social networks, the change in living environment, and the lack of adapted job opportunities on resettlement sites can push people into precariousness and toward out-migration (Jullien and Pulliat, 2020; Miller, 2019; Entzinger and Scholten, 2015; Garschagen et al., 2012; Adger, 1999).

2.6.3.3. Negotiating presence in the city

In addition to economic insecurity and potential environmental risk, the situation of migrants in the city is also complexified by their legal status. The residential registration system that remains in place today was established by the socialist government of Vietnam in 1955 in the North, and 1975 in the South. The household registration permit $-h\hat{\rho} kh\hat{a}u$ — was originally designed as an obstacle to rural-urban migration in order to limit urban development. Each Vietnamese household is registered in its original residential location, and the procedure to modify this registration appears to be particularly long, difficult, and costly. However, the official perspective on urban growth has radically switched from negative to positive over the years, especially as cities became the drivers of integration to the global economy from the end of the 1980s onward (Gibert, 2014). This is why two new temporary permits have been created (KT3 and KT4) in order to provide temporary urban dwellers with a legal status. Procedures associated with the $h\hat{\rho}$ $kh\hat{a}u$ have also been slightly softened. As previously mentioned, keeping one's $h\hat{o}$ $kh\hat{a}u$ registered in the original residential location does not hamper the ability to get a job in the private sector or from renting a house. According to the 2015 national survey on internal migration, 91% of unregistered migrants report no difficulties with having a non-updated residential registration. 44% justify not registering because it was "not necessary." In addition, migrants can obtain temporary short-term registrations guite easily by providing their identification card to their landlord, who handles the process on their behalf (GSO and UNFPA, 2016b). Nonetheless, changing one's permanent residential registration from rural to urban, when possible, may come at a cost: it means renouncing land use rights to any rural land owned, a cost not everyone is willing to pay. Farmland is often a source of food or income for the family, as well as a potential financial resource in case of land seizure, a legacy for the children and, more importantly, a guarantee to access loans (Pulliat, 2013). This cost explains the reluctance that some migrants express toward changing their permanent registration, especially if part of the household remains in that rural location.

Meanwhile, an outdated residential registration can be a hindrance to achieving safety, integration, and recognition in the city. In order to obtain a permanent registration in the city, a migrant must be able to testify living in the neighborhood for at least one year,^[50] having a regular job, and stable legal housing (Liu and Dang, 2019; Pulliat, 2016). In these conditions, the urban $h\hat{o}$ $kh\hat{a}u$ remains out of reach for the majority of poor migrants, preventing them from accessing urban services such as the public education system without an extra fee, public social services, or public loans. There is currently no comprehensive legal framework to protect internal migrants. In Vietnam, an internal migrant is defined as a resident of a specific administrative unit, who lived in a different administrative unit at the commune level 5 years earlier and who was aged 5 years or older at the time of census enumeration (GSO and UNFPA, 2010). Only official residences are taken into account, i.e., registrations which show that the migrant has lived in the city for over 6 months according to the residential registration system, excluding, of course, people who have migrated to the city but are unregistered there (Nguyen and Luu, 2016). This "floating population" (Gubry, Le and Nguyen, 2011) comprises a large proportion of city dwellers, who are intrinsically hard to count. No matter their crucial role in sustaining the growing suburban industries, their presence in the city remains legally and socially in the shadows, tolerated more than accepted. Consequently, they might find themselves

^{50.} According to the National Assembly 81/2006/QH11 Law on Residence of November 29, 2006, Clause 1, Article 20. Previously, the required residence period was three years according to Decree No. 108/2005/ND-CP of August 19, 2005, and originally five years according to Decree No. 51/CP of May 10, 1997.

in situations of legal, social, economic—and sometimes environmental—vulnerability in the city, impeding them from fully accessing urban services and integrating into urban society.

The 2012–2020 Social Welfare Strategy identifies migrant workers as a disadvantaged group that requires support (Marx and Fleischer, 2010). However, national government policies merely aim to reduce spontaneous migration rather than providing substantial support. For example, Decree 190/2003/QD-TTG clearly states that its objective is to limit spontaneous migration. [5] Directive No. 39/2004/CT-TTG of November 12, 2004 presents "a number of guidelines and solutions to continue resolving spontaneous migration." This intention is reaffirmed in Governmental Resolution No. 22/NQ-CP of March 1, 2020.^[53] However. even though controlling spontaneous migration from rural areas is presented as a priority by the Vietnamese government. its management is shared between various ministries rather than having a single ministry dedicated to this work. The Ministry of Agriculture and Rural Development has a lead part in spontaneous migration management, in cooperation with the Ministry of Planning and Investment and the Ministry of Finance. and is responsible for organized migration (or relocation). The Ministry of Public Security is in charge of residential registrations. According to the specific situation, migration management may also involve a range of different ministries, [54] bringing up the guestion of efficient coordination. MOLISA does not have policies to tackle the specific risks that spontaneous rural migrants encounter in the city (Le et al., 2011). In the Oxfam project, the research team did not find an organization or agency in charge of spontaneous migration in Dong Thap and Ben Tre. Similarly, in Ho Chi Minh City there are no specific support policies for migrants. The policy review process conducted in the project concludes that there is no specific policy for spontaneous migrants.

