

5. The new regional policy of the Plan of Sustainable Amazonia (PAS)

5.1. Political initiatives during the government of President Lula da Silva

At the beginning of the administration of President Lula da Silva (2003–2010), two political initiatives decisively redefined the context in which the Pilot Programme was included that seemed to have fallen by the wayside.

In May 2003, the president and the governors of the states of Amazônia Legal decided to install the Plan of Sustainable Amazonia (PAS), coordinated by the Ministry of National Integration in partnership with the Ministry of the Environment (MIN/MMA 2004).

In view of the increasing rates of deforestation,²⁵⁰ the federal government created an inter-ministerial working group with 14 ministries, in order to install the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm), launched in July 2003. These activities motivated the political decision to reconfigure a second phase of the PPG7, including institutional arrangements. According to the government, there was a historical opportunity to take advantage of the accumulated knowledge and the social capital of PPG7 in the construction of structuring public policies, aimed at the implementation of new models of sustainable development in the country.

It was planned to integrate the various dimensions of sustainability – social, cultural, economic, political, and environmental. Some potential topics for new innovative initiatives include land policy (new agrarian reform model, land regularisation, fight against land grabbing), pasture management, recovery of degraded areas, technical assistance and rural extension for sustainable production, alternatives for forest concession and management of natural resources on Indigenous lands. There was a broad consensus that cooperation with other countries in the Amazon basin could be developed in a second phase of the PPG7.

The still high deforestation rates showed that the inter-ministerial working group did not achieve its main objective in the first years of existence. The PAS, with a view to minimising environmental degradation and conflicts in the Amazon Region, had five thematic axes (MIN/MMA 2004):

250 2001: 18 165 km², 2003: 25 396 km² (data: INPE)

1. Environmental management and spatial planning,
2. sustainable production with innovation and competitiveness,
3. social inclusion and citizenship,
4. infrastructure for development,
5. new funding standard.

According to the government, environmental management and territorial planning are the decisive factors of a strategic role of the state in promoting sustainable development (MIN 2003; Capobianco 2017). The fundamental instruments for this were: land regularisation, economic and ecological zoning, environmental licensing in rural properties and consolidation of the protected areas system. However, it is important to realize that 24 % of the Amazonian territory are private property, 45 % (23 % conservation units; 22 % Indigenous territories) are areas legally protected. It is a huge challenge for any government to maintain and secure the officially protected areas of Amazônia Legal according to the legal principles.

The creation of new conservation units of about 16 million hectares by the Amazon Region Protected Areas (ARPA) programme was a very positive initiative (Fig. 35). ARPA was a programme of the Federal Government, planned for ten years, with the objective of protecting biological diversity in the Amazon biome and creating and consolidating 60 million hectares of conservation units and promoting sustainable development in the region (Silva 2005).²⁵¹

Protected areas (PAs) include conservation units (UCs) and Indigenous territories covering 45 % of the area of Amazônia Legal (Santos *et al.* 2021).²⁵² UCs range from strict protection (7.9 %) to those that allow the sustainable use of resources (10.6 %). Conservation units are areas considered essential from an economic point of view, as they conserve socio-biodiversity, in addition to being providers of environmental services and generators of business opportunities.

Ecological corridors are not political or administrative units but important for the conservation of biodiversity. They are defined as

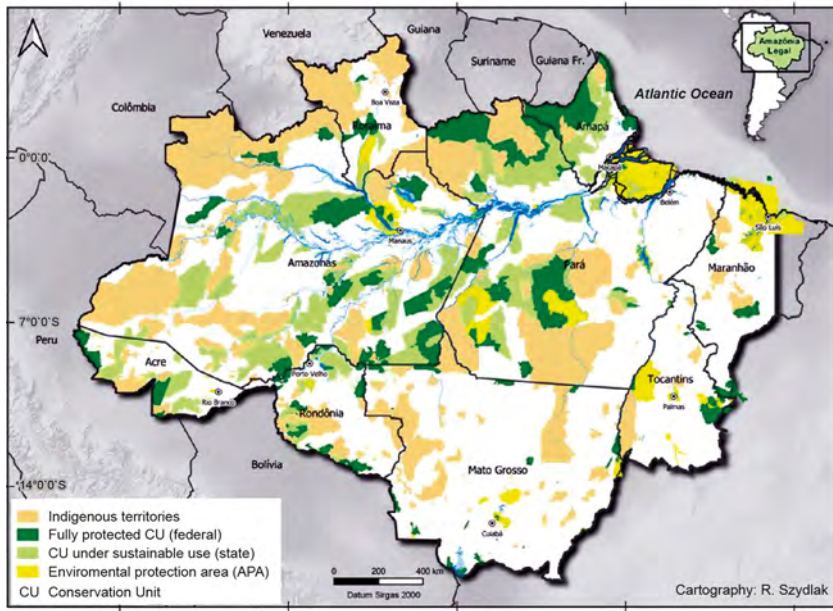
portions of natural or semi-natural ecosystems connecting PAs, which allow gene flow and biota movements among them, facilitating species dispersion and the recolonisation of degraded areas, as well as the maintenance of populations that require, for their survival, greater area sizes than those protected in individual protected areas.²⁵³

