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Rural In-migration and Global Trade

Managing the Risks of Coffee Farming in the Central Highlands of Vietnam

As Vietnam has become increasingly integrated into the global economy, internal migration to the highland frontier has been a major driving force behind its burgeoning coffee industry. Examination of migrant experiences in the Red River Delta and the Central Highlands—migrant sending and receiving communities, respectively—illustrates that livelihood opportunities for coffee-growing migrants are accompanied by an increased exposure to risks and therefore a potential for greater livelihood insecurity. Risks emerge from fluctuations in international coffee markets, the perils of environmental degradation, and increasing social instability in the Central Highland region. Migrants manage these risks in various ways, often drawing on resources provided through migrant networks. The research indicates that a reliance on non-migrating family members for support can be beneficial for migrants who farm coffee. However, this "safety net" for migrants can ultimately lead to an increase in insecurity for the entire migrant household.

Keywords: *Migrants; commodity agriculture; globalization; uplands; networks; South East Asia; Vietnam.*

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Introduction

The opportunities of trade liberalization and globalization are said to be mainly positive for developing countries (Collier and Dollar 2002). However, the greater financial interdependence of national economies can also increase insecurity among rural populations (Hulme et al 2001; Ravallion 2003). The complex interactions between global economic processes and rural livelihood activities are not particularly well understood with respect to mobile populations (de Haan and Zoomers 2003). It is therefore important to identify which aspects of globalization are liable to affect the welfare of people for whom migration is a livelihood activity.

In Vietnam, rapid economic growth and gains in poverty reduction during the 1990s have been largely attributed to changes in the Vietnamese economy from a socialist command economy to an economy based on market principles (Fforde and Vylder 1996). As a result of these reforms, land was allocated to individuals, a variety of private economic activities legalized, and controls on most prices removed. This contributed to a greater integration of Vietnam into regional and international markets (Glewwe et al 2002). The changes made to land reforms and registration systems also mean that households in Vietnam became more flexible in the pursuit of income diversification strategies to secure their livelihoods (Ellis 2000).

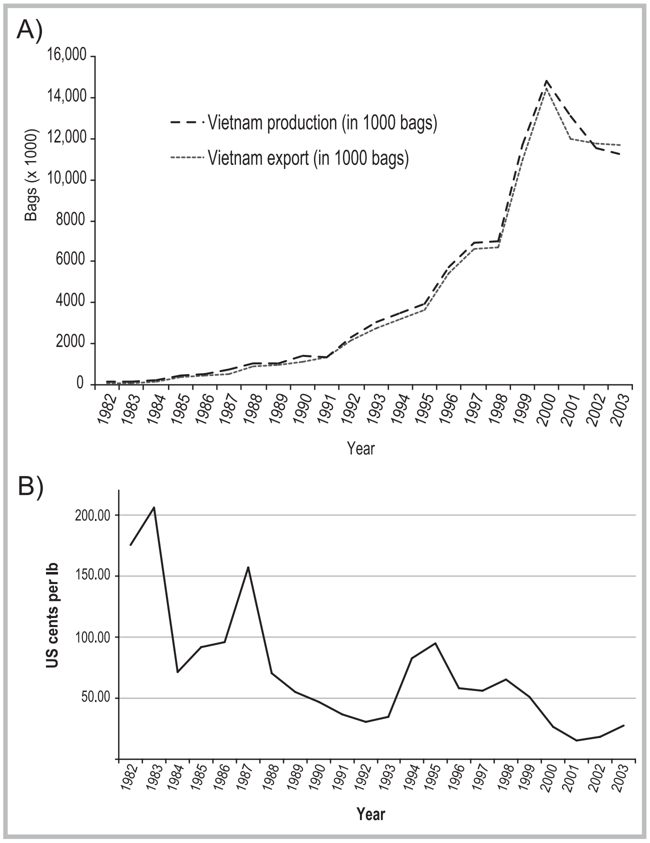
Overall, individual welfare in Vietnam increased between 1992 and 2002; but this was accompanied by rising income inequality. Urban areas tend to have a lower poverty headcount when compared to rural areas (Minot and Baulch 2002; Litchfield and Justino 2004; Thoburn 2004). Since 75% of all rural households in Vietnam earn their living primarily by farming on very small plots (< 1 ha), the risks of experiencing losses of welfare as a result of loss of labor, land, and crops is immanent (Glewwe et al 2004).

