TWO SIDES OF THE SAME COIN: HUMAN MOBILITY IN FRONTIER AREAS OF BRAZIL AND INDONESIA

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ABSTRACT

This paper addresses the volatile nature of agricultural frontier settlements in the Brazilian Amazon and Indonesia. Emphasis is placed on public policy and regional development plans, human mobility and survival strategies deployed by settlers in frontier areas. Despite located in much different longitudes, Brazil and Indonesia share a series of frontier-related traits, such as policy building, migration and circulation patterns and processes, environmental degradation, and cultural clashes. By addressing the realities of frontier expansion in Brazil and Indonesia in a comparative fashion, this study subsidizes the policy debate on stable and sustainable settlements in tropical regions.

Key words: Agricultural frontier; Mobility; Brazilian Amazon; Indonesia.

Frontier colonization is an integral part of the development strategies of many tropical nations. This strategy has been offered as the panacea for population pressure in poverty-stricken areas worldwide, including Brazil and Indonesia (DINIZ, 2002). One of the legacies of colonial times in Brazil is the heavy concentration of cities and population within a few kilometers away from the Atlantic Ocean, and a vast empty interior. Unbalanced occupation and economic development have inspired a series of centrally-planned measures to redistribute population and promote the economic betterment of remote areas. The Amazon region, the last Brazilian frontier, has been the centerpiece of a series of strategies over the last decades, which has called on heavy public and private investments in infrastructure, industries, mineral resources exploration, agriculture, and ranching (Fig. 1). Coloniza-

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tion projects have also been implemented throughout the region as a response to population pressure in Northeast Brazil. As a result, the Amazon region has experienced a tremendous demographic growth, primarily via immigration.

![Brazil, political division](image)

Figure 1. Brazil, political division.

The Indonesian population is also unevenly distributed, displaying a heavy concentration in Java, Bali and Madura, and virtually uninhabited outer islands (Fig. 2). The fast population growth of recent decades has not been translated exclusively in urbanization, but instead, it has resulted in the expansion of agricultural land, leading to further deforestation and severe environmental impact (OEY, 1980). The Dutch and eventually Indonesian authorities have implemented measures to relieve population pressure by transferring families to less densely populated areas. Despite rampant criticism, theses measures have triggered significant migratory flows. Besides frontier-bound movements, the Indonesian mobility system is also characterized by intense permanent and non-permanent rural-urban flows.
Similarities between the Indonesian and Brazilian mobility systems are impressive. This paper discusses frontier expansion and evolution in Brazil and Indonesia. Emphasis is placed on policy building and the associated human mobility. By doing so, this study provides a better understanding of the settlement system and the variegated forms of geographical migration\(^1\) and circulation\(^2\) embedded in the formation and demise of places, subsidizing the policy debate regarding the promotion of stable and sustainable settlements in the Brazilian Amazon, Indonesia and other tropical regions.

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1. In geographical terms, migration is defined as a “permanent or semi-permanent change in place of residence” (LEE, 1966, p. 49). Such a change encompasses different scales of moves ranging from a change of domicile within the same city to inter-continental moves (WHITE; WOODS, 1980, p. 3). Plane and Rogerson (1994, p. 93) expand this notion by stating that migration is “almost always operationally defined to be a move across a political boundary of some sort”. The U. S. Bureau of the Census counts as migrants only those persons who change their usual place of residence from one county to another. IBGE, the Brazilian agency responsible for Census recording, adopts a similar definition, regarding as migrants those who move across municipal boundaries.

2. Circulation implies seasonal or temporary movements such as those undertaken by migrant workers, transients, nomads and students (PLANE; ROGERSON, 1994), without change in residence. Circulation covers “a great variety of movements, usually short-term, repetitive, or cyclical in character, but all having in common the lack of any declared intention of a permanent or long-lasting change in residence” (ZELINSKY, 1971, p. 226).
AMAZONIAN DEVELOPMENT

With the military coup of 1964, an autocratic and nationalist government took power in Brazil with a well-defined plan of action. Inspired by the Doctrine of National Security, the military governments attempted to promote the harmonic implementation of economic development and national security (MATTOS, 1975; FORESTA, 1992). According to this frame of thought, the key to Brazil’s future was to be found in the continental interior, most notably in the Amazon region. Therefore, the region became the centerpiece of a series of plans which, among other things, sought to protect Brazil’s vulnerable interior from foreign intrusion; to solve the agrarian problem without threatening property rights of those who supported the coup (the bourgeois); and to exploit regional resources in order to meet foreign debt payments. In attempting to simultaneously address all these objectives, different interest groups were benefited and policies were remarkably inconsistent. These measures, in turn, generated a series of social problems and conflicts over regional resources.