251 In 2000, the National System of Protected Areas (SNUC) was established comprising federal, state, municipal and district protected areas (PAs), with different specific objectives regarding the form of protection and allowed uses. Attempts were made to optimise the role of PAs with regard to integrated planning and to ensure that significant and ecologically viable samples of the Brazilian ecosystems are properly represented within the protected areas (MIN/MMA 2004; <https://www.mma.gov.br/>). A good example of the planning and establishment of protected areas and the associated environmental problems and conflicting interests of various social actors in the Upper River Paraguay Basin in Mato Grosso is provided by Röper (2001).

252 Areas of environmental protection (APA: 3.7 %) are included in the UCs.

253 <http://www.mma.gov.br/areasprotegidas/cadastro-nacional-de-ucs/dados-consolidados> (accessed April 20, 2021).

Figure 35. Protected areas in Amazônia Legal in 2020



Sources: Celentano and Veríssimo (2007, Fig. 19); IMAZON (2021, Fig. 24); ISA (2020).

Half of the federal PAs are of sustainable use,²⁵⁴ covering a total area of over 40 million ha.

The ARPA programme was implemented in partnership with state and municipal governments and had the support of the World Bank, the German Government Co-operation Bank (KfW), the German Technical Cooperation Agency (GTZ) and WWF Brazil (Kohlhepp 2007a).

The inclusion and citizenship were conceived in the conception that the Amazon is “an urbanised forest” (Becker 1995). The absence of public policies had left much of the urban population marginalised. The social inclusion strategy intended to disseminate universal policies regarding education, health, and public security, accelerate the fight against poverty, community development, etc. Another objective was to prevent poor rural populations from being chased away from their territories (UNEP 2006).

The permanent inter-ministerial working group proposed measures and had to coordinate actions for the reduction of deforestation rates through the following instruments (GTI 2006; UNEP 2006):

254 They are divided into five main categories (Melo-Reiners 2009, 153f.): Environmental Protection Area (Área de Proteção Ambiental, APA), Area of Relevant Ecological Interest (Área de Relevante Interesse Ecológico, ARIE), National Forest (Floresta Nacional, Flona), Extractive Reserve (Reserva Extrativista, Resex), Sustainable Development Reserve (Reserva de Desenvolvimento Sustentável, RDS). Among the PAs of sustainable use extractive reserves comprise over 12 million ha. The Flonas are also designated for the maintenance of traditional peoples, and Brazil holds 67 protected areas under this category, distributed in four biomes: Amazon, Cerrado, Caatinga and Atlantic Forest.

- Land use planning and legalisation of land tenure in the municipalities in the “Arc of Deforestation.” This is the region where the agricultural border advances towards the forest and where the highest rates of deforestation of the Amazon region are found;
- Fiscal and credit incentives to expand economic efficiency and sustainability of areas already deforested;
- Procedures for environmentally sustainable infrastructure works;
- Job and income generation in activities with rehabilitation of degraded areas;
- Addition of open and abandoned areas to the production chain, and management of forest areas;
- Integrated performance of federal agencies responsible for monitoring and control of illegal activities in the Arc of Deforestation.

The Pluriannual Plans (PPA) 1996–1999 and 2000–2003 were part of a strategy of integration of Amazonia to the Brazilian productive space. The *Avança Brasil* Programme invested US\$ 3.5 billion in four transport corridors (Théry 2005). Due to impacts in untouched regions so far, *Avança Brasil* had become the centre of numerous protests and discussions. Some of the mega-projects in the Amazon region were not carried out due to dubious “Environmental Impact Studies” (EIA) and “Environmental Impact Reports” (RIMA). Others, however, were carried out after lengthy negotiations and modifications to the projects.