In the 5 years before the 1999 national census, 6.5% of Vietnam's population (4.5 million people over the age of 5) changed their place of residence (GSO 2001). While rural–urban migration dominates, Vietnam has a significant share of rural in-migration with over 2 million migrants moving between rural areas or from urban to rural areas. Vietnam's Central Highland region has received the largest number of rural in-migrants in the past 3 decades (GSO 2001, 2005). Migration is said to have played an important role in improving living standards in Vietnam during the 1990s (de Brauw and Harigaya 2007) and yet, despite the fact that Vietnam exports over US$ 500 million worth of coffee, most of which is produced in the Central Highlands, this region remains one of the poorest. Analysts agree that the rapid expansion of commodity agriculture, crop specialization and increased integration into global markets bear additional risks for small growers and thus generate greater livelihood insecurity (Osorio 2002; Dang and Shively 2007). To bring into focus the frequently neglected dimensions of rural in-migration, the present article briefly discusses the global coffee economy and its impact on Vietnam and its farmers; it then examines the specific risks for in-migrants who farm coffee in the Central Highlands and discusses how they manage these risks.

Influence of the global coffee economy on Vietnam and Vietnamese coffee growers

The combination of Vietnam's economic reforms since the mid-1980s (see Fforde and Vylder 1996), availability of natural resources in the uplands, and the ability to change residence status (Hardy 2003; GSO 2005) has resulted in a rapid influx of migrant laborers and farmers, precipitating a considerable rise in coffee production in the Central Highland region. Thus within a decade of entering the world coffee market, Vietnam has become the second largest producer of Robusta

FIGURES 1A AND 1B A) Vietnam's coffee production and export, 1982–2003. Production estimates: provided by members of the International Coffee Organization (ICO) for the current crop year and revised on a quarterly basis. After the end of the crop year, estimates are replaced by derived production. In the absence of estimates provided by ICO members, alternative sources are used (ICO 2006). B) Average price paid to Vietnamese growers in US cents per lb of Robusta beans, 1982–2003. (Source: ICO 2006)



beans in the world (Figure 1A). Coffee farmers in Vietnam face a number of challenges. Although the world's coffee consumption is rising, coffee prices have experienced a long-term decline over the past 2 decades. This results in highly volatile world coffee prices where cycles of boom and bust may last over 5 years or longer. Vietnam's rapid entry into the world coffee marketing chain as a major producer has contributed to the fall of real coffee prices to a 70-year low, resulting in a steady decline of the price of coffee beans paid to growers in Vietnam up until 2003 (Figure 1B; Greenfield 2002; Oxfam 2002).

For Vietnamese coffee growers, these global factors are exacerbated because there is no formal marketing board for coffee and the majority of coffee beans grown are of the Robusta variety, which has limited price differentiation potential due to its inferior quality when compared to Arabica beans. Growers have only limited information about the value of their crop and hence very little influence on the prices they are paid by middlemen (CRP 2000; de Fontenay and Leung 2002). The poor quality of soils and the hydrogeography of the Central Highlands mean that coffee plantations require high inputs of fertilizer and need to be irrigated (D'haeze et al 2005).