Under General Castello Branco, ‘Operation Amazônia’ set the tone for the Amazonian development, by granting fiscal incentives to entrepreneurs. Corporate entities were prioritized, because they had the administrative capability to address regional infra-structural problems. These actions resulted in a plethora of national and transnational ventures, which invested heavily on cattle ranching (SAWYER, 1984; CORREA, 1987; VALVERDE, 1990).

The early 1970’s prompted a severe policy change in favor of the rural poor. Growing social inequalities and tensions in rural Brazil, coupled with pronounced droughts in Northeast Brazil, were some of the major issues of the time (FORESTA, 1992). Within this context, President Médici launched the First National Integration Plan, which called for the construction of roads and the creation of colonization settlements, benefiting the landless peasants of Northeast Brazil (MATTOS, 1980; HECHT, 1984; HENRIQUES, 1984). In the mid 1970s, policy changed again in favor of corporations and capitalized farmers, as the government sought a faster and cheaper occupation of the region (FEARNSIDE, 1989; BECKER, 1990; VALVERDE, 1990).

Soaring international interest rates raised the Brazilian foreign debt to over US$ 100 billion in the late 1970’s, prompting another policy shift in the Amazon. President Geisel launched the POLAMAZÔNIA program, seeking to boost agro-ranching and mineral development poles throughout the region, as a means to generate extra revenue to meet foreign debt payments.
President Figueiredo continued Geisel's emphasis on natural resource exploration, as minerals prospecting in the so-called ‘great projects’ became the trademark of the Amazon during the late 1970’s and early 1980’s.

In 1986 the civilian government was restored by the so-called ‘New Republic’. More environmentally sensitive than his predecessors, President Sarney created another development plan for the region, which sought to catalyze regional economic growth, while maintaining ecological balance and reducing social inequalities. By the mid 1990’s, the Amazon was plagued by a panoply of problems, including drug trafficking, smuggling, unorganized peasant colonization, occupation of Indian lands by spontaneous settlers, illegal mining, wood exploitation and widespread ecological devastation (DINIZ, 2002).

The enormous size of the region, coupled with difficulties in communication, made knowledge and control over legal and illegal activities virtually impossible. Seeking to regain control and understanding of the Amazon, President Cardoso unleashed the SIPAM/SIVAM project, whose goal was to collect remote-sensed information on the region to protect the local environment, improve air safety, increase weather forecasting accuracy and promote more effective law enforcement and border control, among other things (RAYTHEON, 1996; SAE, 1997; SIVAM, 1997). But SIVAM also had a clear defense motivation, as it was charged with the responsibility of watching over the aerial and terrestrial Amazonian space.

The neoliberal waves that swept through Brasilia during the 1990’s diminished substantially Federal intervention in regional affairs. President Cardoso’s rule was marked by increasing budget cuts on regional development programs and a laissez-faire approach towards the Amazon. Still, spontaneous migrants kept arriving in the region in search of land. This massive spontaneous migration was matched by the expansion of ranching and mineral operations and a more intensive utilization of resources. Competition for local natural assets among such different players, coupled with confusion over land titles and the inappropriate demarcation of Indian territories, engendered violent incidents involving different interest groups, which in turn promoted intense intra-regional mobility (DINIZ, 2002).