In view of the highly problematic infrastructural programmes of the former Cardoso government, the strategies of the new Lula da Silva government, contained in the multiannual plan 2004–2007 (“Brazil for all”), were anxiously expected. Within the first few months, all of IBAMA’s office managers had been replaced, which was associated with the hope that the action scope of civil society groups would be expanded, and a cooperative environmental policy could contribute to solving corruption problems (Melo-Reiners 2009; Scholz *et al.* 2003). Despite insufficient integration of objectives of the Pilot Programme (PPG7) in the environmental policies of the successor programmes, it had been possible – this had already started in the PPG7 – to involve the most important stakeholders such as public authorities, civil society actors and the private sector in a dialogue in some programmes, which had a positive impact on political decisions on the use of natural resources (Scholz 2007; Kohlhepp and Coy 2010). Opportunities for a sustainable use of the natural potential, e.g., in biologically favourable areas such as the *várzea* of the white water rivers (Junk *et al.* 2000; Junk 2003), sustainable regional development (Coy and Neuburger 2002; Kohlhepp 2005) and good local governance in sustainable municipal development were available and had been used at least partially. “Good governance is based on policy-advising on the national level, institutional development on the regional level and empowerment of civil society on the local level” (Segebart 2007, 367).²⁵⁵ Participation and monitoring are important factors for good local governance. The challenge is to organise frontier expansion so that most forests remain standing and “government and civil society are gradually developing the policies, technology and institutional capacity to meet this challenge” (Nepstad *et al.* 2002, 629).

255 Action research on the implementation of participatory monitoring of sustainable municipal development plans was realised in municipalities in the northeast of Pará.

Although the Pilot Programme's demonstration projects successfully involved local neo-Brazilian and Indigenous populations in sustainable use projects, in the shadow of international climate and environmental protection programmes, local groups whose survival was at risk were excluded from support from national and international state actors and NGOs, as in the case of the *cabocla* communities on the lower Rio Negro (Neuburger 2008). This applies in general to smallholder agriculture in Amazonia, which for a long time was almost completely ignored in all project planning and ran the risk of being marginalised as an excluded group. Poverty, displacement and socio-economic and ecological degradation led to a high degree of vulnerability but gave rise to new forms of organisation and specific survival strategies at local level.²⁵⁶ The smallholders' expectations of the Lula da Silva government were therefore very high.

The Action Plan for Prevention and Control of the Legal Amazon Deforestation (PPCDAm) was a governmental effort which significantly contributed to the decrease of deforestation rates. In 2003, most of the deforestation, mainly illegal, spanned an arc between southeast Maranhão, southern Pará, northern Tocantins, south of Mato Grosso, Rondônia, southern Amazonas, and southeast Acre – the “Arc of Deforestation.” Livestock ranching was responsible for 80% of deforestation, followed by soybean crop expansion, logging, infrastructure projects, the setting of bush fires, and the illegal occupation of public lands. The implementation of the PPCDAm programme began in 2005 and was twice revised (2008 and 2011).

The results of the PPCDAm were the creation of more than 50 million ha of protected areas at federal and state level, especially in regions under heavy deforestation pressure, and the ratification of more than 10 million hectares of Indigenous territories. Furthermore, the inhibition of more than 60 000 irregular land titles for rural properties was realised and 25 600 rural landholdings in the Terra Legal programme had been awarded.

There are also other examples of Brazilian efforts aimed at discouraging illegal deforestation in the Amazonian forests, such as the implementation of frameworks for management of public forests, which were introduced in Brazil's legal system in 2006. Besides this, the Brazilian government intended to invest around US\$ 500 million in initiatives connected to the PPCDAm over the 2008–2011 period, under its Pluriannual Plan (PPA). This signalled to all agencies that deforestation had received the highest level of priority. In order to promote a continuous and consistent deforestation reduction, the PPCDAm has been updated for the periods 2012–2015 and 2016–2020.

Law enforcement efforts successfully tried to uncover illegal activities and organised land- and timber-grabbing groups; “blacklists” of high deforestation municipalities were established. Farmers involved in illegal deforestation lost their access to public farm credit programmes (Nepstad *et al.* 2014; Nepstad and Shimada 2018).²⁵⁷

The president's decision to appoint Marina Silva as Minister of Environment was an extremely clever move and led to the strengthening of the credibility of the Brazilian government internationally. She descended from a rubber tapper family in Acre and led the Association of Rubber Tappers with Chico Mendes, a pioneer of the Brazil-

256 A good example is the study by Neuburger (2002) on pioneer frontier development in the hinterland of Cáceres, Mato Grosso.