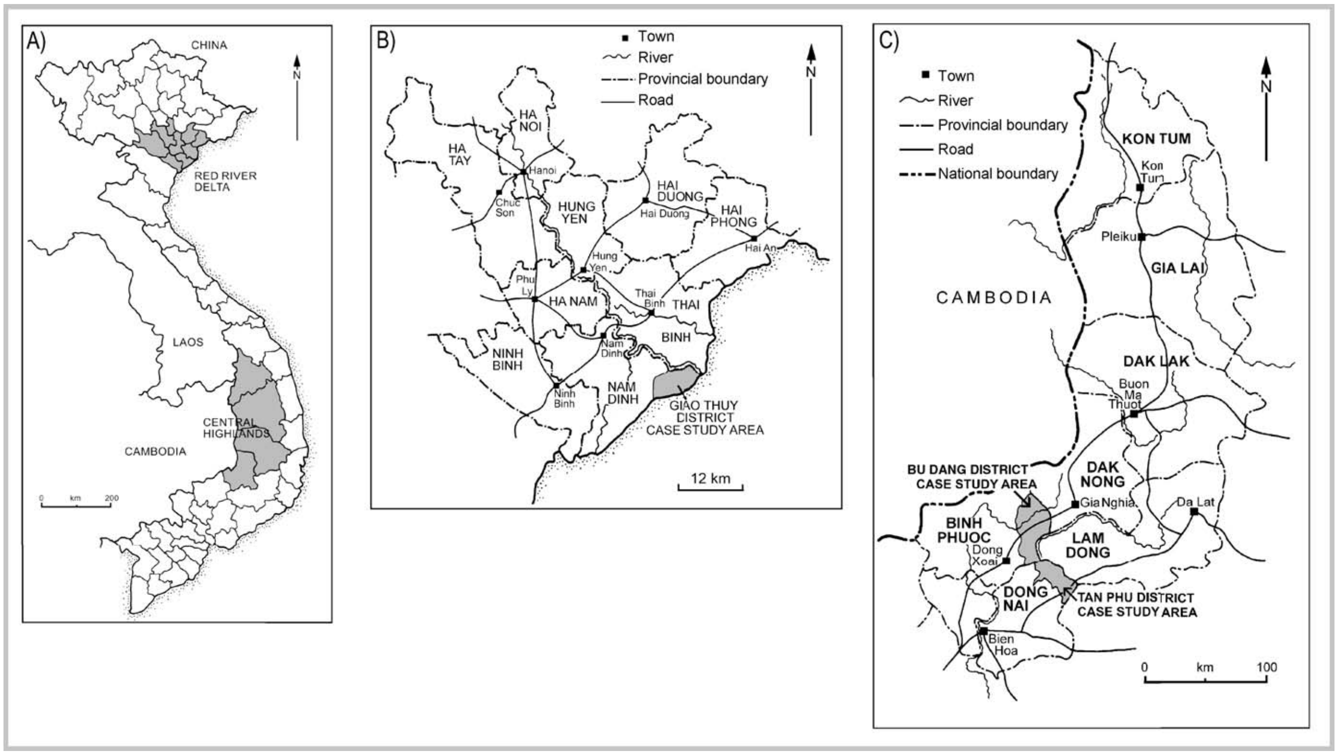
Study design and background

In 2000 and 2001, as part of an ongoing longitudinal study of the dynamics of rural to rural migration and migrants' livelihoods, qualitative research including migrants, migrant families, community elders, and officials was conducted. A case study approach was used, capturing the diverse set of experiences of migrants at the destination, as well as the experiences of migrant families in the home area. Figure 2A illustrates the location of the 2 case study areas, which were selected to complement each other rather than to yield comparable data (Stake 2000). One is a net migrant sending area in the northern Red River Delta, where we interviewed 53 migrant-sending households in Giao Thuy District (Figure 2B). In this district located 90 km southeast of Hanoi and characterized by high population densities and very poor per capita land endowment of < 0.7 ha per person (GSO 2001), migration is an important source of income.

Between 1994 and 1999 the Red River Delta was the second largest migrant sending area, after the Mekong Delta region, with over 400,000 out-migrants (3% of the region's population in 1999; GSO 2001). Migrant destinations of those interviewed varied between urban centers (Hanoi, Hai Phong, Ho Chi Minh City) and rural destinations (Central Highlands, northern uplands) and the sample design meant most households visited had at least one temporary migrant, albeit the period of absence can last years or even decades. These interviews highlighted important historical, political and demographic connections between the Red River Delta and the Central Highlands, where a second case study site was selected (Figure 2C; see also Hardy 2003; Winkels 2004).

