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**The price of being local in a global natural resource Local perceptions and global challenges Case study: Manaus and Novo Airão, Brazilian Amazon**

Souza, Grace Iara

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**Author:**Grace Iara Souza

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**King's College London**  
*School of Social Science and Public Policy  
Department of Geography*

**The price of being local in a global natural resource  
Local perceptions and global challenges  
Case study: Manaus and Novo Airão, Brazilian Amazon**

*By*

*Grace Iara Souza*

**2011**

*This dissertation is submitted as part of a MA degree in Environment, Politics  
and Globalisation at King's College London*

**King's College London**  
*School of Social Science and Public Policy*  
*Department of Geography*

**MA DISSERTATION**

I, Grace Iara Souza hereby declare (a) that this Dissertation is my own original work and that all source material used is acknowledged therein; (b) that it has been specially prepared for a degree of the University of London; and (c) that it does not contain any material that has been or will be submitted to the Examiners of this or any other university, or any material that has been or will be submitted for any other examination.

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## **ABSTRACT**

This research examines if and how local people in Manaus and Novo Airão perceive the Brazilian Amazon as a 'global natural resource', essential for 'global human and environmental security'. Using an 'emic' approach, based on in-depth interviews and participant observation, the findings reveal that global demands have been internalised without adaptation to local circumstances, with serious consequences for local human and environmental security. The three main considerations that result are the need for 'geographies of care', the global challenges such a concept entails, and the lessons the Brazilian government needs to draw.

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## **LIST OF ABBREVIATIONS**

ICMBio	<i>Instituto Chico Mendes de Conservação da Biodiversidade Instituto</i> (Chico Mendes Institute for Biodiversity Conservation)
MAO	Manaus
NA	Novo Airão
NGOs	Non-governmental organisations
SD	Sustainable development
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme



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## **1. INTRODUCTION**

Climate change is one of the biggest threats facing the world today. Governments, scientists, NGOs, businesses and individuals are expected to regard themselves as part of a 'global community' (Bromley et al. 1994; CSD 1992), and take appropriate measures to enhance the protection of the environment.

It was in light of this understanding that the designations 'global natural resources' and 'global commons' were created, to focus awareness on the fact that the (mis)management or (mis)use of natural resources –forests, rivers, oceans, atmosphere – accelerate climate change and impact 'global human and environmental security'. Countries that host global natural resources, however, often suffer from a divergence between environmental concerns and security issues, due to a preoccupation with state sovereignty. The Brazilian Amazon, for instance, has the largest remaining tropical rainforest in the world. Its destruction is likely to intensify the greenhouse effect and considerably reduce the Earth's biodiversity reserves (Stern 2007; UNEP 2010). After 1987, when an estimated 7,000 individual areas of land were burned in one day, the competing economic and environmental demands on its extractive resources began to receive considerable international attention.

However, although there is a vast literature on global natural resources and their importance to global human and environmental security, little is known of how the local inhabitants perceive their environment in this context or the price they must pay for living in a global natural resource. This research aims to address this information gap by examining local actors' perspectives in the context of the Brazilian Amazon. The specific objectives were (1) to identify how local people interpret the description of the Brazilian Amazon as a global natural resource essential for global human and environmental security; and (2) to analyse the differences in perception between the different groups studied.

A combination of qualitative methods were identified as the most appropriate way to gather the necessary data and to analyse the 'phenomena' and 'aspects' of the community under study (Cloke et al. 2004: 17, 181; Andolina et al. 2009). The substantive material of this research draws on intensive fieldwork in two cities, Manaus and Novo Airão

in the Brazilian state of Amazonas, undertaken between 1 and 25 June 2011. While using the in-depth analyses of previous research on the topic of human and environmental security, the findings of my research took me further, prompting a new emphasis on deepening the idea of 'additionality': not only should the Brazilian government be compensated for hosting a global natural resource (the Amazon rainforest), but the Amazonian locals also deserve to benefit.

The research, of course, does not assume that the evidence gathered and discussed here is representative of perceptions in Amazonas State or the Brazilian Amazon as a whole. The various communities in these areas have diverse characteristics, priorities and motivations, which affect their perceptions. However, it argues that local people's rights to security and development have been disregarded by proponents of wider geopolitical claims for global human and environmental security. Furthermore, it emphasises that the Brazilian state should adopt different models of development that take into account the perspectives of the Amazon's local communities, rather than imposing inappropriate 'Northern' models that destroy or damage the livelihoods of forest inhabitants.

This study is organised in five sections. Chapter two provides the background information essential for the discussion of the research findings: it looks at the main points analysed by the existing literature, which for the most part take an 'etic' ('outside') perspective. Chapter three presents the methods and methodology used to collect the research data, with reflections on the fieldwork itself. Chapter four displays the primary data comprising the research findings. Chapter five offers specific insights into the differences and similarities between the viewpoints of local people in the Brazilian Amazon as classified in five main groups, and analyses these perceptions in light of the existing literature, pointing out where these views agree and where they diverge. The work concludes by presenting three main considerations that result from this study: the concept of 'geographies of care', the global challenges it reveals, and the lessons the Brazilian government should take into account.

## 2. LITERATURE REVIEW

The following section provides a background to the questions provoked by the research. Following the 'line of thought' indicated in figure 2.1, the first part introduces the concept of (in)security, goes on to examine discourses characterising the world as a 'global village' and its natural resources as 'global commons', and subsequently focuses on one specific natural resource, the Brazilian Amazon, outlining its main features and giving an overview of the debates around the 'internationalisation' of the Amazon. It argues that it is essential to take into account the perceptions of those living in the Brazilian Amazon; the evidence shows that local perceptions have a fundamental role to play in the formulation of global environmental policies, especially for those national governments that deliver these policies.



Fig. 2.1. 'Line of thought'

## *2.1. Human and environmental security*

According to the Secretariat of the Convention on Biological Diversity (2010:2), the well-being of humanity depends on the health of the world's ecosystems. In other words, human security depends on the security of the environment. Acid rain, floods, drought, scarcity of food, water or energy, and climate change all pose a fundamental risk to human security.

This section does not intend to discuss all the 'complexities' and 'controversies' of the notion of environmental security (Page and Redclift 2002:13); rather, it will focus on the importance of the natural environment to human security. Here, the concept of human security follows Myers's definition (1993:31 cited by Page and Redclift 2002:11): "it amounts to human well-being: not only protection [from] harm and injury, but access to water, food, energy, shelter, health, employment and other basic requisites that are [the] due of every person on Earth". The risk of insecurity can come from local environmental changes or as a consequence of events elsewhere, such as shortages in imported oil or gas supplies. Matthew (2000) claims that the greatest insecurity is felt where national interests are threatened by environmental change. Environmental and human insecurity are not only related to natural disasters but also to the depletion of natural resources through mismanagement. However, Lonergan (2000) adds that poverty and inequality also contribute to tension and insecurity. As Page (2010:4) says, environmental insecurity is caused by a combination of three main sources of resource scarcity: environmental change, population growth and social inequality.

Toepfer (2005:xvi) states that the world's forests provide food for as many as 1.6 billion people. They also host countless species of plants and animals, potentially of great value to humanity (Ibid.). Stern (2007) claims that deforestation is responsible for over 18% of all global emissions, and Myers (2004:3) links deforestation to water deficits, soil erosion, desertification, decline of marine and fluvial fish, and many other environmental problems. The scarcity of natural resources is regarded as a threat to the security of both local communities, with the increase in poverty, high mortality, disease and overpopulation, and in the global sphere, with the effects of climate change.

Loneragan (2000:72), who sees environmental security as a 'multi-dimensional term', looks at the question of 'rights' and 'responsibilities' at all levels, from the individual to the global. Matthew (2000) adds that the 'security community' could contribute to environmental initiatives, by virtue of its widespread resources and sophisticated technologies. He claims that it must either adapt to the reality that environmental change is a communal risk, by sharing its expertise and resources, or risk greater financial costs in the future. Myers (2004:6) also urges that the response to security challenges, such as climate change, should focus on cooperation rather than confrontation: "No nation can meet the challenges of global change on its own. Nor can any nation protect itself from the actions or inactions of others." It could be added that no nation can be expected to respond to global change at the expense of its own natural resources and human security.

Barnett (2001) stresses that environmental security should be seen as only one dimension of the wider problem of human security, in a world where people's livelihoods, health and welfare have been undermined by environmental degradation. Wilson and Bryant (1997:xi) associate degradation with the intensification of the impact of humans on their environment. They suggest that the ways in which the environment has been managed should be re-evaluated. Redclift (1987:76) claims that tropical forests were destroyed primarily for economic reasons, and the causes of environmental conflicts begin with the relationship between economic growth and resource use (Ibid. 2000:44). What all these arguments show is that the constant battle for security is undermined by the way in which the global economic system continues to develop: the evidence shows that while its benefits continue to be unequally shared, it is impractical to expect developing nations to tackle the environmental costs according to an understanding of 'multi-dimensional' responsibility.

## *2.2. The 'global village', 'global natural resources' and the 'global commons'*

Given the insecurities that humanity faces, it has been claimed that the world's population lives in a single community, a 'global village' (Bromley et al. 1994:1), because environmental problems have no borders. Giddens (1990) attributes this to the effects of globalisation, where local events are no longer restricted by national boundaries. The 'international community' – international agencies such as UNEP, UNDP and the UN, the

World Bank, Western NGOs, the industrialised nations – claim that natural resources are a ‘global patrimony’. Consequently, places such as the Brazilian Amazon, the North Pole, the Himalayas, the African lakes, and all existing natural resources, which are mainly located in the Global South, are often referred to as ‘global commons’ or ‘global natural resources’ (WRI, UNDP, UNEP and WB 2008).

The ‘global commons’ is perceived in divergent ways. Goldman (1998:2) claims it is represented either as a *cause* (the ‘tragedy of the commons’) or an *antidote* (protecting our ‘global heritage’). The international community, comprising organisations based in nations which tend not to host ‘global commons’, claims it is necessary to ‘manage’ these resources properly in order to sustain the ‘integrity’ of the growing world economy (Goldman 1998:36). Bromley et al. (1994:5) maintain that this policy “allows [the] legal production of greenhouse gases with *privilege* for those responsible for emissions and *no rights* for those adversely affected” (Ibid.). Redclift (2002:75) observes that due to globalisation, tropical forests have become, literally, a ‘global resource’, to be exploited at several removes, in the ‘interests of science’ as well as the market. This accords with Bromley et al. (1994) and Goldman’s (1982) arguments that countries in the North wish to maintain tropical forests in the South in order to process greenhouse gases and discourage those living in the South from producing emissions, while countries in the South have a predominant interest in economic development, whether through deforestation in order to earn foreign exchange and land clearance for agriculture or cattle ranching, or, in recently affluent societies, by constructing factories and promoting car use (Ibid.). As Thompson (1998:204) claims, the biggest problem is not that the ‘commons’ has to be shared among more and more ‘commoners’, but the sort of institutional arrangements that must be mediated between the population and its resource base (Ibid.). It is clear that the priority, for North and South, is to maintain or increase economic development; what is not clear is whether they are willing to compromise over their wants and needs in the interests of the ‘global security’.