257 Regarding the actions of government territorial control and planning and the successful measures implemented to reduce deforestation, see also: Capobianco (2017).

ian environmental movement who was murdered in 1988. As a native Amazonian and member of Brazil's Federal Senate (1994–2002), she built support for environmental protection of the forest reserves as well as for social justice and sustainable development in the Amazon region.

Her appointing was associated with high expectations (Mello *et al.* 2004; 2005). Numerous prominent NGO representatives had been invited to join the staff of the Ministry. Her conviction as a defender of the rain forest's traditional dwellers against the encroachment of ranchers and loggers and the drastic measures to protect the Amazon forest, clamping down on illegal forest devastation activities made her the main enemy of all opponents of state controls in the environmental sector. However, she managed to reduce deforestation by almost 60 % from 2004 to 2007. She instituted "a sophisticated system to root out corruption within IBAMA" (Tollefson 2015). However, Marina Silva "did not need to start from scratch" (Nepstad and Shimada 2018, 16) because tools for controlling Amazon deforestation were already in place, initiated under President Cardoso.

In 2006, Marina Silva announced a proposal to establish a tropical forest fund for receiving performance-based donations to help Brazil advance the strategies to greatly decrease deforestation. In 2007, the government of Norway responded with a major commitment to the Amazon Fund, established to prevent greenhouse gas emissions through rain forest conservation. It provides funding for measures to prevent, control and combat deforestation and for the conservation and sustainable use of resources in the Brazilian Amazon. The Amazon Fund was based on a Brazilian target of reducing Amazon deforestation by 70 % by 2017.²⁵⁸

The Amazon Fund investment has supported state-level programmes to encourage farmer participation in the Rural Environmental Registry (CAR), mandatory for all rural properties in the country, and projects led by NGOs. The projects have been most relevant to small-scale producers. The combination of the PPCDAm, the establishment of the Amazon Fund, and support from the Ministry of Environment created the basis for state governments to elaborate state level plans for prevention and control of deforestation and an efficient socio-environmental governance.

In May 2008, Marina Silva resigned after losing political influence and self-assertion for control of environmental policies within the Federal Government. She had become increasingly isolated and was involved in struggles between developmentalists and environmentalists in the administration. In Lula da Silva's second term, there were frictions with other ministers, who accused her of blocking the environmental licensing of projects. One of the main clashes was with the then Minister of the Civil House, Dilma Rousseff, responsible for the Growth Acceleration Programme (PAC). The main reason was that Marina Silva opposed approval of new hydroelectric dams in Amazônia Legal, especially in the Rio Madeira,²⁵⁹ and criticised the president's biofuels programme. She also lost the fight against the planting of genetically modified crops.

258 This target was subsequently increased to 80 % by 2020 as Norway finalized its pledge of one billion dollars to the Amazon Fund. Cf. chapter III.4.

259 São Paulo (Reuters) 05.03.2007: President Lula da Silva said that nuclear energy will be the alternative for Brazil if obstacles to building new hydroelectric dams cannot be overcome in time. This was a clear political threat to Environment Minister Marina Silva and environmental movements in the region.

President Lula da Silva reduced the power of the Minister of Environment by splitting IBAMA into two agencies and separating environmental protection from the issuance of environmental licenses. The resignation of Marina Silva is believed to have been prompted by the president's decision to withdraw the highly praised PAS from the auspices of the Ministry of Environment and give it in the hands of the Minister of Strategic Affairs, Mangabeira Unger, a Harvard law professor with limited experience with Amazon affairs, and a declared "developmentalist," certainly not a representative of sensitive environment and resource protection. It had been central for Marina Silva to drawing up the Plan of Sustainable Amazonia and believed she would oversee its implementation.²⁶⁰

According to a statement of the vice president of Conservation International South America in 2008 "her resignation is a disaster for the Lula administration. If the government had any global credibility in environmental issues, it was because of minister Marina."²⁶¹ Lula da Silva had called Marina Silva the "mother of the Sustainable Amazon Plan (PAS)", finally launched by the government in 2008. It was a setback for Brazil's ambitions to become a major voice in global environmental debates, exposed the shortcomings of Brazil's Amazon policy and damaged Brazil's international reputation.

This event made it abundantly clear that President Lula da Silva, under intense pressure from agribusiness, was more concerned with economic development than with conservation as a commodity export boom fuelled Brazil's economic growth, the "golden years" of Brazilian foreign trade. The Lula da Silva government benefited in particular from China's huge absorption capacity for soybeans, iron ore, meat and mineral oil. Enormous tensions between the promotion of modernisation-oriented regional development on the one hand and the strengthening of protection and sustainability made a balance between the two options extremely difficult.