In order to gain an understanding of this migrant receiving area, we interviewed another 28 migrants who settled at the southern plateau of Vietnam's Central Highland region 150 km northwest of Ho Chi Minh City, in the communes of Nam Cat Tien, Dak Lua (Dong Nai province) and Dang Ha (Binh Phuoc province). ("Central Highlands" is used here in the broader sense of a geographical region also known as *Tay Nguyen,* which includes the provinces of Gia Lai, Kon Tum, Dak Lak and Dac Nong, as well as former Central Highland provinces and bordering areas displaying similar agroecological characteristics, ie the provinces of Lam Dong, Binh Phuoc and Dong Nai.) Migrants interviewed originated primarily from the northern lowlands around the Red River Delta. The economy in this area is largely based on cash crops such as coffee, rubber, and pepper; nearly 80% of individuals throughout the Central Highlands grow perennial crops and vegetables (Glewwe et al 2004).

FIGURES 2A–2C A) Vietnam's provinces, with research locations in the provinces of the Red River Delta and Central Highlands. B) Giao Thuy District case study area. C) Bu Dang and Tan Phu case study areas. (Maps by Philip Judge)



The Central Highlands are Vietnam's rural region with the highest net in-migration rate partly because this once-forested region was long perceived as an 'empty' frontier area destined to absorb population surpluses from the northern provinces (Déry 2000; Hardy 2003). Around 1 million permanent migrants are said to have moved to the Central Highlands between 1976 and 1995, both as part of official resettlement programs and as independent migrants. This in-migration accounts for the majority of the region's population increase from 1 million in 1975 to 2.7 million persons in 1990 (Vu et al 2000). Around 250,000 migrants officially settled in the Central Highlands between 1994 and 1999 alone, which, together with natural increases, brought the total population up to at least 4.1 million in 1999 (GSO 2001). As a consequence, these parts of Vietnam are experiencing pressures on both natural resources and social stability, which are discussed in greater detail below.

Semi-structured interviews included questions about the respondents' livelihood status (family structure, education, economic assets, and income sources; see Ellis et al 1999), migration reasons, migration pattern, and exposure to risks and the way migrants manage these risks. The data collected during these interviews were enhanced through both visual techniques such as map drawing and timelines, and triangulation by means of group discussions and interviews with key informants. The iterative analysis of the interviews involved a systematic process of structuring, coding, and annotating data, using a qualitative analysis software (ATLAS.ti; see Miles and Huberman 1994; Muhr 2004). Migrants interviewed (60% of whom were male) had an average age of 27 years at the time of moving to the South; most were married and had children of their own.

Overview of main results

The majority of respondents (71%) migrated because they had limited income and assets (eg land) and therefore used migration to ensure themselves against livelihood uncertainties, ie floods and storm events, pests and diseases affecting farming (including shrimp farms), social exclusion due to landlessness, religious persecution, and loss of labor due to illness or death within a household. Nearly a quarter of all respondents used migration to enhance an already stable or even relatively wealthy livelihood (see Winkels 2004 for definitions of these categories); 5% of respondents did not give a reason for their migration.

While economic factors appear to be the major drivers for migration, prospective migrants are also influenced by migrant networks (Fawcett 1989; Gurak and Caces 1992). Families and friends who have migrated previously both facilitate and encourage prospective

TABLE 1 Sources of risk as experienced by migrant coffee growers. (Source: Migrant interviews, 2000 and 2001)