### *2.3. Global perspectives of the Brazilian Amazon*

This part of the study analyses the discussions concerning the contribution of the Brazilian Amazon to global human and environmental security, and the discourse of 'internationalisation'.

#### *2.3.1. The Brazilian Amazon and global human and environmental security*

The Amazon region contains the largest tropical rainforest on the planet, with around 6,900,000 km<sup>2</sup>, shared by nine South American countries (figure 2.2, below), of which about 3,800,000 km<sup>2</sup> lie in Brazil. The Amazon legally<sup>1</sup> represents 59% of Brazil's territory, around 5 million km<sup>2</sup> (IBGE 2008). It is an ecological mosaic, with a rich variety of fauna, flora and soil types, and significant climatic differences. It also hosts human populations that differ in their history, demography, social and political organisation, and attitudes to nature (Moran 1993).

WWF (2007) defines the Amazon as a "region of superlatives". Responsible for approximately 15-20% of the world's fresh water, the River Amazon has the largest drainage basin on the planet, and is approximately 6,925km<sup>2</sup> long (Meireles Filho 2006:46). Enough water flows from it each day to keep New York City going for 10 years (FCO 2011).

Equally important, the Amazonian rainforest stores about 20% of the planet's carbon in the form of carbon dioxide, trapped by photosynthesis (Meireles Filho 2006:256). Simpson (2010:40) reminds us that the Brazilian Amazon is often referred to as 'the world's lungs'. Although this characterisation has been challenged in recent years, it cannot be denied that the rainforest plays a fundamental role in maintaining the equilibrium of the world's climate.

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<sup>1</sup> As stated in Article 2<sup>o</sup> of Brazilian Law n<sup>o</sup>. 5,173 of October 1966.



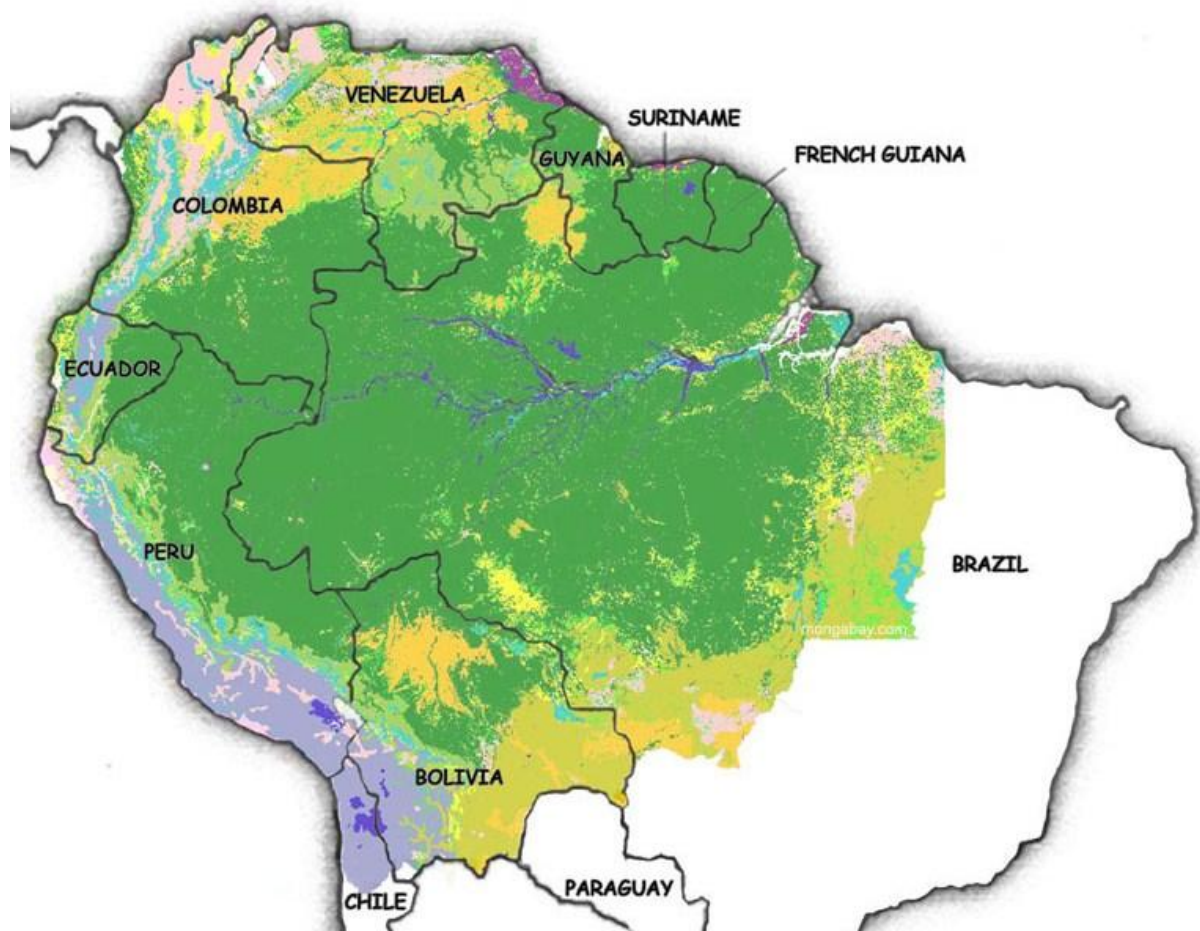


Fig. 2.2. The Amazon Basin. Source: adapted from (Butler n.d.)

The effect of climate change on the Brazilian Amazon is potentially devastating. Changes in rainfall patterns caused huge droughts in 2005 and floods in 2010. Experts (IPCC 2007) believe that forest fires, selective logging, hunting, 'edge effects' and forest fragmentation threaten its biodiversity (Fearnside 2001; Peres and Lake 2003; Asner et al. 2005 cited by Magrin et al. 2007:590). This biodiversity is important not only to its people, but also to the international community: according to WWF (2007), many of today's cancer-fighting drugs are derived from plants found only in the Amazon. As Cardoso (2002:62) says, biodiversity is "the common immunisation system of global life and life-connected industries" (Liepietz 1995:121 cited by Cardoso 2002:62). However, Stern (2005:vii) stresses that tropical forests "are particularly vulnerable to climate change"; a warming of the climate by 2°C would be enough to cause the extinction of around 15-40% of the Amazon's species, resulting in a severe loss of biodiversity (p.56).

The destruction of the Amazon could not only lead to a reduction in the levels of regional rainfall, compromising agriculture production and putting the livelihoods of millions at risk, but would also intensify the 'greenhouse effect' (Secretariat of the Convention on Biological Diversity 2010b). The Brazilian Amazon is crucial not only for the security of the Brazilian people but for global security in general.

### *2.3.2. The Amazon as a 'global natural resource'*

According to Barbosa (2000:1), the Brazilian Amazon started to be characterised as a 'global commons' in the mid-1980s. Cleary (1991:121) states that environmentalists in Europe and North America promoted tropical rainforests as a strategic foreign policy issue. Other factors, such as World Bank involvement in the western Amazon, meant that the situation of its indigenous peoples also received international attention. However, it was the assassination of the Brazilian environmental activist and union leader, Chico Mendes, in 1988 that really focused attention on the Amazon (Ibid.); his murder created an international furore over the Brazilian government's policies in the region (Goldenberg and Durham 1990 cited by Cardoso 2002:70). Meanwhile, a combination of environmental disasters – Chernobyl, famine in Ethiopia, forest fires in the Amazon – shifted environmental concerns from the local to the global (Cardoso 2002:64).

Goldman argues that when scientists in the North characterised the Brazilian Amazon as the 'lungs of the world', they were openly promoting the rights of citizens around the world who hypothetically depend upon the preservation of forests for their daily dose of oxygen (Hecht and Cockburn 1990 cited by Goldman 1998:4). However, by calling it a 'global commons', elite-based environmental groups and global institutions were able to justify intervention in its management, claiming it was vital they ensure continuous oxygen supplies and 'sustainable' extraction (Goldman 1991:4). The 'global commons' idea gave rise to the concept of the 'tragedy of the commons', which implied that local people were not able to manage their own resources – they were seen as 'predators', opposed to sustainable development (Cleary 1991:127). Given its importance to 'global humanity', the argument was that the rainforest needs to be 'commonly' managed, disregarding local knowledge and practices. Yet, as Redclift and Goodman (1991:17) note, "few developed countries would

agree to intervention in their environments on the grounds of global necessity". The Brazilian Amazon is no different. Nonetheless, as a consequence of globalisation, the question remains: to what extent is the governance of the Brazilian Amazon a shared responsibility?

Naturally, this debate has caused the Brazilian government concern over its right to govern its own territory. Its response is studied below.

### *2.3.3. Internationalisation and national sovereignty*

The idea of putting the Brazilian Amazon under international control began with the claim that it is a 'global natural resource' and that the global population has an interest in how the people of the Amazon manage their resources (Cardoso 2002:61). However, the interest of the international community in the area was viewed with suspicion by the Brazilian government.

Forero and Woodgate (2000:246) observe that, as the majority of governments in countries containing global natural resources are dependent on international finance capital and the private sector, their sovereignty is bound to be called into question. Financial institutions have played an ambiguous role in helping 'manage' the Brazilian Amazon. Cardoso (2002:64) describes how international capital has had two important interventions in the region. In the 1970s, the World Bank and Inter American Bank (and foreign private investors) provided loans and financial incentives for 'questionable' projects (Cleary 1991:130). The resulting debt crisis stimulated inflation, which in turn led to further land clearance, as the ever higher interest payments diverted federal resources from social projects (Cardoso 2002:64; Cleary 1991:127). Then, due to massive international pressure over deforestation, the World Bank and Inter-American Bank started to pressurise the Brazilian government to comply with these demands and threatened to cancel the loans if deforestation continued (Barbosa 2000:1).

As Simpson (2010:41) acknowledges, there is concern that international demands for the environmental preservation of the rainforest could threaten national sovereignty. However, although from the government's perspective, the preoccupation over security is in essence a dispute over land, it also wants to show an international audience that it is

integrating and developing the Amazon region (Espach 2002:1). In contrast to earlier years, when it openly declared that “not one square centimetre of the Amazon would be turned over to foreigners” (President Sarney in the Conference of Amazonian Nations in Manaus, 1989, cited by Cleary 1991:134), in 1991 it started accepting foreign funding for environmental protection (Espach 2002:11).

In the 2007 UN Conference in Bali, Indonesia, the Brazilian government proposed an Amazon Fund, consisting of non-repayable funding, to monitor rubber tapping, forestry management and pharmaceutical production from plants, and to promote conservation (Nicholson 2009:4). Despite the fund’s aim of attracting international finance, the government made it clear it would not tolerate the international community dictating its policies. Simpson (2010:58) quotes a speech by former Brazilian president Luis Inácio Lula da Silva, in which he declared: “There’s a real problem of deforestation that’s of great interest to the world, and some countries have decided to step up to the plate and help us solve it. [...] The fund is a vehicle by which foreign governments can help support our initiatives without exerting any influence over our national policy. We are not going to trade sovereignty for money.”