FRONTIER EVOLUTION AND MOBILITY IN THE BRAZILIAN AMAZON

The inconsistent policies reviewed earlier led to a highly volatile settlement system, marked by constant land-use and socio-economic changes and
rampant internal migration and circulation. The recent literature on human mobility in the Brazilian Amazon is extensive and highlights the fast urbanization of the region.\(^3\) These studies tend to be grounded on historical/structural perspectives and on frontier evolution models (NEIVA, 1949; MARTINS, 1975 and 1997; HENKEL, 1982; FOWERAKER, 1981; FINDLEY, 1988; BROWDER and GODFREY, 1990), offering as explanation for the massive urbanization process the displacement power of the encroaching capitalist mode of production.

Diniz (2002 and 2003A) synthesizes the major ideas embedded in those models of frontier evolution and Amazonian mobility studies in a framework, which depicts the structural transformations of frontier settlements and the variegated forms of human mobility therein. The model breaks up the evolutionary spectrum in four stages: pioneer, transitional, consolidated and urbanized.

According to Diniz (2002 and 2003A), pioneer frontiers start with the spontaneous arrival of landless peasants in a given area. Once settled, those individuals remove the natural vegetation and plant subsistence crops, establishing a peasant mode of production (CHAYANOV, 1966). Migration chains\(^4\) dominate the system, constituting the primary migration type, linking pioneer frontiers with very specific rural origins. In the process, informal communication channels strengthen the links between pioneer frontiers and very specific migrant source areas.

Transitional frontiers are increasingly marked by economies based on commercial agriculture and extractive activities. Land becomes scarce and incipient labor and land markets arise, as properties become progressively more consolidated. Earlier settlers begin out-migrating, especially due to legal battles over land ownership, lack of capital, inability to compete with mass producers, and changes in the productive systems introduced by large-scale farmers and ranchers. Settlers of transitional frontiers are drawn from a limited number of places, relying on migration chains, but not to the same degree as pioneer frontiers, given the improvements on transportation and communication networks.

Consolidated frontiers are characterized by capitalist-oriented enterprises, waged labor, costly land prices and land concentration. Land now serves large speculative holdings and capital-intensive agribusiness. Local popula-

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\(^3\) See Diniz (2001) for a complete review of major works on frontier mobility in Brazil.

\(^4\) Chain migration is a process defined by the evolution of successive in-migration waves composed of related individuals.
tion is sparse, as a large number of earlier settlers have out-migrated, while remaining ones have been converted into wage laborers. Such places also rely on year-round transportation facilities and regular transport lines. Immigrants still rely on informal communication systems, but the importance of migration chains diminishes substantially. Most consolidated settlers do not own the land they live in, as they are, for the most part, farm and ranch workers.

Urbanized frontiers are outcomes of embryonic urban nuclei created at the heart of colonization and settlement projects. Those emergent urban centers are present throughout the evolutionary process, but they gain momentum during later phases, becoming major reference points for displaced settlers. Besides displaced peasants, those urbanized frontiers also attract a pool of better-off migrants pulled by the installation of various governmental offices, military bases and commercial businesses (SAWYER and CARVALHO, 1986; SILVA, 1986; DINIZ, 1997). The role of migration chains is even smaller at this stage; while formal communication channels influence an increasing number of moves.

Based on this process, Becker (1990) contends that present-day Amazon is born urbanized as a strategy of occupation by the State, which deliberately transferred large quantities of workers to the region in order to supply manpower for its many projects. Godfrey (1990) concurs with this notion, adding that the urbanization of the Amazon stems from the strategic formation of a mobile work force intermittently engaged in diverse forms of resource extraction and rural-type work. According to Godfrey (1990), because settlers cannot obtain or maintain subsistence plots, many congregate at urban places, serving as a reserve of occasional wage laborers.

Therefore, one basic point of agreement in this literature is that the Brazilian Amazon frontier can no longer be conceptualized as a ‘safety valve’ to population pressure in older communities. In fact, the Amazonian frontier is ‘closing off’ opportunities for the landless and the small scale farmer, given the changes taking place in production and land tenure systems, soaring land values and land consolidation (SAWYER, 1981 and 1982; MARTINE, 1984; JARDIM, 1987; HENRIQUES, 1988).