The Growth Acceleration Programme (PAC) was another major infrastructure programme of the Federal Government, launched in 2007. Consisting of a set of economic policies and investment projects with the objective of accelerating economic growth in Brazil, the programme had a huge budget for the 2007–2010 period. The continuation of the asphaltting of the BR-163 had been expressly confirmed. The successor government of Dilma Rousseff (2011–2016) has continued the PAC programme under the name PAC-2.

Numerous innovative programme ideas, such as the Proambiente programme, which aimed to compensate for environmental services, were crushed in the mills of the ministerial bureaucracy. However, innovative approaches to rain forest protection have been launched by individual states in Amazonia. Particularly noteworthy is the so-called Bolsa Floresta programme in the state of Amazonas, which was initially limited to federal protected areas and financially compensated the renunciation of de-

260 After resigning, she left the Workers' Party (PT) after 30 years of affiliation, became member of the Green Party (PV) and ran for president in 2010, 2014 and in 2018. In 2007, she was awarded by the Champions of the Earth award, the UN's top environmental award. On the start of a renewed career as Environment Minister, see chapter IV.2.

261 <https://news.mongabay.com/2008/05/brazils-environmental-minister-resigns-after-losing-amazon-fight/> (accessed September 4, 2024).

forestation as an environmental benefit and combined it with other social transfers (Kohlhepp and Coy 2010).

To the great irritation of environmentalists, disappointment of members of the Workers' Party (PT) itself and great surprise for many people, some of the newly initiated infrastructure projects gained special attention. The national development plan PAC strongly overshadowed the sustainability goals with its infrastructure projects. This mainly referred to the construction of roads and of hydroelectric power plants and dams with large reservoirs.

The Plan of Sustainable Amazonia (PAS) was realised without resolving the severe conflicts between the convinced supporters of infrastructure development and the engaged and well-prepared environmental groups with the aim of regional sustainability. "Environmental" policies were frequently realized without direct participation of the Ministry of Environment and with a total lack of consideration of the most important environmental factors. The government was unwilling or unable to implement the sustainability approach in its programmes after the departure of Marina Silva. The extensive activities of ranching projects could not be reduced, and the agribusiness was specially supported. Deforestation fell sharply, but the proportion of illegal logging remained high.

The PAS initiated the Operation "Green Arc" ("Arco Verde") as a reaction to the command-and-control operations to finance projects of reforestation and recuperation of degraded areas in Amazônia Legal. The governance arrangement brought together municipal, state, and federal administrations with the objectives of legalising land tenure and creating positive incentives to promote sustainable activities, helping rural landowners to clarify and legalise land tenure. The "Arco Verde" region is composed of the municipalities having the highest deforestation rates. The government tried to establish its presence in these municipalities and to strengthen the sustainable development's strategies. Only a modest part of the government's sustainability goals in the PAS programme was achieved.

Due to the chaotic situation in the BR-163 region, the Federal Government decided to implement a special regional development programme in an area where the government had increasingly lost control.

5.2. The Sustainable Regional Development Plan for the area under the influence of the BR-163 (Cuiabá-Santarém)

This plan, implemented to cushion possible negative consequences of the major infrastructure project, was based on the assumption that it must be possible to achieve economic growth and national integration goals with social justice and preservation as well as the sustainable use of natural resources. It aimed at combating the illegal occupation of public lands, the creation and consolidation of conservation units and Indigenous lands, the provision of services in urban centres (treated water, basic sanitation), increased food security, the valorisation of traditional knowledge about biodiversity, among others. This could only succeed if the participation of all social actors in the design and implementation, but also in the monitoring and evaluation of the plan was guaranteed.

The plan met the demands of the civil society for sustainability of the region, consolidated in the *Carta de Santarém* of April 2004.²⁶² It included demands related to basic services, land planning and combating violence, management of natural resources, social and cultural strengthening of local populations, environmental management, and monitoring. The first public hearings on the environmental impacts (EIA/RIMA) of the planned asphaltting of the BR-163 took place in April 2004. Fearnside criticised very clearly that the key problem was “that environmental impact assessment and licensing procedures are subject to pressure from those interested in speedy and obstacle-free construction of the infrastructure” (2007, 608). In addition, it must be emphasised that the most important environmental damage was not intensively incorporated into the assessments, either intentionally or due to a lack of expertise.

The severity of the problems linked to this project, a mere transport corridor for agricultural commodities, had led to a broad mobilisation of social movement organisations – Indigenous people, smallholders, rubber tappers, NGOs – as well as private institutions specialised in environmental research. The latter tried to bring in the expertise of those not directly involved in the projects.