The government has also played a fundamental role in the development of the UN-REDD and REDD+ (the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries), whose aim is to reduce deforestation in developing countries through economic incentives (Simpson 2010; Viana et al. 2005).

Overall, the government has demonstrated a more flexible posture towards ‘sharing’ the management of the Brazilian Amazon. As many experts argue, the Brazilian Amazon, due its magnitude and importance for global human and environmental security, is in some respects beyond the Brazilian government’s control.

#### *2.4. The study of local perception*

The study of local perceptions is the key objective of this research; however, it appears this issue has mainly been studied from an ‘etic’ (Peterson and Pike 2002) perspective of environmental (in)security, which views the Brazilian Amazon as part of the

'global commons'. Little is known from the 'emic' perspective, the 'inside' or 'native's point of view' (Ibid.).

Previous research has analysed 'local-stakeholder' perception using cultural theories. According to Thompson (1998:2000), cultural theory studies human lives, and their manifestations and interactions, at every level, facilitating a more precise picture of the reality behind phenomena. Both 'emic' (culture-specific) and 'etic' (culture-generic) research are important theoretical tools in anthropological studies, and have similarly yielded significant results in the social sciences (Xia 2011; Peterson and Pike 2002). Li (2011:3) argues that a combination of 'emic' and 'etic' perspectives results in a 'geocentric culture', where local and global are integrated, rather than the global being imported or adapted to the local.

The reason for studying local or stakeholder perceptions comes from the need to analyse the interaction of cause and effect among all the participants of a process. Studies of companies have established that an integrative framework ('etic' and 'emic') permits enhanced understanding of employees' perceptions, as well as better decision-making and policy execution (Morris et al. 1999:794). Other researchers (Humphries and Kainer 2006:41) argue that "perceptions are the basis for action, and therefore critical in natural resource management decisions". The Center for International Forestry Research (CIFOR) and its partners also promote the inclusion of local perceptions in natural resource management policies as an effective way of involving local stakeholders (Lynam et al. 2007:2).

Some scholars believe that resource management is often approached in a top-down manner, excluding the knowledge and values of those affected (Groot and Maarleveld 2002; Long and Long 1992 cited by Lynam et al. 2007:2). The key objective of this research, therefore, is to investigate how so-called 'global commons' are seen through the eyes of local actors; more specifically, to understand if and how the local inhabitants of the cities of Manaus and Novo Airão, in Amazonas State, perceive the Brazilian Amazon as a global natural resource essential for human and environmental security.

### **3. METHODS AND METHODOLOGY**

#### *3.1. Methodological approach*

The research was conducted from a social-constructivist perspective, where knowledge is constructed through a process of interaction and interpretation (Geertz 1973:9). Its theoretical framework is the interdisciplinary intersection of human and environmental security with cross-cultural and sustainable development theories.

#### *3.2. Methodology selection*

As the research aimed to analyse local perceptions, a combination of qualitative methods were identified as the most appropriate technique (Cloke et al. 2004:17, 181; Andolina et al. 2009).

Although qualitative data is commonly held to be 'subjective' and open to incorporating the researcher's biases (Cloke et al. 2004:17), an 'emic' perspective involves methods in which "observations are recorded in a rich qualitative form that avoids imposition of [the] researcher's constructs" (Morris et al. 1999:783). Using this approach, the research was based on ethnographic fieldwork, interviews and participant observation.

It was organised in two stages. The first identified the relevant literature in order to discover, through an 'etic' perspective, how the Brazilian Amazon came to be designated as a global natural resource. The second stage was based on 67 in-depth, open-ended, face-to-face interviews (in Portuguese), with participant observation, in Manaus and Novo Airão, in order to identify local perceptions.

#### *3.3. Participant selection and the conduct of the interviews*

I initially identified representatives of local NGOs, grassroots associations and government agencies as potential interviewees. During the fieldwork, a 'snowballing' effect meant such contacts then introduced me to other interviewees. Whilst investigating

perceptions, it was important to understand the motivations behind them – how people’s understanding of things help construct their views (Geertz 1973:9). For this reason, I got to know the local people as much as possible, experiencing their ways of life, work and leisure, and their interaction with nature, tourists, friends and families. This reduced the potential for unbalanced power-relations and was helpful in leading interviewees to disclose the ‘unfolding factors’ of their own reality (Cloke et al. 2004:129; Baxter and Eyles 1997: 508).

I talked to ordinary people, representatives of NGOs, government authorities and industries, academics, rural and riverine community leaders, indigenous people, tourist guides and hotel owners. The wide variety of participants enabled me to draw out common concerns and provide a holistic view of how local perceptions were constructed.

All interviews were recorded and subsequently transcribed for analysis. Questions were designed in simple language so that participants could feel free to express themselves in their own words. When appropriate, questions were re-shaped before moving onto more sensitive issues.

### *3.4. Reflections from the fieldwork*

The fieldwork also provided a chance to better understand my own research process. Because of my initial ‘etic’ perspective, my aim was to investigate local perceptions of the ‘internationalisation’ of the Brazilian Amazon, and was initially influenced by the conception that, due to globalisation and common concerns about the environment, it could be perceived as an ‘international’ environmental resource. I had three possible hypotheses:

1. *Manauaras* have no position and the debate continues;
2. *Manauaras* believe the state is not able to protect or develop the region itself, so international involvement is necessary;
3. *Manauaras* have elected the state as their representative, with the sovereign power to decide the extent of international involvement.

However, conducting the fieldwork through an 'emic' approach helped me understand that local perceptions of the 'internationalisation' of the Brazilian Amazon must be inserted into the bigger picture.

The research process has been one of learning and constant reconsideration. Based on my fieldwork, I redesigned my research, incorporating other factors alongside the international dimension. I understood, however, that if I based a new hypothesis on 'etic' views, this would inhibit the gathering of local perceptions. Therefore, I let the research happen freely, without prejudgement. This facilitated my interaction with the participants and enriched the process. The result can be seen in the 'findings' section, where meanings are expressed in the respondents' own words. However, in the 'analysis' section and conclusion, there is an interaction between the literature, which provided the background information based on 'etic' views, and my analysis, which compares the 'emic' and 'etic' approaches.

### *3.5. Framework of the analysis*

Once the interviews had been conducted, they were classified according to the participants' connection to the Brazilian Amazon. The five categories were: 'rainforest people', 'rainforest protectors', 'rainforest governors', 'rainforest dependants' and 'rainforest indirect users'.

Local perceptions were then analysed using an 'emic' perspective. According to Morris et al. (1999:782), 'emic' interpretations describe thoughts and actions mainly through locals' 'self-understanding-terms'. As these are culturally and historically bound (ibid.), the main differences and similarities in perception between the five groups were identified and compared. Finally, I compared how local people see the Brazilian Amazon with the existing literature (as outlined in chapter two).



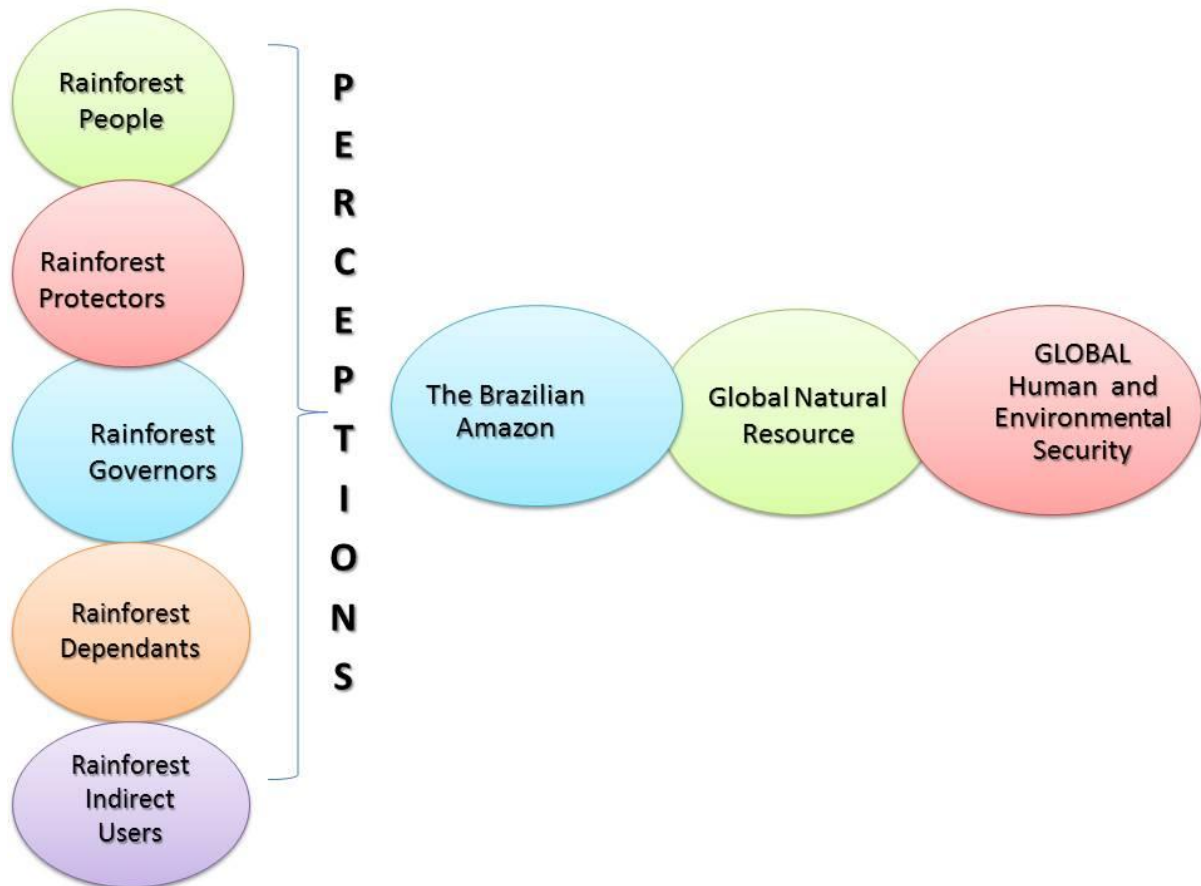


Fig. 3.1. Structure of analysis

## **4. FINDINGS**

The following section describes the findings of the fieldwork conducted in Manaus and Novo Airão. To give a better understanding of how local perceptions are constructed, it begins by introducing the cities as contextual background. Photographs taken during the fieldwork are displayed throughout the section to aid comprehension. The 67 interviews are then placed in five different categories. The results reveal in what sense people in each group consider the Brazilian Amazon to be a global natural resource, essential to global human and environmental security.

### *4.1. Research locations*

Both cities in this research are located on the banks of the River Negro, in Amazonas (fig. 4.1). Amazonas is the largest state in Brazil, comprising 157 million hectares, 16 times the size of the UK. It is usually only accessible by plane or boat, and it can take over 20 days to travel by boat from the capital Manaus to cities such as Eirunepé and Japura. As Amazonas is largely located in the Amazon Rainforest Basin, its soil is not ideal for agriculture, due to lack of nutrients. Consequently, the cost of living there is high, as goods, services and people need to travel long distances. However, this has its positive side: it discourages activities that cause deforestation. Unlike other states that contain parts of the Amazon rainforest, it is estimated that 97.4% of the Amazonas area has been preserved (SDS 2011).