Type of risk	Source of risk
Economic	Initial investments in land and labor are expensive and many are in debt.
	Price collapse of globally traded crops in 1999, smallholder returns fall below investment costs.
	Limited access to public sources of loans.
Environmental	Floods and droughts, covariate shocks limit people's ability to reciprocate.
	Environmental degradation, loss of forest products and soil erosion.
	Access to good-quality land is becoming more difficult, increasingly marginal areas are exploited.
Socio-political	Restrictions on permanent residence permits limit access to social services, formal-sector employment and secure land tenure.
	Newly established upland communities provide limited community support, lack of social cohesion decreases personal security, and inability to register land results in stricter loan requirements.
	Disputes over land between groups with different ethnic and settlement histories causes insecurity.

migrants to move by lowering the costs and risks of moving, finding a job, and accessing resources in the destination (Dang 1998; Winkels 2005). Of all migrants interviewed, 81% had connections to familiar persons in the Central Highlands before moving there, the majority (61%) were ties to family members. In contrast, data collected from non-migrant households in the same migrant-sending area at the time of this research show that not only were non-migrant households economically better off, but they were less likely to have contact with a migrant (see Winkels 2004).

How do migrants manage the risks associated with coffee farming?

Migration generally involves numerous risks. Finding shelter, employment, or a suitable plot of land, not knowing about local customs and institutions, and accessing health care and other public services can be challenging for migrants and can affect their wellbeing (Sabates-Wheeler and Waite 2003). Supported by the interviewed migrants' accounts, the following sections describe the risks involved in the farming of coffee in Vietnam's Central Highlands and the various ways in which migrants attempt to manage these risks.

Economic risks and their management

Increased competition over agricultural land in the Central Highlands has led to steadily rising costs for arable land. Severe regional droughts in 1998 and 2001 have added further financial stress for coffee farmers (Adger et al 2001). Indeed, in order to establish a plantation, the majority of migrant coffee farmers interviewed had taken loans from state banks, private lenders, and family members prior to the coffee crisis in 1999. The drop in international coffee prices, however, meant that they were unable to recoup their initial investments and subsequently were unable to service their debts (see also Lindskog et al 2005; Dang and Shively 2007).

The fluctuations in coffee prices may put severe stress on households who overspecialize in one cash crop. While there are a number of macroeconomic tools to manage the impacts of commodity price fluctuations for small farmers, the best way is to diversify their crop production, thus providing a natural hedge against commodity price fluctuations (de Fontenay and Leung 2002). Interviews with migrants showed that many have taken the more vulnerable route of focusing their production on cash crop farming, making diversification more difficult, especially when other cash crop markets are not very well developed or suffering from a similar fate as coffee. From December 1999 through February 2001, coffee prices fell sharply (see Figure 1B) and migrants interviewed in 2000 and 2001 responded in various ways (Table 1). Those who were unwilling to sell their beans in the hope of price improvement sought additional loans to be able to keep their farms productive (see also Giovannucci et al 2004). Others responded to the crisis by planting different cash and subsistence crops, whereas those who could not afford to keep farming or who had better opportunities elsewhere were considering returning home or migrating to other destinations in search of non-farm employment. In 2001, during repeated visits to the case study sites, we observed that new migrants had moved into houses vacated by former coffee farmers who had moved to urban areas such Ho Chi Minh City.

The experience of Hong, a former seafarer from Giao Thuy District who moved to the Central Highland province of Dak Lak in 1995 to farm coffee, is illustrative of a commonly shared experience. Hong intended to diversify his income through farming coffee in order to pay back existing debts. However, the investments in his coffee farm meant he had to borrow more money from his nephews, who also worked in Dak Lak Province. By 1999, low coffee prices prevented Hong from recovering his investments. He therefore decided to invest in pepper. Hong's own words describe this dilemma:

> *"This year, the price of pepper will be much lower as well.… If the price of pepper further decreases, we won't continue farming pepper because it needs a lot of capital investment. But I am not planning to return just yet; I will still work there for some time. I haven't decided whether to stay [in Giao Thuy] or move to Dak Lak permanently."*

Most migrants aim to buy a piece of land (1–2 ha on average) as soon as they arrive, yet the majority act like Hong, leaving the decision of whether to settle permanently in the destination until a later date.