In particular, the asphaltting of the 950 km section of the BR-163 (Cuiabá–Santarém) in Pará triggered strong criticism and fears that it could cause major ecological damage and impact on Indigenous lands. Many small landowners working on a subsistence basis were expelled from their land as a result of the preparations of the highway construction. Property rights of these landowners were poorly protected, and they were vulnerable to the activities of speculators and developers. Grabbing of Indigenous lands had been explicitly a component of the land occupation process in the north of Mato Grosso and in southwest Pará, receiving support from agricultural projects encouraged and funded by the Federal Government.

In addition, Indigenous land was forcibly seized by speculators who relied on forged documents certifying that the people were not Indigenous or even land squatters (UNEP 2006). “A climate of generalized lawlessness and impunity prevails, and matters related to environment and to land tenure are especially unregulated” (Fearnside 2007, 601). Deforestation and illegal logging had accelerated in anticipation of highway paving. In the course of deregulation and flexibilisation, the Federal Government withdrew from many areas of action on the regional scene and left the field to private capital and various global players as new actors. The high potential of conflicts led to a rapid increase of clashes of different social actors, which, without any state control or mediation, often manifested themselves in violent actions and unpunished murders.

The BR-163 plan was under the responsibility of the inter-ministerial working group (GTI 2006), decreed by a President’s Act in May 2004. The sphere of influence covered 73 municipalities (28 in Pará, 39 in Mato Grosso and 6 in Amazonas) and an area of 1.2 million km².

Two rounds of public consultations were held in the region to identify the demands and expectations of local participants of the plan and to collect suggestions from the different social groups likely to be interested, such as state governments, municipalities, entrepreneurs and workers representative entities, civil society forums, etc. A

262 Cf. https://ipam.org.br/wp-content/uploads/2004/03/plano_de_desenvolvimento_territorial_int.pdf (August 18, 2004).

public consultation was held in Brasília on the request of NGOs and the civil society. The objective was to bring about a more balanced scenario, such as sustainable exploration of natural resources and to foster increasing levels of governance. In the second round, the Indigenous populations were absent, because of travel problems to the meeting venues and because of the non-adherence to the promise to organise an own round of meetings for them.

The development on the central Amazonian pioneer front is an example of the socio-economic and political complexity of environmental problems, its influencing factors and its wide-ranging consequences. The most diverse conflicts of interest between the actors in Amazonia led to a constantly escalating competition in the use of space associated with illegal actions and often violence. From the perspective of political ecology, Amazonia is to be understood as a politicised environment and thus as an area of conflicting interests of actors (Coy and Neuburger 2008; Fearnside 2008; Kohlhepp and Coy 2010). There is a wide variety of stakeholder groups. On the one hand, so-called place-based actors, i.e., those anchored at the local level, and on the other hand, non-place-based actors, who have a much wider radius of action (Kohlhepp and Coy 2010).

Regional policy in Amazonia takes place under global influences and dependencies. This applies in particular to the economic interests and globally networked value chains of the agribusiness.

Since modernisation goals and economic development ideology met irreconcilably with a new environmental discourse and goals of social justice, the negotiation of a common basis for regional development within the framework of the BR-163 plan seemed almost hopeless.

Soybean farmers, sawmills, timber trade, transport companies, representatives of the municipalities concerned, urban businessmen, land speculators, often with fake ownership documents, but also land-hungry settlers are place-based actors expecting economic upswing from the asphalted long-distance road connection. Their hopes are faced by parts of the civil society, such as small farmers' unions, rubber tappers, Indigenous groups, who fear displacement and are supported by environmental groups on the ground.

In the conflict of the opposing interests of the actors, the powerful actors had so far steered the planning and its implementation almost without contradiction or at least decisively influenced it. The majority of the marginalised local actors had only a very limited right to be heard.

This local conflict-laden situation was overshadowed by the influence of the large non-place-based actors. These include certain federal ministries (transport, planning, integration), the governments of the states concerned, private investors as well as the transnational agribusiness, which markets local/regional production and its export globally.

As a counterpart, regional and national environmental agencies as well as national and international NGOs, strengthened in recent decades, appeared on the scene, committed to ecological and social sustainability and ethical economic behaviour. The NGOs are often scientifically and administratively very well networked, have been tested in discussions and the organisation of public meetings of the persons concerned and support the regional actors of civil society on a broad basis. In the case of environmental protection, some NGOs, and socio-environmental institutes (such as Isa,

Imazon, and Ipam) have acted by producing extremely relevant technical information for mapping demands and for proposing solutions, as in the case of the polygons of the conservation units (Pereira, A. *et al.* 2022).