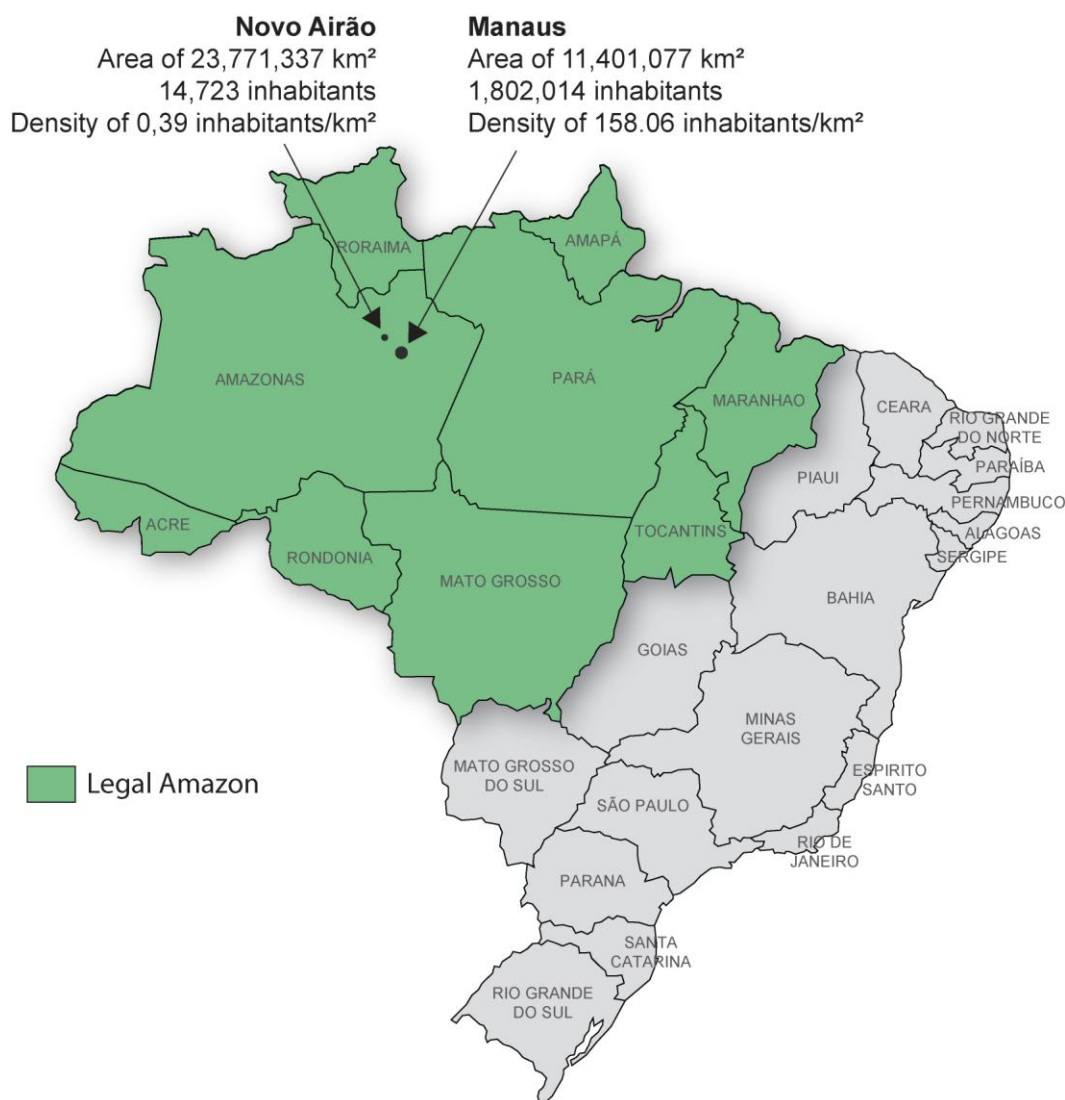


Fig. 4.1. Map of the Brazilian Amazon  
Source: IBGE 2010. Illustration: Alexandre Pereira

#### 4.1.1. Manaus

Manaus is the capital of Amazonas State, and its most populous city, with approximately 1,802,014 inhabitants (IBGE 2010). Situated on the confluence of the Negro and Amazon rivers, its main economic activity in the 19th century was the rubber industry. Nowadays, its commercial activities are focused on the extraction of brazil nuts, timber and petroleum, ecotourism, and its major industrial centre, the Free Economic Zone of Manaus. Although it is the urban area of Manaus that is most well-known, it also has several rural and riverine communities situated around the Negro and Amazon. Among these is the

community of São João do Tupé, comprising 64 families, which was one of the research locations.

#### *4.1.2. Novo Airão*

Novo Airão is a small city located approximately 130km upstream from Manaus, with 14,723 inhabitants (IBGE 2010). It is situated just in front of the Archipelago of Anavilhanas – the largest fresh-water archipelago in the world, with 400 islands. Traditionally, its main industry was the extraction of wood resin for building naval boats. Nowadays, as the city is surrounded by natural resources and protected areas, its main economic activities are ecotourism and handicrafts.



Fig.4.2. City entrance

#### *4.2. Perception groups*

During the research, five different groups emerged, according to the participants' connections with the Brazilian Amazon. It is important to stress that the classification was not made according to the researcher's judgement of the interviewees' relationship to the rainforest; the participants were placed into groups according to how they themselves

perceived their engagement with the rainforest. Some of the participants fell into more than one group. For example, a person who lives in the rainforest may also make his/her living from it, working with handicrafts or extracting rubber, although a person who works with local handicrafts may not necessarily live in the rainforest. In such cases, the strongest characteristic determined the classification, but where necessary the overlap is acknowledged.

#### *4.2.1. Rainforest people*

Traditional families, such as those living around the River Negro, and indigenous people who live, or who have lived, in the rainforest are referred to here as 'rainforest people'. Ten of those interviewed fell into this category, in addition to another one participant who used to be riverine people, and a further two who had spent several years living and working in indigenous reserves but who, at the time of the interview, were living in the urban area. I also attended a meeting of the *Forum Permanente em Defesa das Comunidades Rurais e Ribeirinhas de Manaus* (FOPEC) (the Permanent Forum in Defence of the Rural and Riverine Communities of Manaus), and was able to hear the views of some community leaders.

### **The Brazilian Amazon:**

When asked to explain how they perceive the Brazilian Amazon, both indigenous and riverine people identified themselves, through their language and way of life, as a natural part of the rainforest and the river. As one interviewee states:

"[...] the Amazon Rainforest is everything to me. It is amazing to wake up and see all this beauty from my window, smell the Rio Negro, hear the sound of the birds [...] The Rio Negro is my life. Our food comes from the river; we travel by river; we swim in the river, with the fish and pink dolphins [...] We are proud of living here, we have a passion for the Amazon and would never live anywhere else. I was born in Novo Airão: this rainforest is part of me and I am part of it [...]" (NA21F).



Fig. 4.3. Replica of a *cabloco*<sup>2</sup> house, MAO



Fig. 4.4. Indigenous hut, *Maloca Aruak*, MAO

<sup>2</sup> *Cabloco* or *caboco* refers to the miscegenation of white men or women with indigenous Brazilians, a very common feature in the Brazilian Amazon.

### **As a global natural resource:**

When asked about the Brazilian Amazon in a global perspective, there was a mixture of concerns. The participants see international ‘interference’ as having both positive and negative aspects.

On the positive side, both indigenous and riverine people say they enjoy receiving foreigners so they can ‘get to know’ the rainforest with ‘their own eyes and hearts’. The media, they feel, gives the wrong impression, displaying images associated only with destruction or preservation; the people who live in the rainforest, their culture and way of life are hidden from view. They also feel that the rainforest people are seen as a ‘threat’ to the Brazilian Amazon’s security. This perception can be equated with the ‘tragedy of the commons’ metaphor (chapter two). However, they claim that ecotourism, locally called ‘community-based tourism’, gives both foreigners and people from other parts of Brazil the chance to better understand local livelihoods, through their handicrafts and traditional ceremonies.



Fig. 4.5. River Negro, facing the Anavilhanas park, NA

On the negative side, it is claimed that there are tourists and researchers with ulterior motives, who take advantage of indigenous communities' knowledge in order to get their hands on the rainforest's biodiversity.

"[...] I always have to be careful what I say to international tourists. They come, asking us for things to use in their own countries. The other day I received a visit from a guy asking where my people get salt in the forest. I said: 'From the leaves' – but not from which leaves. There are still many secrets in the forest for Brazilians to discover [...]" (MAO25M).



Fig.4.6. Pink dolphin, NA

"[...] It is good to have tourists; we can show them our dances, our handicrafts. They go away happy, having seen our culture, and we make a little money from it [...]. The problem is when they come to the forest to see my real job as spiritual leader or *curandeiro*. These people are not real tourists. They ask the name of a medicinal plant, want to take pictures of it. Then when I've almost forgotten them, they return and ask for a piece of the plant or tree. I only understood later what was happening. They investigated what I said and found that the plant did have powers. I thought they wanted to know about my job, but they wanted to steal the power of the forest [...]" (MAO31M).





Fig.4.7. Waterlily (*Nimphaea*)

When asked if they considered the Brazilian Amazon as part of a ‘global commons’ rather than a local resource, some riverines did not have a clear ‘geographical’ understanding of these terms. However, some community leaders questioned the meaning of ‘sustainable development’ (SD). Again, this was a reflex against media representations and government-imposed policies of ‘resource management’. They claimed they see on television “the need to protect the Brazilian Amazon and natural resources around the world for the sake of the security of the ‘global community’”, but they question whether they should be the only ones who have to ‘deprive’ themselves of these resources for the global good, while “those with money destroy the rainforest without any sense of responsibility”.

“[...] SD is a word I hear all the time. When the deforestation of the Amazon is mentioned on TV, it seems that [it’s us], just because we live in the forest, who are destroying it. But we live off the forest and know it well [...] We are allowed to use one hectare, just enough to [feed] ourselves. Then this ‘Mr. SD’ comes along and turns everything into a park. [...] We cannot hunt or plant anymore. It’s [a] complicated [business] getting a licence from the

ICMBio to use our single hectare. Yet we see the 'big guys' destroying 5,000 hectares without any problem. No need for them to call 'Mr. SD', because they are not from here [...]. *Cabloco* cannot use the forest, even if we know how to do so without destroying it. The big [people] have money, they can buy their rights [...]" (MAO35V).



Fig. 4.8. Indigenous people, MAO

### **Human and environmental security:**

When questioned about environmental security, the rainforest people demonstrate they have an intrinsic relationship with their environment. Their concern is that the rainforest and its indigenous communities are allowed to remain intact. In this context, the environment incorporates the human; there is no distinction between the rainforest and the people, as they each complement the other. They are worried about the security of the environment for the sake of the environment itself, of which they perceive themselves to be an intrinsic part. The preservation of the rainforest is seen as important for the human beings who live there as for those who do not.