Another example is Thi and her family, who have been circling between their home community in Giao Thuy District and their farm in Dak Lak Province since 1993, when her parents had claimed land there. Her family's flexibility about whether to live in the northern lowlands or the highlands illustrates the flexibility with which migrant families manage the risks of upland farming. Thi explained to us:

> *"I think I won't go and live in the South, because we had difficulties sometimes. My parents may come back here [Giao Thuy] because they are getting older. At the moment they still farm in the Central Highlands. My brothers probably won't come back to Giao Thuy."*

This circling between the migrant's origin and destination may last years or even decades and may fulfill 2 important functions. On the one hand, it allows the household to maximize the return on its efforts by diversifying its assets, especially the return to labor power. On the other hand, it is an important risk management strategy in the face of changing upland economy.

The qualitative data collected for this study also highlight important functions of migrant network connections to family and friends, both at home and at the destination. Household members who remain in the place of origin—the spouse, father, or a sibling—often join the migrant during times of high labor requirements (usually during periods of soil preparation and harvesting). Similarly, financial capital tends to flow from the origin household to migrants for a number of years. Parents and spouses of migrants take out loans using their land and house in the Red River Delta as collateral in the hope that successful highland farming will benefit all members of the household in future.

This support by migrant networks is important in light of in-migrants' limited access to public services and support. The majority of migrants interviewed were still registered at their place of birth and had only temporary residency in their destination. Vietnam's household registration system (*ho khau*) requires that public services such as health care, schools, and pensions only be accessed in the place of permanent residence and therefore excludes many migrants from accessing these services in the destination (Hardy 2001; GSO 2006). The many uncertainties with respect to globally traded cash crops mean that it is in many in-migrants' interest to stay registered in their home area to be able to further draw on resources outside the highland economy.

Within the community of farmers in the destination areas, in-migrants also tend to rely primarily on those they knew before they migrated. On the one hand this reduces the risk of relying too heavily on strangers and traders in gaining access to land and knowledge about both farming techniques and prices for coffee beans; on the other, the fact that migrants tend to relate mostly to their "hometown" friends in the destination may limit their access to more relevant information and social networks outside their peer group (Winkels 2005).

Environmental risks and their management

Strongly linked to farming activities in Vietnam's uplands are negative impacts on the region's natural resources. Between 1943 and 1995 the area of Dak Lak, Kon Tum, Gia Lai, and Lam Dong provinces, then officially considered part of the Central Highlands, experienced a decline of primary forest from 93% to 57%, ie from around 51,000 ha to 31,000 ha (Vo et al 1998). At the same time, the area planted with coffee trees in Vietnam rose from 22,500 ha in 1980 to 530,000 ha in 2000, three-quarters of which are cultivated in the Central Highlands (Giovannucci et al 2004). Pettenella (2001) outlines the complex combination of factors that are responsible for forest decline in Vietnam's uplands: population pressure due to migration, reduced fallow periods, privatization of state forest enterprises (providing a stimulus for commercial logging), road building, hydroelectric developments, and Vietnam's increased integration into international markets. The influence of national and local governments in the unfolding environmental degradation of Vietnam's highlands, as well as unclear definitions of property rights on forest lands, are highlighted by Sikor (2002, 2004).

The result of this widespread reduction of forest resources has many negative implications for ecosystem health and biodiversity as well as for livelihoods that depend directly on forest resources (Rambo and Jamieson 2003). Deforestation has also been linked to the increasing number of localized floods and droughts in the Central Highlands (Adger et al 2001). The response to these shocks differed widely among those affected in the migrant group interviewed, largely depending on their asset base and level of debt. Some of those affected started to migrate to other areas to work as farm laborers in order to make ends meet. Others had sufficient capital to rebuild and improve their houses and to continue farming. The study design allowed us only to meet in-migrants who were present at that moment in time, thus making it difficult to achieve a first-hand assessment of whether many migrant farmers moved away or returned home in response to flooding events or droughts.