The basic problem of the discourse on regional development in the area of BR-163 was the decisive question of an export corridor or a sustainable development for the protection of vulnerable groups because of socio-ecological reasons. Rain forest destruction has increasingly taken place out of profit or speculative interest. On the other hand, the struggle for survival is the goal and the everlasting hope for a better living. These groups saw the need to implement basic requirements and poverty-oriented strategies that are geared to the model of regional sustainability.

Despite the well-known consequences, the Lula da Silva government – especially after the resigning of Marina Silva as Minister of Environment – was still sticking to its major infrastructure projects in Amazonia, such as the asphaltting of the Cuiabá–Santarém long-distance road (BR-163). The road was the backbone of one of the most important export corridors in the Brazilian Amazon. In the energy sector, the Belo Monte hydroelectric power plant²⁶³ at the Xingu river had priority, whose construction – under the project name Babaquara – was denied in 1988 (Kohlhepp 1989a; 1998c). Hydroelectric dams on the Madeira river and a planned waterway connecting Guaporé and Beni rivers now had priority as well. In view of the large number of conflicts of interest, a new dynamic of regional constellations of actors had emerged (Scholz *et al.* 2003; Alencar 2005; Coy and Neuburger 2008).

The activities of social actors increasingly shifted northwards to south-western Pará. The road ran in southern Pará near the Serra do Cachimbo, a mountain range (250–750 m above sea level), where a support facility to the operation of aircraft flying on a straight route between the north and the southeast of Brazil had been established by the Brazilian Air Force in 1950. In the 1970s, a centre for testing weapons and training of the Brazilian Armed Forces had been set up.²⁶⁴

The paving of BR-163 in Pará had mobilised new actors and activities from Mato Grosso to Novo Progresso, Castelo dos Sonhos, among other new settlements in the state of Pará, with an increase of tensions and conflicts. Illegal land grabbing, land speculation, displacement of small farmers, threats to Indigenous groups determined the scene. Novo Progresso became the new regional centre. The area, originally intended as farmland, experienced a major expansion of large-scale livestock farming, selective logging and timber trading after the gold boom. Cattle population in the municipality of Novo Progresso increased sixfold between 2000 and 2014 to over 600 000 animals (Klingler in Coy, Klingler, and Kohlhepp 2017, 29).

Under pressure from agribusiness, the state had assumed a strategic role in the implementation of the BR-163 plan by expanding infrastructure and establishing de-

263 Cf. chapter II.6.

264 In the 1970s and 1980s, during the military regime, Brazil had a secret programme to develop nuclear weapons. In the beginning of the 1980s, evidence surfaced in the press of the existence of two major shafts in the Air Force base in the Serra do Cachimbo. These raised suspicions over nuclear activities, as the shafts had been possibly designed as testing sites for nuclear explosives – which has always been officially denied – or for the storage of nuclear waste from nuclear power plants. Although extremely remote at that time, the location was relatively close to Indigenous settlement areas. The programme could not be realized and was dismantled in 1990, five years after the military regime ended.

velopment poles. In addition, environmental and institutional factors have gained influence in the form of the establishment of protected areas, control, and monitoring of illegal land grabbing. The demand for environmental protection was a historical concern, as opening the road could allow access for loggers and land grabbers, creating an “aisle of devastation” (Coy and Klingler 2014; Pereira, A. *et al.* 2022). Faced with the very pressing but completely unresolved issue of legally secured land access, the state blocked itself with the aim of preventing illegal logging and land speculation in the land grabbing process in the long term.

In addition, globally controlled discourses on rain forest destruction, CO₂ emissions, threats to Indigenous habitats or sustainable value chains were becoming increasingly important in the negotiation process of land use at the frontier. At the local level, more than ever, actors were simultaneously squeezed into the global logics of international value chains on the one hand and the sustainability discourse on the other and are increasingly unable to make self-determined and responsible decisions due to the restricted rights of disposal over land (Klingler 2022).

Farmers in the region had heeded the government’s call to develop land in Amazonia since the 1980s. They cling to the frontier myth of having successfully achieved their goal and fulfilled their duty but are now complaining about rapidly changing laws and the new environmental and global climate dialogue and its direct and indirect repercussions. From their point of view, areas in which they had established farms with official approval were suddenly designated as protected areas (Jamanxim National Park etc.). “We are not the bad guys” was the reaction of one of the affected farmers,²⁶⁵ who felt overwhelmed by national requirements and international demands for sustainability.