4.9. Indigenous handicrafts, NA

#### *4.2.2. Rainforest protectors*

This category represents the views of people who work in local NGOs, environmental associations, syndicates, trade-unions and universities. A total of thirteen people were interviewed.

#### **The Brazilian Amazon:**

Apart from one technical response, all seven rainforest protectors said something similar to “the forest represents life. It’s part of my life and my life is part of it. It’s both home and work, and it gives me energy.” However, one interviewee also recognised that “[...] being born here is an amazing experience, but at the same time, it’s a responsibility” (MAO13M).

Regarding the River Negro, another interviewee claimed:

“[...] besides all the biodiversity of the River Negro, there is something else [that is] magical, different from the other rivers, that makes us feel at home [...] [To] see the meeting of the waters [the confluence of the rivers Negro and Solimões that becomes the River Amazon] is like looking at a *cabloco*'s face: half indigenous and half white. This is us, this is the Amazon” (MAO20F).



Fig.4.10. The confluence of the waters of the rivers Negro and the Solimões

### **As a global natural resource:**

Looking at the Brazilian Amazon as a global natural resource, the rainforest protectors mentioned the influence of international environmental agreements on local policies:

“[...] as a consequence of international agreements such as the Kyoto Protocol and the United Nations Framework Convention on Climate Change, the Brazilian government created several Protection Units around Novo Airão – 85% of Novo Airão is now an environmental reserve. We may be owners of our land, but we don't have rights over it. We

can't hunt, we can't fish, we can't plant, because of the environmental laws. Where is the human law? We are protecting the 'global resources' but who is protecting the 'human resources' who live in this environment? [...] Who is paying for my kids to have a proper education, health system, social life, water [...]? Who is paying me to have a minimum [standard of living] without using the natural resources [...]?" (NA2M).



Fig.4.11. Man in the rainforest, MAO

### **Human and environmental security:**

Regarding global human and environmental security, the forest protectors claim there is little respect for the security of those who live in the rainforest.

"[...] the Park of Anavilhanas was created without even acknowledging that several families were living in the area. First, the government creates the policy, then – maybe – they relocate these people to a different place. What about their rights? Instead of having the riches of the forest, we are poor, because the government does not care about the people, it only cares about its image [...]" (NA2M).



Fig. 4.12. Tupé

They claim that the problem is the lack of environmental policies that prioritise not only the rainforest but also its people. As one mentions:

“[...] There are different kinds of conservation units here. Some of them are called Conservation Units of Sustainable Development, and some families [are allowed to] live there. But I know people there who sometimes have no food on the table. Also, the devastation is huge, so no one considers them to be ‘conservation units’. I’m not sure whether 97.4% of the Amazonas really has been preserved [...] The government has no structure for checking those areas, or for promoting sustainable development for the Amazonas people [...]” (MAO13M).

The interviewee continued with an example:

“[...] the federal government’s ‘Light for Everybody’ programme is good. Everyone has the right to electricity. But it imposes it in riverine communities without an analysis of its environmental impact. We also see organisations constructing factories with government support, without adequate environmental risk assessment [...] Then, when the impact becomes clear, they buy off the community with litres of diesel. [...]” (MAO13M).

#### *4.2.3. Rainforest governors*

This group includes representatives of local and national government authorities, as well as representatives from the industrial sector, and agencies responsible for the management of Manaus and Novo Airão. Twelve people in this category were interviewed, with the addition of one participant from a public-private agency. Due to the composition of this group, it is important to stress that this research set out to explore individual perceptions and not the official views of either companies or the government. However, these participants were included because living and working environments help construct local perceptions.

#### **The Brazilian Amazon:**

The rainforest governors believe the Brazilian Amazon is a place rich with opportunities that has been exploited in the wrong way for years. Some claim that because the Amazon is so huge and diverse, even Brazilians themselves have not had enough time or financial resources to get to know it and take full advantage of it in a way that differs from the current model of development. As some state:

“[...] The Brazilian Amazon represents an opportunity for the country. It’s the only place in Brazil where we can still reconcile economic, environmental, social and political factors, and find different ways of development to those tried so far [...]” (NA10F, NA11M, NA12F and MAO26F).



Fig. 4.13. Favelas on stilts, MAO

“[...] However, we should look at the Amazon not only as a conservation area, but as a rich natural resource that can be used in sustainable ways, so the people here can achieve development [...]” (MAO26F).

#### **As a global natural resource:**

When questioned as to whether they see the Brazilian Amazon as a ‘global commons’, the responses of the the forest governors varied:

“[...] the Amazon serves the planet. But it is Brazilian! [...] It’s the Brazilians’ role to take care of the rainforest. It belongs to us, the Brazilian people, especially to the indigenous and *cabloco* people [...]. What I see, with this ‘human patrimony’ discourse, is that those who say they want to take care of the Amazon don’t care about their own natural resources, so they can’t teach us how to take care of ours. [...] Some international countries are very critical about the way others take care of their natural resources, yet they don’t even sign existing environmental agreements [...]” (MAO24M).





Fig.4.14. Anavilhanas Park

“[...] I don’t think the Brazilian Amazon has one owner. It’s a ‘human patrimony’. [...] However, the price of living in this natural resource is high. There are limitations on what local people can do, so it’s not the same as living in other parts of the world [...]” (NA12F).

Regarding international funding, NGOs and international intervention, the response was:

“[...] I wonder where all those millions from the Amazon Fund go to? I can’t understand why all that money isn’t connected to a study of alternative energy sources for the peripheral parts of the Amazonas. We live on top of the largest river basin on the planet, yet less than half of the population has access to running water. We have sunlight every day of the year, but the energy that powers the Amazon is coal. [...]. I’m sorry, but there’s something wrong about the administration of this money, and those who give it are not interested in who benefits from it [...]” (MAO24M).



Fig.4.15. Transporting goods, MAO

“[...] the biggest problem of the Amazon rainforest is the lack of environmental education, starting with its mayors and governors. They don't have a clue about the rainforest's environment. They don't even know what happens to the Amazonian cities' waste [...] When other countries come, interested in cooperation, the money gets lost in the bureaucracy in Brasilia and very little finds its way to the Amazon [...]” (MAO12M).

“[...] I don't see the international community and their NGOs contributing to the development of public policies in the Brazilian Amazon. They aim to protect the forest rather than help us increase its sustainable development. What these international institutions are doing is maintaining the *status quo* for the countries they represent, holding back the [economic] acceleration of Brazil [...]” (MAO26F).

### **Human and environmental security:**

Turning to the idea of the Brazilian Amazon as a regulator of human and environmental security, the forest governors were concerned about the 'security' of the Amazonian people.

"[...] There's lot of pressure attached to being the 'lungs of the world'. You know, protect, protect, protect. The *gringos* come, see the forest, take pictures of the riverine [peoples], spend money on handicrafts, then go back to their apartments and jobs in the States. But what about the *cabloco*? They go back to their struggles: you can't do this, you can't do that [...]" (NA17M)

"[...] I only see the international community [championing] the security of the environment. If they are interested in the security of the Brazilian Amazon, it should be in an anthropological sense, where the environment is preserved for its humans. But I don't see anyone worried about the security of those who live in this environment. The Amazonian people live below the poverty line [...] I cannot accept that it is only preserved for the security of the rest of the world, while we *kill* the people that live here: *killing* the hungry, the thirsty, through lack of economic alternatives [...] The first thing to do is to take care of the human [inhabitants], because they are the ones who have the capacity to take care of the rainforest. But they need dignity for that [...]" (MAO24M).

#### *4.2.4. Rainforest dependants*

The rainforest dependants are all those whose jobs depend on its natural resources, such as the handicraft workers or those in occupations related to ecotourism. Thirteen interviewees were placed in this category.

### **The Brazilian Amazon:**

The Brazilian Amazon is seen as a source of work for some (NA9M). For others, it represents a combination of change and opportunities.

“[...] All the time I think about the Brazilian Amazon, it’s like going back to our origins. It means remembering the indigenous, traditional families living around the river; a *cabloco* on their canopy on the River Negro [...]” (NA16M)

“[...] The Amazon has huge economic [potential] for the future of Brazil. [...] But the government needs to organise the rainforest in such a way that we can use it sustainably” (MAO11M).



Fig.4.16 Marilda’s *fuctuant*, NA

**As a global natural resource:**

Forest dependants expressed concerns about sharing the Brazilian Amazon with the rest of the world:

“[...] The world didn’t take care of its own natural resources. This politics of a ‘global commons’ is all about personal interests. We need to take care of the Amazon ourselves. There should be interaction, not imposition by the international community. The people from the Amazon need to be able to take care of the rainforest because they are a part of it [...]” (MAO16M).

When asked how they perceive the role of ecotourism, the answer was:

“To have tourism, we need to make the forest [an attractive destination]. To make it attractive, we need preservation. And to ensure preservation, we need to take care of the *cabloco*, because it’s the *cabloco* who takes care of the rainforest” (NA26F).



Fig.4.17. Mothers and children playing in the River Negro, NA

### **Human and environmental security:**

Regarding the Brazilian Amazon and its relationship to global human and environmental security, forest dependants asserted:

“[...] People from here think that the Amazon belongs only to them. I’ve noticed quite a lot of prejudice towards international NGOs and foreigners. I think this is mainly because these organisations only see the forest and not the people who live in it. But once they arrive here, and begin to understand the symbiosis between the two, they end up making no distinction” (NA9M).

“[...] I’m not sure whose security you’re talking about. To be honest, what I see is the government taking money from the international banks, and I can’t imagine they give it away for nothing. We also hear about *gringos* buying allotments here. I just hope the government has not bonded the Amazon. *Gringos* want to ensure their own security, and the government wants to ensure its own economic security [...]” (MAO23F).

#### *4.2.5. Rainforest indirect users*

This group represents people who are not related to any of the groups above but who also rely on the Brazilian Amazon’s natural resources, such as those who live in the urban areas of Manaus or Novo Airão and use the River Negro for transport or sustenance. Seventeen people were classified in this category.

### **The Brazilian Amazon:**

The rainforest indirect users, both young and old, seem to have great affection for the Brazilian Amazon:

“[...] The Amazon helps us grow in health and happiness. But if we don’t preserve it, life on Earth may finish. [...] People think that money can buy everything, but if we lose the rainforest, no [amount of] money will bring it back [...]” (NA28F and NA29F).

“I’m proud to have lived in this amazing place since 1944, when I was a ‘rubber soldier’ [...] This place, my daughter, is a paradise. Of course, people don’t come here to admire the forest; they come because of the money they can make from it. This is the richest place on the planet [...]” (NA27M).



Fig.4.18. The Legislative Assembly, MAO

### **As a global natural resource:**

However, when the rainforest indirect users were asked whether they consider the Brazilian Amazon as a global natural resource, they disagreed with the concept:

“[...] People from abroad come here, see all the beauty and richness, and then think of ways of exploiting it. They don’t even consider there are people living in the Amazon. They think there are only crocodiles, snakes and monkeys [...]” (MAO1M).