- 51 https://luatvietnam.vn/dat-dai/quyet-dinh-190-2003-qd-ttg-thu-tuong-chinh-phu-15455-d1.html.
- 52. https://luatvietnam.vn/an-ninh-trat-tu/chi-thi-39-2004-ct-ttg-thu-tuong-chinh-phu-16665-d1.html.
- 53. https://luatvietnam.vn/dat-dai/nghi-quyet-22-nq-cp-on-dinh-dan-cu-tu-do-va-quan-ly-su-dung-dat-tu-nong-lam-truong-181022-d1.html.
- 54. Namely, the Ministry of Labour, Invalids and Social Affairs, the Ministry of Health, the Ministry of Information and Communication, the Ministry of Education and Training, the Ministry of Transport, the Ministry of Construction, the Ministry of Justice, the Ministry of Natural Resources and Environment, the Ministry of National Defence, and the Committee for Ethnic Minority Affairs and Government Committee for Religious Affairs. See "Chi thi 39/2004/CT-TTg của Thủ tướng Chính phủ về một số chủ trương, giải pháp tiếp tục giải quyết tinh trạng dân di cư tự do," LuatVietnam, https://luatvietnam.vn/an-ninhtrat-tu/chi-thi-39-2004-ct-ttg-thu-tuong-chinh-phu-16665-dl.html.

2.6.3.4. Rural migrants in the official vision of the city

Policies regarding spontaneous rural-urban migration are linked to both national and regional urban development policies, especially in the case of Ho Chi Minh City. This is the country's most populous city, with the fastest economic growth, and the main target of direct foreign investments (more than 15% of the country's direct foreign investments in 2016; GSO, 2018b). Urban planning exercises aim to strengthen the city's role as an economic leader, and both national and provincial authorities intend to enhance the city's international reputation, following the path of other major global cities to realize the vision of an ideal modern city with the Ho Chi Minh City motto: "civilized, clean and safe" — "văn minh, sạch đẹp, an toàn." By "civilized," this motto refers to an urban ideology where the rural legacy tends to disappear — be it rural architecture, farming, or other rural tropes. Of course, rural migrants do not fit this definition. Being excluded from this official vision, they become the victims of various exclusion processes. For instance, many urban dwellers share the idea that rural migrants are responsible for problems such as drug trafficking and prostitution. They also reject rural habits with the argument that they are retrograde. Leaf, reflecting on the "becoming urban" process in Asia, says: "the terminology employed in simply describing something may be consequential in prefiguring our understanding, as particular words will link to specific meanings in established academic discourses and thus shape ongoing theoretical development" (Leaf, 2011, 527). The image of the rural migrant does not fit with the official vision of the city promoted by the government.

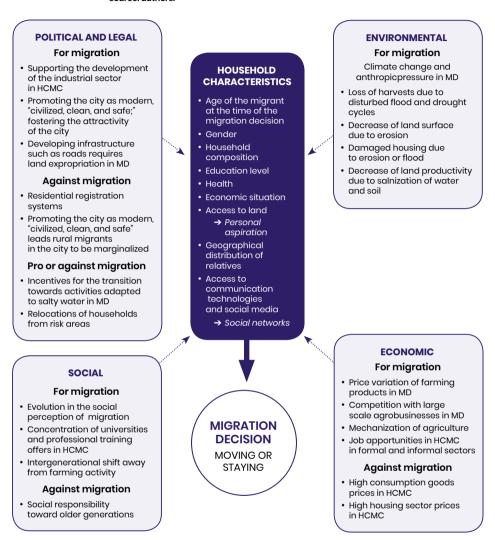
The choice to migrate as a response to environmental vulnerability can therefore lead to new forms of vulnerability. The restrictions that remain on the access to urban services generate structural inequalities between migrants and permanent urban residents. The requirement to obtain a long-term residential registration in the city prevents most underprivileged migrants from obtaining it, regardless of the actual time they have spent in the city. While migration is often linked to poverty alleviation, it also generates vulnerabilities related to the precariousness of living conditions in the city.

2.6.4. Conclusion

The interactions between the environment and socioeconomic inequalities at play in migration from Vietnam's Mekona Delta to Ho Chi Minh City happen to be particularly complex, constantly changing at the pace of environmental evolutions and economic variations. Our literature review highlighted this changing context, and collated substantial evidence from previous research of the complex relationship between the environment and migration in the Mekong Delta. Research projects focusing on the Delta highlight the ambivalence between environment and economy as one of multiple factors contributing to the decision to migrate. Regardless of climate change or anthropogenic actions in the Delta, the search for a higher and more stable income is the primary reason for migration to city. However, environmental factors may be hidden behind the stated economic factors. The research conducted by Oxfam in 2019 provides valuable insights into migrants' living conditions in Binh Tan District in Ho Chi Minh City, highlighting the precariousness and insecurity they experience through an economic, social, and environmental lens. In addition, complex residential registration procedures and the promotion of the official vision of the modern city converge toward excluding rural migrants in certain ways, who are nevertheless essential to the city's growing economy. Vulnerabilities faced in the departure location and expectations about the arrival location are part of a more complex set of factors that lead to the decision to migrate. Of course, expectations can be challenged by reality after some time in the city. Research shows that migrants face obstacles that make it difficult for them to move from "migrant living conditions" to better living conditions in the city, which generates the prospect of return migration. The multiplicity of factors for and against migration, whether objective or perceived, that together create the decision to become (and remain) a migrant from the Mekong Delta to Ho Chi Minh City is summarized in the graphic below (Diagram 2).[55]

^{55.} This graphic is inspired from the conceptual framework of migration factors from Dina Ionesco, Daria Mokhnacheva and François Gemenne (Ionesco *et al.*, 2016), adapted to the local context of the Mekong Delta and Ho Chi Minh City.

Diagram 2. Decision factors affecting contemporary migration from the Mekong Delta (MD) to Ho Chi Minh City (HCMC) in Vietnam Source: authors.



Acknowledgments

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