It also becomes clear that frontier-bound migration in Brazil is the fruit of a complex social network. These movements are strongly based on informal communications channels and migration chains connecting communities thousands of miles apart. In the process, a given peasant (innovator) settles in a pioneer area in search of land. During his/her stay, letters and phone calls keep ‘stayers’ abreast of what goes on in the frontier. But once the
‘innovators’ secure land, the second wave of peasants (‘followers’) soon arrive, temporarily settling, on a share-cropped basis, the plots of related ‘innovators’. In-migration intensifies as ‘followers’ gain access to land, prompting the arrival of successive waves of migrants.

Circulation is ubiquitous among rural settlers, representing one of many forms of income maximization and adaptation (DINIZ, 2003B). Family units tend to split up in order to extract the best from rural and urban settings. Based on this strategy, women and younger children remain in urbanized frontier areas, where facilities are present, while men and older children attend rural plots in pioneer areas. As part of the scheme, women supplement family incomes by performing service-type jobs in urbanized areas. During the key phases of the production cycle; however, women and younger children temporarily circulate in rural plots, helping their folks with labor-intensive tasks such as harvesting and planting (DINIZ, 2003B).

Job-seeking circulation is also evoked as a means to supplement family incomes. Individuals originating in pioneering areas perform temporary jobs, such as forest clearing, in nearby capitalist-organized ranches and farms during the hiatus of the production system. These temporary jobs are undertaken in order to meet cash demands imposed by the encroaching capitalist system. But job-related circulation and commuting also take place between pioneering and urbanized areas, where individuals engage in the informal economy, working primarily in construction and street vending (DINIZ, 2003B).

Having explored the dynamics of frontier evolution and mobility in the Brazilian Amazon, I now turn to a brief discussion on major past and current population movements in Indonesia, which greatly resembles that of the Brazilian frontier.

INDONESIAN CONTEXT

According to recent population estimates, Indonesia has around 216 million unevenly distributed people throughout its many islands. Java, which covers only 7% of the territory, holds 60% of the entire population (Central Bureau of Statistics, 1995). This concentration is a result of heavy investments in infra-structure promoted by Dutch authorities before the end of the nineteenth century. Those changes reduced death rates, while birth rates remained high, launching Java into phase two of the demographic transition (TAEUBER, 1987). Moreover, a high proportion of land area in Java
can support wet rice cultivation, while an extensive irrigation system permits rice land to be double-cropped in the island. These advantages are found nowhere else in Indonesia, fuelling the concentration problem (DIFE, 1974).

Indonesia is an eminently agrarian society, as around 70% of the population inhabits rural areas (Central Bureau of Statistics, 1995). Because of the agglomeration of people in rural areas and the limitation of agricultural land, a limited number of families own land, and among those who possess some, plots are relatively small. Recent population growth combined with an atomized land-tenure system led to severe environmental impact, as the typical spontaneous response among land-hungry peasants has been the expansion of agricultural areas and farming terraces into steep locations. As a result, there are hardly any tracts of forest stands left outside protected areas, and Indonesia’s soil erosion is one of the highest on earth (GOELTENBOTH, 1996).

Within this context of population pressure, human mobility is rampant, being dominated by three major types of movement: expressive migratory flows from Java to the frontier-like outer islands; increasing rural-urban migration within Java; and substantial short-term migration and commuting between rural and urban areas (McNICOLL, 1982).

**Human Mobility in Indonesia**

Dutch authorities have been aware of the population pressure in Java since the beginning of the twentieth century and have adopted measures to minimize the problem. In 1905, Colonial authorities set forth a colonization program, which called on the resettlement of families from Java to Sumatra (DIFE, 1974). Those first migrants received a plot of land and financial aid to settle the new areas, but owing to heavy expenditures the government decided to revise this system de-emphasizing the resettlement program. Still, this first attempt set in motion a series of spontaneous movements, as successful settlers were followed by relatives and friends into the Sumatran frontier. Needless to say, this informal system greatly reduced the costs of fomenting population relocation into frontier-like outer islands (OEY, 1980). Despite promoting the migration of many families away from Java, the program did little to alleviate population pressure in the island, as out-migration represented a small fraction of the overall population growth during the 1900-1940 period (GOELTENBOTH, 1996).