“[...] I understand the Amazon is important to the world’s climate: this huge forest with all its biodiversity, this river full of fish. But I’m not sure about the intentions of the international community [...] We saw it in Novo Airipona: there’s a huge place there that was bought by one of those *gringos*. He says it’s for forest preservation, but someone doesn’t make an investment like that just to ensure his or her share of oxygen [...]” (MAO14M).



Fig.4.19. Containers, MAO

### **Human and environmental security:**

Regarding security, the main fear was the loss of the rainforest’s resources, in a way reminiscent of colonial times:

“[...] First they came and killed the indigenous people and made the rest slaves, and then took our gold, silver, rubber, our Pau Brazil [in Bahia]. And now, you want to tell me that they are here to help us to protect the forest? From us?! I’m sorry, I’m not buying that anymore. We are better off just taking their money [...]” (MAO2M).



## **5. ANALYSIS**

This section draws on the literature and theory discussed in the literature review (chapter two) in order to analyse the research findings (chapter four). It will compare the main differences and similarities between the perceptions of the five groups identified in the research concerning the role of the Brazilian Amazon as a global natural resource essential for human and environmental security, and between local perceptions of the Brazilian Amazon and the existing literature on the topic.

### *5.1. Groups*

The table below (5.1) is a résumé of the reactions of ‘insiders’ to the above concept. The frequency of a colour highlights the extent of similarity of response.

Overall, both rainforest people and rainforest protectors identified themselves or their lives with the Brazilian Amazon. For these groups, the rainforest and its people are interconnected, complementing one another. However, members of the latter group observed that alongside the pleasure of living and working in such a natural resource comes the responsibility of taking care of it. Although rainforest governors, dependants and indirect users all saw the Brazilian Amazon as an opportunity for social and economic development, rainforest dependants associated it with traditional ways of living, while indirect users claimed that it also represents health and happiness.

The five groups expressed a common understanding about how the Brazilian Amazon is seen as a global natural resource, despite their different perspectives. They regarded the designation of the Brazilian Amazon as part of a ‘global commons’ as something imposed on ‘insiders’, accompanied by demands for their use of its natural resources to be restricted. Their major concern was the ‘unequal’ way in which ‘global commons’ are seen and managed by their ‘global commoners’. On the one hand, ‘outsiders’ (and the Brazilian government through its environmental policies) claim that the Amazon should be preserved, but their idea of ‘preservation’ disregards the needs of those whose lives directly depend on it.

Table 5.1 - Differences and Similarities between groups

	Rainforest People	Rainforest Protectors	Rainforest Governors	Rainforest Dependants	Rainforest Indirect Users
<b>Brazilian Amazon (BA)</b>	Identify themselves as part of the BA and the rainforest as part of themselves.	Identify the BA life as part of their lives and their lives as part of the BA, but highlight that the 'pleasure' of living and working in such an environment also entails 'responsibilities'.	Identify the BA as a rich natural resource that should be used in a way that differs from the current model of development.	Some see the BA as a way of remembering their roots; some see it as a source of work; and others believe it has huge economic potential for Brazil as a nation.	For some, the BA is synonymous with health and happiness; for others, it represents an economic opportunity.
<b>Global Natural Resource (GNR)</b>	International interference Positive: the idea that it is the rainforest people themselves who are responsible for the BA's degradation. Negative: some 'visitors' take advantage of indigenous and traditional communities' knowledge in order to get their hands on the BA's rich biodiversity. 'Global commons': Question why the concept of sustainable 'resource management' is applied only to 'insiders' when is 'outsiders' who are destroying the BA without any sense of responsibility for the global effects of their actions.	Attribute the influence of 'global' environmental agreements on 'local' policies. Claim that BA 'insiders' are required to protect the GNR but there is no parallel requirement to protect the 'human resources' that live in and from the rainforest.	Global commons': Recognise the BA's importance to the planet but claim that 'insiders' pay a high price for living there, and are under constant surveillance by 'outsiders'. Also question the integrity of these 'outsiders', as several of the countries that interfere in and criticise local management of the BA haven't even signed existing international environmental agreements. International influence and international funding: Claim that both of these are focused solely on the preservation of the BA and not the sustainable use of its natural resources for the development of its inhabitants.	Argue that the discourse of the 'global commons' is all about personal interest; 'outsiders' have not taken care of their own natural resources, so it is in the interests of the Brazilian people to take care of their Amazonian region themselves. Eco-tourism: claim tourists want to see a rainforest that is preserved. However, its preservation is intimately related to the security of its inhabitants and their way of life.	Do not believe that 'outsiders' take an interest in the BA as a part of the 'global commons' purely for the sake of its preservation, but also as a profitable opportunity for exploitation.
<b>Human and Environmental Security (HES)</b>	Express concern about the security of the environment for the sake of the environment itself, because they see themselves to be an intrinsic part of it; the preservation of the BA is as important for the human beings who live there as for those who do not.	Believe that current policies on HES are not integrated: when the government prioritises the environment, it excludes human security, but when it promotes development, it excludes environmental security.	Complain that 'outsiders' claim that the BA is vital for the HES of the global community but do not include in this concept the security of 'insiders'.	Assert that 'outsiders' need to go to the BA in order to understand how HES works on the ground as there is a symbiosis between the 'insiders' and the rainforest. Also claim that the way international funding is distributed in the BA purely for 'protection' purposes is opaque; 'security' should be interpreted as connected as much to economic as to environmental concerns.	Demonstrate concern about losing control of the rainforest's resources in a way that is reminiscent of colonial times, and believe that the HES discourse is being used as a cover for expelling 'insiders' from the rainforest.

On the other hand, this interpretation of 'preservation' helps maintain the *status quo* for 'outsiders', who do not feel the need to change their way of life in the interests of human and environmental security. Meanwhile, they claimed that the Brazilian Amazon is often misused in 'development' projects that put its natural resources and habitat at risk.

The five groups all emphasised that human and environmental security should be seen as a single dimension. However, for both rainforest protectors and dependants, the discourse of 'environmental security' refers to the economic security of the few rather than the human security of the many. Rainforest protectors claimed that the government struggles to include the environment on its development agenda, whereas rainforest dependants maintained that the role of international funding for 'preservation' is ambiguous. Rainforest governors, meanwhile, protested that the existing model of human and environmental security prioritises the interests of the global community, ignoring local needs. Rainforest indirect users added that this approach echoes that of colonial times: the North interfering in the South in order to enrich itself.

## *5.2. Local perceptions and the existing literature*

According to the existing literature, the concepts of 'global natural resources' and 'global commons' were created to promote awareness of the fact that the '(mis)management' or '(mis)use' of natural resources accelerate climate change and impact human and environmental security (2.2). In line with this, several interviewees acknowledged the importance of the Brazilian Amazon to the global community, as it both helps regulate the world's climate and is the planet's richest source of biodiversity (4.2). However, looking at the Brazilian Amazon through an 'emic' perspective confirmed what Li (2011:3) claims: 'global' needs have been imposed over 'local' rights without any adaption to local circumstances.

The research findings show that being 'local' in a global natural resource has crucial consequences for their human and environmental security. Little attention has been given to how the international demands for the preservation of 'global commons', in environmental policies and scientific literature, leads to a disregard of the needs of local people, ignoring the fact that they are also a part of this natural resource. In fact, the

dynamic of 'enforcing' preservation continues to be connected to the views of 'deep ecologists', whom Guha (1989:74) criticised for emphasising the "preservation of biotic integrity rather than the need[s] of humans". The intention of this research is not to dispute which has the more importance, the human being or the rainforest; rather, it is to highlight – as the rainforest people and rainforest protector groups (5.1.) do – that the human beings who live in the rainforest deserve security and development as much as those populations who do not.

A number of interviewees pointed out that, due to international pressure, several parts of the Brazilian Amazon have become protected areas or national parks, displacing local people or reducing the amount of land they can use (4.2.2.). In Amazonas, 54% of the territory comprises a 'protected area' (SDS 2008:23). Academic studies also show how such measures intended to reduce rainforest devastation (Hall 2008:969) have restricted traditional rights of access and land use, including the destruction of traditional land-tenure systems, leading to conflict and the devastation of local economies, and cannot be said to promote conservation (Heinen and Metha 2000 cited by West et al. 2006:259). There is substantial literature linking land conflicts with security issues in other parts of the Brazilian Amazon, such as the state of Pará (Cardoso, 2002; Christopher Brown and Purcell, 2005; Simmons, 2003; Simmons et al. 2007).

However, this research has revealed that one of the main concerns of the five groups interviewed in Manaus and Novo Airão is the lack of economic alternatives for those communities that used to make their living out of the rainforest's resources. Local people lack alternative occupations, access to markets, and appropriate educational, transport and healthcare systems. The remoteness of Amazonas, compounded by its lack of infrastructure, tends to be related to extreme insecurity (Seehusen 2009:94). Additionally, the interviewees' stress on the inequity of rights among the different actors in this 'global community' reflects the comments of Bromley et al. (1994:5) on environmental policy (2.2.). Local inhabitants' rights to the rainforest are restricted, while those of the actors that produce greenhouse gases – the industrialised nations, Brazil's urban areas, logging companies – have the 'privilege' of destroying this 'global commons' in the name of 'development'. According to the views revealed by this research, it seems that local people are to be penalised simply for living in a global natural resource. Contrary to Lonergan's

claims (2000:72) (2.1.), security issues are not viewed globally from a 'multi-dimensional' perspective; rather, it is poorer individuals who are expected to take responsibility for global human security at the expense of their own. But it is unanimously believed by those who live in (or who have visited) the rainforest that its preservation relies on the presence of indigenous and traditional communities who maintain its natural systems and help keep it out of the hands of loggers and ranchers (Meirelles Filho 2006; Nugent 1991).

Ecotourism, although seen by the rainforest people and some of the forest dependants as a way of making a living and sharing their traditions, has also turned into a 'commodity' (Krech 2005 cited by West et al., 2006:263). Local people's unique knowledge of the Brazilian Amazon's biodiversity is often appropriated by international researchers. Moreover, although ecotourism may represent a form of income for local people, they only see a small part of the profits, as the hotels, lodges and tours are monopolised by the big hospitality chains. Many scholars argue that ecotourism is neither ecologically nor socially beneficial (Carrier and MacLeod 2005; West and Carrier 2004 cited by West et al., 2006:262). Whatever the truth of this claim, however, ecotourism is one of the few economic activities left for the populations of those cities in the Brazilian Amazon, such as Novo Airão, that are surrounded by national parks. Again, this is another example of how social inequality promotes insecurity (Page 2010:4), under the guise of the protection of natural resources.

This research, therefore, upholds Matthew's (2000) assertion that environmental change represents a 'communal risk' (2.1.), but, based on its findings, it also argues that the costs of environmental preservation have not been shared as a 'communal problem'. Local people in the Brazilian Amazon are fighting for their own human security, but it appears the 'global community' expects them to jettison it in order to 'preserve' the rainforest, justifying their suspicions of international interest in the region (4.22 and 4.2.3). As Cardoso (2002:74) points out, the international community frequently claims that "humankind has some sort of right over tropical forests", but it seems this does not include the 'humankind' that lives in (and from) those forests. These criticisms notwithstanding, although the interviewees condemned the international community for not acknowledging them to be a part of the Brazilian Amazon, many also noted how international interest has helped to attract funding for research and partnership projects, related to the rainforest, that also result in benefits

for the Brazilian Amazon in general. This was the case with the majority of local NGO projects, which frequently work through alliances with both international organisations and local governmental agencies.