Soil erosion and the depletion of groundwater resources are both serious problems in the Central Highlands, and access to good-quality land is becoming more difficult according to migrants interviewed. Smallholder coffee farmers often lack adequate support and knowledge to prevent these problems and end up paying with decreased yields and higher costs for fertilizer and irrigation (Beckman 2001; Giovannucci et al 2004). As illustrated above, migrants respond to the unpredictable nature of coffee farming in such a fragile environment by not changing their residence status permanently. This short-term view and temporary nature of living in the destination provides migrants with a certain livelihood advantage, as they are able to return home once they experience diminishing returns. However, this attitude also means that migrants are less willing to invest in sustainable techniques necessary to prevent soil loss and ensure water is abstracted at sustainable levels.

Sociopolitical risks and their management

As a result of the rapid in-migration of lowland Vietnamese—*Kinh,* ie "people from the capital," who are in a majority with 86% among of Vietnam's 54 ethnic groups—as well as migrants from the northern mountain regions (belonging to a range of other ethnic minority groups), the ethnic makeup of the Central Highland population has changed dramatically in the past 4 decades. Until the French occupation in the early 19th century, the indigenous population of the Central Highlands was dominated by the *Ede*, *Bana* and *Jarai* ethnic minorities, who made up 95% of its population (Chu 1995). Yet, by 1999, at least 65% of the highland population belonged to the *Kinh* ethnic group (Rambo and Jamieson 2003, p 139).

The competition for resources and administrative bias towards *Kinh* leave indigenous ethnic minorities in the highlands to search for livelihoods in more marginal areas, where they are more exposed to climatic variations and poorer soils (Rambo and Jamieson 2003; Zingerli 2003). As a result of these pressures, the uplands are witnessing increasing social tensions. Since 2001, for example, several demonstrations by ethnic minority groups were held in the Central Highland provinces of Dak Lak and Gia Lai against discriminatory state policies that tend to favor *Kinh* in-migrants in resource allocation (McElwee 2001; Human Rights Watch 2002).

Interviews with migrant settlers in the Central Highland region show that social tensions also exist *amongst* in-migrants in newly established highland communities. The diverse ethnic, cultural, and economic backgrounds of in-migrants settling in these communities mean they are less likely to develop a sense of social solidarity and trust (Sandefur and Laumann 1998). This sense of insecurity for migrant coffee farmers is exacerbated by resource pressures, remoteness, insufficient investments by local and national governments, protracted legal recognition of land titles and community status, and the above-mentioned restrictions on access to public services by in-migrants who have not been registered (GSO 2006). It is therefore not surprising that migrants manage these uncertainties by leaving their children at home to be looked after by their grandparents. As labor requirements on coffee farms often require both husband and wife to migrate together, a number of interviewees left their children of school age with their grandparents.

In their absence, migrants also rely on those who stay behind to look after their allocated plots of land in their home area, which would otherwise be reallocated by district authorities. However, when migrants draw on resources through their networks, for example by asking other household members to provide monetary support or help by looking after children and/or land, this can also have detrimental effects on the wellbeing and security of other family members who remain at home. The loss of any investment in migrant farming activities may therefore not only leave the migrant struggling, but also lower the capability of the remaining family to respond to risks. To illustrate this, it is worth quoting at length an account of Mr Tam's experience.

Mr Tam is 61 years old and has 3 children. He has 2 sons who work in the Central Highlands as migrant farmers, and one daughter who lives with an aunt in Ho Chi Minh City in order to work and be treated for a chronic disease, using much of the household's savings to pay for medical treatments. In 1997, one of Mr Tam's sons purchased half a hectare of land in the uplands to plant coffee and pepper. In order to be able to afford the investments for his plantation, Mr Tam took out loans for his son. However, as perennial crops take a number of years to mature and because of the subsequent price collapse of coffee, Mr Tam is unsure whether his son will be able to pay him back. In the meantime, he has had to sell his own assets to pay back the loan:

> *"Last year… I borrowed 3 million VND [US$ 207] with 1% monthly interest. I paid back 1 million, now I owe 2 million. My son sent me some money to pay the debt. And I had to sell a pig to pay 1 million VND [US$ 69]… I haven't had any more money to pay. I don't know if he will send me the rest. He hasn't harvested yet, his first crop will be ready next March."*

Mr Tam and his wife remain in the Red River Delta and look after their children's land. Yet, they find it difficult to plant these fields because they lack labor power. They can only partially draw on community resources, as they are unable to repay any obligations:

> *"Since my son went to the South, my wife has been planting rice on his field. During the harvest season, I have to hire laborers. I exchange work with others, but it is still not enough labor for all the land. Because in the harvesting season, others have to harvest in their field, so they don't have time to work with us. In my family, there are only 2 laborers. We can't plant for others because my family lacks laborers. In the harvesting season, they will share work with us, but in planting season they won't because we can't plant rice for them."*

While Mr Tam and his wife may benefit from the increased land resources at their disposal, they are actually unable to do so as they lack the necessary labor power. Moreover, because they have more land to farm than they are able to, they cannot exchange labor with others, thus reducing their own stock of social obligations—which they could normally call upon when they require the help of their neighbors. Therefore, while providing insurance for his son, keeping land for his son becomes a drain on Mr Tam's household resources. With the uncertainty related to export markets in the Central Highlands, it is unclear whether Mr Tam's children will profit from their investments. What is likely, however, is that Mr Tam's livelihood has become less secure with the migration of his children.

Conclusions

This study highlights some of the complexities of rural-to-rural migration processes and their impacts on economic and social development in Vietnam's Central Highland region. The study draws attention to the sources of risks of coffee farming as perceived and managed by migrant coffee farmers. Findings indicate that migrants manage the risks associated with coffee farming primarily by drawing on resources available through their migrant network. Family members staying at home frequently provide migrants with additional labor power and financial capital; they also enable migrants to leave their children behind and maintain their claims to allocated land while being absent. Household relations therefore provide an important mechanism to mitigate, and cope with, the risks involved in coffee farming and migration under both globally and locally unpredictable circumstances.

While staying registered in the migrant sending area provides migrants with a buffer, the fact that all migrant household members tend to invest labor and money into migrant activities—in this case coffee farming—may spread the risks from migrants to those who stay behind. For the elderly parents of migrants, loaning money to their migrating children and looking after their grandchildren has been shown to put an increased burden on them, reducing their own ability to respond to new opportunities or to cope with additional livelihood stress (see also Moser 1997).

This analysis of the challenges resulting from rural in-migration is important for at least 2 reasons: first, the fact that many coffee farming migrants consider migrating to other destinations when faced with the financial consequences of the global price collapse of coffee, means that urban and industrial zones located near the Central Highlands act as safety valves for unsuccessful investments in globalized commodity agriculture. The extent to which this affects Vietnam's urbanization challenge (Douglass et al 2002; Roberts and Kanaley 2006) needs to be investigated further.

Secondly, the research presented here indicates that it is important to include the dynamic nature of the global economy in an analysis of local livelihood strategies, of which migration is but one. While most of Vietnam's regions have experienced both human and economic development gains, the inhabitants of the Central Highland region are amongst the poorest, despite the region's key role in producing crops for export (Glewwe et al 2004). The main reasons are the economic and social marginalization of its ethnic minority inhabitants and the challenges faced by most small upland farmers in Vietnam: remoteness from markets and the lack of support from producer organizations, which means any decline in price will be transferred to the producer (Tan 2007). However, while migration to the Central Highlands contributes to unpredictable markets, social tensions, and environmental degradation, in-migrants also suffer the consequences of this process. This paper therefore argues that in order to provide a true assessment of human development in the uplands in the context of globalization, it is crucial to consider the linkages between uplands and lowlands and the effectiveness of the risk management strategies employed by migrants and their families, as these may undermine the ability of migrant households—in both origin and destination—to cope with further shocks and risks.

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