After independence, the Indonesian government revived the resettlement
program under the name of “Transmigration”. The program’s main goal was to improve the living standards in Java and Bali, by fostering 7 million families’ out-movement to frontier areas between 1953 and 1987. This plan, however, was rather unrealistic, as by the early 1990’s around 900,000 families had actually out-migrated (GOELTENBOTH, 1996).

The New Order government took power implementing a series of five-year development plans, in which Transmigration began to be conceptualized as an instrument of regional development, capable of catalyzing economic betterment in frontier-like outer islands. The program relied heavily on international support, especially from the World Bank, and had a considerable impact upon net-migration from Java to the outer islands (HUGO et al., 1987).

But despite a certain degree of achievement, the Transmigration program received heavy criticism. First, some critics consider Transmigration a way to develop frontier islands, rather than a solution for the Javanese population problem (HAWKINS, 1967). Goeltenboth (1996) posits that the official promotion of population movements has triggered further environmental destruction. The author claims that, between 1985 and 1990, 80% of the transmigrating families were settled in forested areas, resulting in the demise of about 33,000 ha of mountain rainforest. Moreover, given the environmentally blind and poorly planned nature of settlements, there has been renewed remigration into other frontier areas and further environmental impact. Goeltenboth (1996) demonstrates that, in Kalimantan, 16 former Transmigration projects have been carried out, leaving critical land in the outer islands. Moreover, in Sumatra, Kalimantan and Irian Jaya, numerous transmigrants are involved in quarrels with local populations over land resources. Even war-like fighting between peoples totally foreign to one another, in their own country, has taken place.

Confronted with heavy criticism and lowering oil prices, the Indonesian government has curtailed Transmigration budgets over the years, while increasingly turning to ‘spontaneous’ migration as a solution for the population pressure in Java. But the fundamental problem is yet to be resolved, as the government is still facing a growing need to identify sufficient new land for settlement.

5 The term represented the “resettlement of people from one area to another within the boundaries of the state for the purpose of permanent settlement” (SJAMSU, 1960, p. 78, apud TAEUBER, 1987).
Unlike in the Brazilian Amazon, urbanization in Indonesia has been rather slow. In fact, until today a large proportion of the Indonesian society dwells in rural areas. Nevertheless, this figure is highly deceiving as the relatively modest pace of city expansion in Indonesia is directly linked to the urbanization of labor, rather than to the urbanization of residence (Central Bureau of Statistics, 1995).

A study by the United Nations reveals that circular and seasonal migration from surrounding areas of Jakarta have become increasingly important, rendering conventional urbanization measurement irrelevant. Despite the official decline in permanent in-migration to the city, it is widely acknowledged that Jakarta’s population endures a growth rate faster than official population figures indicate, given intense commuting, circulation and seasonal migration (United Nations, 1989).

The first evidence of such trend came from a survey of 14 West Java villages conducted by Hugo (1982). After examining all permanent and non-permanent moves associated with work and formal education, Hugo found that only one third of all such moves met census migration-time criteria. Among these unrecorded moves were commuting up to 50 kilometers to work or school, and circular migration, whereby the movers did not change their usual place of residence in the village, but were absent in the city for up to six months. The study also revealed that, once in the city, temporary migrants tended to engage in non-permanent employment, while maintaining some sort of village-based employment. Another important result is the close linkage between circular migration and the agricultural cycle, as most of these moves take place during the crops’ maturation period – between planting and harvesting (Hugo, 1982).

Forbes’ (1989) study of circulation patterns among petty producers of Ujung Pandang town, in Sulawesi, corroborates that trend. The vast majority of surveyed individuals were born outside the Ujung Pandang town, mostly in surrounding rural areas. However, despite dwelling in the city, migrants displayed strong ties with original villages, visiting birthplaces regularly. Rice harvesting season is the time of the year when these return moves are more intense.

Another important trait of Indonesian human mobility system is the fact that much of the circular migration and commuting tend to occur along well defined contact networks, attesting the importance of informal communication channels and aid groups, which foment and support the mobility process. The majority of migrants in West Java employed themselves in the urban informal sector largely because of the freedom to select working...
days and hours. Evidence also shows a substantial degree of occupational clustering (HUGO, 1982), as the type of urban jobs a given migrant or commuter performs depends on the village where he/she originates from (FORBES, 1989).