It cannot be denied that the Brazilian government bears some responsibility for local people's feelings of exclusion from the human and environmental security agenda. Following the state's historic failure to ensure the sustainable use of the rainforest (Cardoso 2002:91), its introduction of the Free Trade Zone of Manaus inadvertently took the pressure off the rainforest's resources in Amazonas State (Rivas et al. 2009). However, although indisputably viewed by the interviewees as good for the environment and the Brazilian state, this project has followed the mainstream template of development, so has little chance of being reproduced in the rest of the Brazilian Amazon, especially when the region's lack of infrastructure is taken into account.

The major problem of (in)security faced by the local inhabitants of Manaus and Novo Airão is the lack of new forms of development that include both the forest and its peoples. The Brazilian government still confines itself to reproducing Northern models of development, influenced by the ethos of neoliberal capitalism. This assumes that 'progress' means large-scale agriculture, logging, mining and large construction projects, all of which have promoted devastation as well as threatening the security of the Amazon's people (4.2.1 and 4.2.2). These activities are not only destroying the rainforest and placing in jeopardy the very environmental security that 'global humanity' is so anxious about, they are endangering local families that rely for survival on, and have intrinsic physical and spiritual connections to, the rainforest.

Recently, however, the Amazonas government, in partnership with other organisations, has developed initiatives that give 'value to nature' through 'payment for environmental services' (PES) (AMAZONAS 2010). Similar initiatives have proved successful in Costa Rica (Seehusen 2009:116). PES is seen by some to have the greatest potential for simultaneously improving the livelihoods of locals – by generating long-term income flows in return for conservation – while helping to reduce rates of deforestation and limiting greenhouse gas emissions (Hall 2008:966). However, others have pointed out that there are limitations to the power of the Brazilian state to promote such a programme internationally. Hall (2008:977) points to external factors, such as the potential for 'market-flooding' during

periods of high availability of carbon credits, which could depress prices; the causality issue of attributing changes in deforestation levels to government action; and the possibility that the reduction of emissions through forest conservation may not be as permanent as reducing fossil-fuel combustion. Seehusen (2009:116) emphasises that the state should invest instead in strategies of 'efficient allocation', 'fair distribution' and 'sustainable scale' projects. Meanwhile, Candotti (2010:36) speculates that "limiting environmental services to greenhouse gas emissions, in addition to 'managing' all the other services that the Brazilian Amazon region promotes, will only confirm the idea that [it] is a mineral[-rich] province, with rivers that transport cheap energy, rebel indigenous [peoples] and a free trade zone for [the] exportation industry: [in effect], a colony". In fact, the PES still has a long, bureaucratic journey to make before its benefits are proved, and the security of the Brazilian Amazon and its people should not have to rely on this project alone.

The people of the Brazilian Amazon, through their knowledge of the forest and intrinsic relationship with its biodiversity, have identified several ways in which the Amazonian state could foster new forms of development that include both keeping the rainforest intact and its people safe by using existing industrial technology and caring for social and environmental issues. Meirelles Filho (2006:255-348) highlights 12 'vocations' or services the Amazon provides that should be explored as sustainable opportunities:

- (1) environmental services: as mentioned above;
- (2) water: countries such as Japan and Saudi Arabia import water from their neighbours; if applied to Brazil's regional neighbours, such a policy could represent an economic opportunity for the country;
- (3) minerals and permaculture: according to the creator of the term, Bill Mollison, "the permaculture could save ecosystems, preserve species and feed the hungry" (cited by Meirelles Filho 2006:265);
- (4) soil: the decomposition of organic material is very fast and efficient;
- (5) bioenergy: as well as the trees in the permaculture system, discarded wood from sawmills could be used to generate energy;
- (6) the rainforest's 'pharmacy': according to Myers (cited by Meirelles Filho 2006:281), one in four of all medications has its origins in tropical forest products, including an estimated 70% of plants with anti-cancer properties. However, in Brazil, as well as all the other

countries that contain part of the Amazon rainforest, the study of pharmacology is still very poor, and this has encouraged 'biopiracy';

(7) wood: it is estimated that the Amazon holds the greatest amount of tropical wood on the planet. If exploited through sustainable management, less than a fifth of the rainforest would be sufficient to meet the needs of all the Amazonian countries, and allow them to achieve international economic leadership in the sector;

(8) other non-wood products (fruits, fibres, seeds, skins, oils and resin): the global cosmetic industry, including companies such as Bodyshop (UK) and Natura (Brazil), has started to adopt the practice of partnerships with forest people's organisations for the extraction of oils from the brazil nut (*Bertholletia excelsa*), the *adiroba* (*carapa guianensis auberville*) and the *babaçu* (*attalea speciosa*);

(9) food: in contrast to the Brazilian Amazon's exploitation so far, there are many other agricultural opportunities than soya bean monoculture, such as the use of tubercles (cassava, sweet potato, etc.), palm trees, brazil nuts, aromatic plants and tropical fruits;

(10) handicrafts: although handicraft activities are quite common in the southern region of the River Negro, in the main parts of the Brazilian Amazon it is viewed more as a livelihood than a profession;

(11) subsistence fishing, fish farming, recreational fishing: Meirelles Filho suggests the 'aquaculture' is equivalent to over 12% of cattle production. While the cattle industry employs one person per 1,500 hectares, aquaculture employs a family of three per hectare (a relation of 1:3,000). Recreational fishing is an elite market, attracting high-income clients, and a good way of ensuring conservation, but its potential has been little explored;

(12) ecotourism and environmental studies: ecotourism presupposes four basic conditions: an intimate knowledge of the environment, income, natural resources and an environmental culture.

The many alternatives identified by the people of the Brazilian Amazon themselves, collected in Meirelles Filho's book, raise the question: whose interests are served by maintaining the Brazilian Amazon and protecting its people, the global community and future generations from the threats of unsustainable development and insecurity? This research suggests it is time for the Brazilian government's decision-makers to start looking at the Amazonian region from an 'emic' perspective.



## 6. CONCLUSIONS

As they are the first witnesses to environmental changes in the Brazilian Amazon, as well as those first impacted by the global demands for environmental conservation, a study of the perceptions of its local inhabitants is undoubtedly pertinent. Although there is a vast literature on human and environmental security, little is known of how local people perceive their own environment in the light of this concept – especially in relation to the price of being a local inhabitant of an area designated as a global natural resource. In order to help fill this gap in the literature, this research offers a few considerations on the topic. However, I reiterate the words of Geertz (1973:30): the intention here “was not to answer deep questions, but to make available answers that others, guarding [the Brazilian Amazon], have given, and thus to include them in the consultable record of what man[kind] has said”.

Using an ‘emic’ approach, based on a combination of in-depth interviews and participant observation, the findings of this research draw on the perceptions of five different groups in the Brazilian Amazon: rainforest people, protectors, governors, dependants and indirect users. Given the evidence presented in chapter four (findings), and bearing in mind the issues considered in the chapter five (analysis), the research suggests three main conclusions.

First, there are different geographical ways of caring for the Brazilian Amazon. The first, ‘caring at a distance’, is a concept similar to that used by Smith (2000) and Bryant and Goodman (2004). Here it is attributed to those interviewees who do not live in the rainforest or work directly with it. The *Manauaras* who work and pursue social activities around the urban area of the Amazonas, as well as other Brazilians and people from the international community who have no contact with the rainforest, can be included in this category. These people exhibit a preoccupation with the rainforest as a purely natural habitat, solely comprising trees and animals, which must be preserved for the sake of ‘global human security’ – however, it appears that by this they mean the security of those who do not themselves live in the forest. The second, which I call ‘interconnected care’, describes an interlinking of the person with the forest, as if they were part of one another. Several of the interviewees who live in the rainforest or the river area, or work directly with it, identified

themselves as part of the rainforest. The environment incorporates the human; there is no distinction between the forest and the people, they are one and the same, complementing each other. These people are worried about the security of the environment for the sake of the environment, of which they see themselves as a part. They believe the preservation of the forest is equally important for the sake of those human beings who live in the forest and those who do not. All the interviewees from Novo Airão, a small rural city, fell into the second category, in contrast to those who lived in Manaus. This is probably due to the fact that Manaus is a capital city and consequently a very urban environment.

Secondly, although it is accepted that environmental change is a 'communal risk' (Matthew 2000), both the international community, and in many cases the Brazilian government, have failed to see the human beings who live in the Brazilian Amazon as part of the environment, with rights to security and development equal to those who do not depend directly on the rainforest for their livelihoods. Therefore, the 'costs' of environmental preservation of global natural resources should also be considered a 'communal' duty.

Thirdly, the research results show that in order to ensure the environmental security of the Brazilian Amazon, the Amazonian and Brazilian people, and indirectly the global community, the Brazilian government needs to restructure its development model, taking into account the diverse characteristics of the rainforest and of its people. The Brazilian Amazon is the largest, richest rainforest in the world, able to provide all the natural resources necessary for the country and to help balance the climate and the circulation of water for the whole planet. However, the Brazilian state will only be able to provide security for its people and for future generations if it promotes sustainable development in the rainforest itself.

To conclude, most of the interviewees mentioned that decisions about the Brazilian Amazon have so far come from 'outsiders'; perhaps the concept of the 'geography of care' could change this by promoting the necessity for the government to take steps towards fulfilling this agenda. By 'getting to know' the Brazilian Amazon better, and narrowing the gap in its relations with the rainforest, the government could facilitate 'interconnected connections of care' and provide more efficient ways of managing the forest for the environment, for global human and environmental security, and for the development of the

Brazilian Amazon and the local people who are a fundamental part of it.

This research has concentrated on the local perceptions of the *Manauaras* and *Novo Aironsenses*. The study of local perceptions in other parts of the Brazilian Amazon, or a comparison between the perceptions of the inhabitants of all the Amazonian countries, deserves further research and analysis.