Bundschu’s (1989) study corroborates this trend, highlighting the importance of migration chains in temporary and permanent moves. Accordingly, migrants acquire information on suitable opportunities about destinations from those family members and acquaintances that had already experienced the migratory adventure. In addition to the provision of information, second-wave migrants count on their predecessors’ provision of food and shelter during the period of adaptation to the new destination.

Circulation is not a new phenomenon, dating back to colonial times. However, its larger scale and shorter periodicity are more recent phenomena, being facilitated and stimulated by innovations in public transportation (HUGO, 1978; HUGO et al., 1987). Other factors fomenting those temporary moves are related to the circulators’ selectivity. Those individuals tend to be predominantly male, in the age cohorts of 15 to 39, generally holding six years of education or less. Moreover, there seems to be a positive relationship between educational levels and traveled distance, as those with higher levels of education travel further (United Nations, 1989).

The motivations for these rural-urban-rural movements are diversified, but are usually related to population pressure and poverty. Bundschu (1989) identifies as the predominant push factors: landlessness and land scarcity due to increasing population, lack of non-agricultural jobs, insufficient educational and training establishments, lack of opportunities for occupational advancement, low incomes, dependence under conditions of tenancy and inadequate supply of goods and services. Forbes (1989) goes further, stating that, despite being complex, the push factors tend to reflect economic pressures associated with the expansion of the capitalist mode of production. Conversely, urban destinations attract those individuals with the supply of non-agricultural jobs, educational establishments, better occupational advancement opportunities, higher incomes and varied supply of goods and services.

Migratory circulation and commuting have profound socio-economic impacts on originating communities. Hugo (1979) demonstrated that the social costs of circulation for sending communities might be negative, as gotong-royong (self-helping groups) projects are threatened. Moreover, circulation jeopardizes the selection of local leaders, and the number of young and strong people in the community decreases. Circulation has also impor-
tant effects upon family structures and social division of work (FORBES, 1989). The dual localization of families promotes a gender division of labor, as the women left behind continue to work the subsistence fields, while men engage in cash-related activities. Moreover, there also seems to be a generation-related division of work. In this case, the entire family nucleus may engage in circulation, while the older folks (parents, aunts and uncles) are left behind, receiving regular money remittances.

On the other hand, the return of more educated and capitalized groups of migrants tends to compensate for problems generated by out-migration. Migratory circulation has positive economic impacts upon originating villages, as money remittances represent a large share of household incomes of those who left for the cities (HUGO, 1979). Moreover, according to Forbes (1989), circulation represents an important escape valve for the structural changes presently under way in Indonesia, as it postpones the capitalization of the rural sector, preserving traditional practices and forms of land-tenure. As money remittances are not employed in land acquisition, but instead in food, clothing and basic needs, cash influx does not lead to land consolidation and other structural transformations in villages.

DISCUSSION

This broad review on frontier evolution and human mobility in Brazil and Indonesia brings to light pronounced resemblances. It is true that any systematic comparison between the realities of Indonesia and Brazil is jeopardized by the fragmented way in which survey-based works are found. Moreover, the different methodologies, operational concepts, focuses, and epistemologies embedded in the various papers reviewed here hamper detailed contrasts. Still, there seems to be striking similarities between Brazil and Indonesia in terms of population policy and mobility patterns and processes. I now briefly point the more noticeable similitude.

First, moved by the need to alleviate population pressure and promote regional development in unoccupied or scantly occupied areas, Brazil and Indonesia have promoted a series of strategic programs in recent decades. These plans have brought about heavy investments in roads, railroads, industries, mineral resources exploration, agriculture, ranching and colonization projects, fostering the transference of thousands of families from poverty-stricken areas. In Brazil, the Amazon region has been emphasized, while in Indonesia, measures have benefited the outer islands of the archipelago.
Another coincidence was the reliance on foreign sources of capital to materialize the development and population resettlement plans. In this regard, World Bank loans were instrumental. At the same token, despite promoting the economic betterment of remote areas, those measures failed to meet the goal of relieving population pressure, as the numbers of frontier settlers represented a small fraction of the population growth taking place in both countries.

The demographic and economic occupation of frontier areas in Brazil and Indonesia have also unleashed similar processes. In both areas environmental impact has been significant. In Brazil the introduction and expansion of cattle ranches, mineral exploitation facilities, lumber mills and colonization areas have led to the removal of a sizable proportion of the Amazon rainforest. In Indonesia environmental problems have been aggravated by the hilly topography, which catalyzes soil erosion and consequently sedimentation and pollution of water sources. A corollary effect has been the eviction and demise of indigenous populations in both countries. Contracted by incoming migrants, indigenous people have been forced to move deep into the jungle, jeopardizing century-old inter-tribal territorial arrangements. Less resistant groups have simply ‘civilized’ themselves.

Once triggered by centrally-planned relocation programs, frontier-bound mobility gained momentum in Brazil and Indonesia, fuelled by spontaneous movements. These unplanned movements rely heavily on migration chains, and well-orchestrated survival mechanisms. Early settlers move into isolated areas in search of land and/or employment. Once he/she has secured the necessary means of production and a certain economic stability, they are followed by friends and relatives. This is a highly symbiotic arrangement, as early settlers can count on provisional help from secondary migrants, and they, in turn, are aided by already-established folks in their pursuit of jobs or land. It is important to stress that these arrangements are not exclusive of frontier areas.

Another curious recurrence observed in Brazil and Indonesia is the partition of household units as a survival strategy. This scheme is deployed in order to avert the risks associated with permanent migration. Mobility selects household members, prioritizing young males, shaping up the pioneering migratory waves. Women, the elderly and children are generally left behind, attending land; while young males venture in other regions seeking new economic opportunities. Thus, one witnesses a clear gender – and generation – based division of labor, as household members perform specific roles in order to maintain the livelihood of household units. Contacts be-
between origin and destination tend to be frequent, with earlier migrants communicating and returning regularly. Curiously, during harvest time return moves intensify in Indonesia as well as in the Brazilian Amazon. This intense interaction establishes the basis for canalized flows, as information on economic opportunities at destination is communicated by pioneer migrants.

Another mobility-related survival strategy present in both contexts is intense rural-urban circulation. These movements tend to be primarily income-driven and are contingent upon reliable public transportation, as they are generally undertaken during the hiatus in the agricultural production cycle. Circulators employ themselves temporarily either in the more advanced frontier areas or in the urban realm, engaging themselves, for the most part, in the informal sector.

In the light of such striking similarities, I make the case for joint research efforts among scholars working on mobility and land-use change in Brazil and Indonesia. It would be highly instructive to develop simultaneous studies on both parts of the world, based on articulated methodologies, so that results would be more readily comparable. Much could be gained from such scientific endeavor, as by contrasting these experiences we could deepen our knowledge on the interplay between mobility and land-use change in equatorial environments. This, in turn, would inform on possible ways of promoting more stable and environmentally sound settlements in the region.

RESUMO

Este trabalho acessa a natureza volátil dos assentamentos nas fronteiras agrícolas brasileira e indonesiana. Ênfase é dada às políticas públicas e planos de desenvolvimento regional, mobilidade humana e estratégias de sobrevivência adotadas por assentados em áreas de fronteira. Apesar de localizados em longitudes distintas, Brasil e Indonésia apresentam uma série de coincidências em relação às suas fronteiras, tais como: políticas públicas, certos padrões e processos migratórios e de circulação, degradação ambiental e choques culturais. Ao abordar a expansão da fronteira no Brasil e na Indonésia numa perspectiva comparativa, este estudo subsidia o debate sobre a construção de assentamentos estáveis e sustentáveis em regiões tropicais.

Palavras-chave: Fronteiras agrícolas; Mobilidade; Amazônia brasileira; Indonésia.
Bibliography


DINIZ, A M A. Frontier evolution and mobility in volatile frontier settlements of the Brazilian Amazon. 2002. 280 f. Tese (Doutorado) – Arizona State University, Geography Department.


UNIVERSITAS INDONÉSIA. *The population of Indonesia*. Jakarta: Demographic Institute of the Faculty of Economics, 1974.