## 7. APPENDICES

### 7.1. List of interviewees

Group	Code	Date	Gender	Age	Nationality	How long living in MAO* or NA**	Education
Rainforest People	MAO10F	8 June 2011	F	28	Maranhao	10y	Graduate degree
	MAO21F	11 June 2011	F	20	Rio Preto da Eva/AM	N/A***	Nurse Technician
	MAO22F	11 June 2011	F	33	Varzea/AM	N/A	Nurse Technician
	MAO35V	13 June 2011	F/M		FOPEC – the Permanent Forum in Defence of the Rural and Riverine Communities of Manaus		
	MAO25M	14 June 2011	M	48	Sao Joao Batista/AM	N/A	Completed Secondary School
	NA7F	16 June 2011	F	57	Novo Airao –AM	N/A	Uncompleted Primary School
	NA8M	16 June 2011	M	41	Antigo Airao – AM	N/A	Illiterate
	NA21F	18 June 2011	F	32	Novo Airao –AM	N/A	History teacher
	NA24M	18 June 2011	M	31	Novo Airao –AM	N/A	Uncompleted Primary School
	NA25M	18 June 2011	M	48	Manaus/AM	46yrs	Illiterate
	MAO30F	23 June 2011	F	55	Parintins/PA	20y – Tupe	Completed Secondary School
	MAO31M	23 June 2011	M	64	Sao Gabriel da Cachoeira/AM	11y – Tupe and 6y	Primary school
MAO32M	23 June 2011	M	56	Manicope/AM	20y – Tupe	Completed High School – Refrigeration	
Rainforest Protectors	MAO6M	6 June 2011	M	52	Amapa	14yrs	Postgraduate degree
	MAO7M	7 June 2011	M	32	Manaus/AM	N/A	Postgraduate degree
	MAO9M	8 June 2011	M	45	Joao Pessoa/PB	24	Postgraduate degree
	MAO13M	9 June 2011	F	40	Parintins/PA	30	Technical Forestall
	MAO18F	10 June 2011	F	28	Sao Paulo/SP	4y	Forestall Engineer
	MAO19M	10 June 2011	M	31	Sao Paulo/SP	6y	Forestall Engineer
	MAO20F	10 June 2011	F	21	President Figueiredo/AM	20	Administrator
	NA2M	16 June 2011	M	48	Novo Airão/AM	N/A	Completed Secondary School
	NA15F	17 June 2011	F	42	Parintins /PA	10yrs	MA History
	NA19F	18 June 2011	F	28	Novo Airão/AM	N/A	BA Environmental Management
	NA20F	18 June 2011	F	22	Novo Airão/AM	N/A	BSc Geography
	MAO27F	21 June 2011	M	31	Manaus/AM	N/A	MSc Environmental Law
MAO28F	21 June 2011	F	29	Manaus/AM	N/A	BA Communication and Journalism	
Rainforest Governors	MAO12M	9 June 2011	M	42	Manaus/AM	N/A	HR, Eng. Agro, Lawyer
	MAO24M	14 June 2011	M	38	Manaus/AM	N/A	Postgraduate degree
	MAO26F	14 June 2011	F	42	Airunepe/AM	N/A	Postgraduate degree
	NA4M	16 June 2011	M	29	Novo Airão/AM	N/A	Postgraduate
	NA4M	16 June 2011	M	46	Novo Airão/AM	N/A	MSc Natural Science
	NA5M	16 June 2011	M	39	Tefe/AM	29yrs	BA Natural Sciences
	NA10F	17 June 2011	F	29	Recife/PE	2yrs	BA Tourism
	NA11M	17 June 2011	M	25	Montes Claros/MG	2yrs	BSc Forestall Engineering
	NA12F	17 June 2011	F	28	Belo Horizonte/MG	2yrs	Oceanography
	NA17M	17 June 2011	M	36	Caruari/AM	N/A	Completed Secondary School , Electrical Technician
	NA23M	18 June 2011	M	28	Novo Airão/AM	10yrs Presidente Figueiredo	Completed Secondary School
	MAO29M	21 June 2011	M	38	Coari/AM	13y	Forestall Engineer

Rainforest Dependants	MAO3M	6 June 2011	M	30	Parintins/PA	30y	Completed Secondary School
	<b>MAO5F</b>	6 June 2011	F	30	Manaus/AM	N/A	Completed Secondary School
	<b>MAO5F</b>	6 June 2011	F	55	Manaus/AM	N/A	Graduate degree
	MAO11M	8 June 2011	M	77	Manaus/AM	N/A	Technician
	MAO23F	12 June 2011	F	53	Manaus/AM	N/A	Dressmaker and handicraft worker
	MAO33M	13 June 2011	M	61	Catu/BA	25yrs	Agricultural technician
	NA1F	15 June 2011	F	26	Porto Velho/RO	24yrs	Completed Secondary School
	NA3M	16 June 2011	M	21	President Figueiredo/AM	12yrs	Uncompleted Secondary School
	NA6F	16 June 2011	F	20	Manaus/AM	18yrs	Completed Secondary School
	NA9M	16 June 2011	M	39	Sao Paulo/SP	9yrs	BA Publicity
	NA13M	17 June 2011	M	30	Roraima	11yrs	BA Mathematics
	NA16M	17 June 2011	M	28	Sta. Izabel do Rio Negro/PA	N/A	Completed Secondary School
	NA26F	19 June 2011	F	40	Acre	over 20yrs	Completed Secondary School
Rainforest Indirect Users	MAO1M	6 June 2011	M	46	Belem do Para/PA	20y	Undergraduate
	<b>MAO2M</b>	6 June 2011	M	57	Caruari	35y	Uncompleted Primary School
	<b>MAO2M</b>	6 June 2011	M	56	Tapajos/PA	50y	Uncompleted Primary School
	MAO4F	6 June 2011	F	45	Manaus/AM	N/A	Completed Secondary School
	MAO8M	7 June 2011	M	42	Manaus/AM	N/A	Graduate degree
	<b>MAO14F</b>	10 June 2011	F	30	Manaus/AM	N/A	Completed Secondary School
	<b>MAO14M</b>	10 June 2011	M	33	Manaus/AM	N/A	Incomplete graduate degree
	MAO15M	10 June 2011	M	45	Manaus/AM	N/A	Primary School
	MAO16M	10 June 2011	M	17	Manaus/AM	N/A	Uncompleted Primary School
	MAO17M	10 June 2011	M	32	Manaus/AM	N/A	Uncompleted Primary School
	NA14F	17 June 2011	F	40	Mato Grosso	NA= 12yrs and MAO= 19yrs	BA Economics, Bsc Natural Science
	NA18F	18 June 2011	F	18	Novo Airão/AM	N/A	Completed Secondary School
	NA22M	18 June 2011	M	55	Maceio/AL	29yrs	Agricultural technician
	NA28F	19 June 2011	F	11	Novo Airão/AM	N/A	Uncompleted Primary School
	NA29F	19 June 2011	F	11	Aranduba/AM	11yrs	Uncompleted Primary School
	NA30F	19 June 2011	F	16	Uruaru/PA	12y	Completed Secondary School
NA27M	19 June 2011	M	84	Sergipe	67yrs	Illiterate	

\*MAO = Manaus

\*\*NA = Novo Airão

\*\*\*N/A = Not Applicable

Codes in **BOLD** = two participants interviewed at the same time

TOTAL: 67 participants (38 Males and 29 Females with age between 11 and 84)

## *7.2. Questionnaire guidance*

Questions were chosen and framed according to whom they were addressed and the course of the interview itself. Overall, they covered the themes of identification, ownership, environmental security, global natural resources and international influence, but not in any specific order.

### *Identification*

- What does the Amazon rainforest mean to you?
- What does the River Negro or River Solimões mean to you? Why?
- Do you think the Amazon rainforest belongs to the people or the people belong to the Amazon rainforest? Why?
- Would you like to visit or live in any place other than Manaus/Novo Airão?
- What do you like most about Manaus/Novo Airão? What do you like least? Would you change anything?

### *Ownership*

- Does the rainforest have an owner or owners? Who is it/are they?
- Who cares for and protects the Amazon rainforest?
- Who does not really care about the Amazon rainforest?

### *Environmental security*

- What did your parents and grandparents tell you about the Amazon rainforest? Is there any difference in what they say and what you see and feel? Is it different now from when you were a child?
- What do you think the Amazon rainforest will be for your children and grandchildren?
- What comes to your mind when you think about 'energy'? Why?
- How about 'food'? How is it obtained? Would you like to get your food from another place? Why?
- What comes to your mind when you think about 'water'? How is it obtained? Would you like to get your water from another place?

- How do you think the interaction between the environment and human security here, in the Amazon rainforest, is perceived? Why?
- The Amazon rainforest has the largest river basin in the world, and yet there have been several droughts and floods in the past few years. What do you think about this?

#### *Global natural resources*

- How do you think people from other parts of Brazil view the Amazon rainforest? Is what they think important? Why?
- How about people from other countries – how do you think they view the Amazon rainforest? Do you think there is any difference in the way they perceive it and the way people from other parts of Brazil do? Why?
- How do you feel when people from other parts of Brazil come to visit or live in Manaus/Novo Airão?
- How do you feel when people from other parts of the world come to Manaus/Novo Airão?
- Some people call the Amazon rainforest the ‘lungs’ of the world. What do you think?
- Do you see the Amazon rainforest as a ‘global patrimony’? Why?

#### *International influence*

- Do you think the international community (NGOs, industrialised countries, international agencies and banks) help the conservation of the rainforest? Why?
- Manaus hosted the International Forum on Sustainability this year. International personalities such as the US politician Al Gore, the World Bank’s biodiversity adviser Thomas Lovejoy and the film maker James Cameron, among many others, came to discuss global sustainability. What do you think about this?
- How do you feel about the international concern over the way the Amazon rainforest is managed?
- The Brazilian government and the media often condemn international interest in the Brazilian Amazon. Why do you think this is? Do you agree? Why?

### 7.3. Ethical Approval

#### Online Submission of Application for Ethical Approval

sshl@kcl.ac.uk [sshl@kcl.ac.uk]

**Sent:** 24 March 2011 10:34

**To:** [Souza, Grace Iara](#)

**Cc:** [Redclift, Michael](#)

Dear Grace Iara Souza,

KCL/10-11\_463 MA Environment, Politics and Globalisation

I am pleased to inform you that full approval for your project has been granted by the GGS Research Ethics Panel. Any specific conditions of approval are laid out at the end of this email which should be followed in addition to the standard terms and conditions of approval:

- Ethical approval is granted for a period of one year from the date of this email. You will not receive a reminder that your approval is about to lapse so it is your responsibility to apply for an extension prior to the project lapsing if you need one (see below for instructions).
- You should report any untoward events or unforeseen ethical problems arising from the project to the panel Chairman within a week of the occurrence. Information about the panel may be accessed at: <http://www.kcl.ac.uk/research/ethics/applicants/sshl/panels/>.
- If you wish to change your project or request an extension of approval you will need to submit a new application with an attachment indicating the changes you want to make (a proforma document to help you with this is available at: <http://www.kcl.ac.uk/research/ethics/applicants/modifications.html>).
- All research should be conducted in accordance with the King's College London Guidelines on Good Practice in Academic Research available at: [http://www.kcl.ac.uk/college/policyzone/index.php?id=247&searched=good+practice&advsearch=allwords&highlight=ajaxSearch\\_highlight+ajaxSearch\\_highlight1+ajaxSearch\\_highlight2](http://www.kcl.ac.uk/college/policyzone/index.php?id=247&searched=good+practice&advsearch=allwords&highlight=ajaxSearch_highlight+ajaxSearch_highlight1+ajaxSearch_highlight2)

If you require signed confirmation of your approval please forward this email to sshl@kcl.ac.uk indicating why it is required and the address you would like it to be sent to.

Please would you also note that we may, for the purposes of audit, contact you from time to time to ascertain the status of your research.

We wish you every success with this work.

With best wishes

Yours Sincerely,  
GGS Reviewer

Conditions of approval (if blank there are no specific conditions):



## 8. REFERENCES

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