As a conclusion of the Sustainable Plan BR-163, which envisaged the legalisation of land titles along the road and the delimitation of protection and sustainable use areas such as conservation units and extractive reserves, it must be stated that the plan was not properly implemented by the government. The BR-163 plan did not have its own resources, which meant that each ministry had to fit the plan’s actions into its budget. Low use of resources, insufficient inspection, lack of INCRA and IBAMA personnel, improper implementation of the protected areas were some of the most important failures which resulted in the advance of the agricultural frontier opening new areas.

People took possession of land by means of false deeds (*grileiros*), submitting applications to INCRA to regularise huge areas over which they did not have any legal right, using local people who act as false applicants (“*laranjas*”). To obtain contiguous plots of land larger than 2500 ha, the maximum limit for disposal of individual plots of public land, frequently some applications of “relatives” were presented.

As a key measure, the government turned huge areas of land along the road into conservation units, removing them from the land speculation market, but no appropriate precautions have been taken to protect them adequately.

When the road project was retaken after the standstill caused by the 2008 crisis, many leaders of the government agencies responsible for the articulation around the plan had moved to other agencies. This could have contributed to the governmental

265 Interview by Stefanie Nolen, January 26, 2018, in Novo Progresso, <https://www.theglobeandmail.com/news/world/amazon-rainforest-deforestation-crisis/article37722932/> (accessed October 20, 2022).

demobilisation regarding the sustainable and territorial aspects of the road-paving project (Oliveira 2015; Pereira, A. *et al.* 2022). Although a majority favoured the participation process promoted, a mix of trust and disbelief prevailed over the governmental policy (UNEP 2006). The lack of trust in the state's ability to act sometimes led to civil disobedience.

The PPG7 International Advisory Group (IAG) presented clearly formulated critiques and detailed recommendations for better organisation of public land registration and for monitoring and clarifying the problems that the government had been slow to address, despite the accelerating land occupation process. There was a lack of clear indications on how to connect the licensing procedure of the BR-163 and the Sustainable BR-163 plan. The transversality of policies and practices was not occurring on the expansion fronts of the Amazon region. The recognition of the value of environmental services in Amazonia was necessary, with the accelerated creation of knowledge chains that become production chains, such as the bio-industry.²⁶⁶

NGOs most frequently raised contentions against state and local governments, loggers, urban entrepreneurs and urban workers. Migration, the increase of violence and crime, environmental devastation, and the difficulties of access to land were the issues most frequently seen as important.

Referring to federative coordination, most of the region's mayors favoured the road but opposed the plan, particularly the command-and-control actions and land-use planning in the context of the demand for environmental protection. The mayors especially defended the interests of the local elite related to mining, agriculture, timber extraction, and timber trade. Unlike sectoral coordination, there was no institutional arrangement to promote this coordination between federal, state, and municipal governments (Pereira, A. *et al.* 2022). The organisation of an effective participation in the region could be expected from the Federal Government as the responsible actor. However, its agencies INCRA and IBAMA were often described as inoperative, ineffective, bureaucratic, and corrupt (UNEP 2006). There was also considerable tension between the Ministry of Environment (MMA) and IBAMA, the federal agency under the MMA, which has to exercise the environmental police role.

The local civil society in Novo Progresso criticised alternative regional development strategies due to negative experiences in the implementation of the participatory development goals of the Sustainable Regional Development Plan of BR-163 as well as the low proportion of definitive land titles in the land regulation programme Terra Legal (Klingler 2022).

As a result, it must be noted that the BR-163 plan can only be seen positively for those who already had the advantages of the asphaltting of the road. The new highway benefits the economic elite of Mato Grosso, the largest soybean producer and exporter in the country, and to some extent in southwest Pará. Electronic products from the Free Trade Zone of Manaus, meat, timber, and agroforest products, in addition to soybeans, are the main cargo. Those who lived in the towns located along the highway in particular gave more importance to economic expansion than to the environmental features included in the plan.

Participation of all in the benefit of the new corridor did not work as planned. Social disparities between the actors alongside the BR-163 increased excessively as did

266 IAG Relatórios XX–XXII (2003; 2004a; b).

the vulnerability of the urban and the rural poor as well as the Indigenous people. The “winners” of the BR-163 try to defend their position against all interference by all means, including against environmental laws. As a result of displacement processes in rural areas, intraregional migration to regional centres and new pioneer towns was increasing, leading to impoverishment growth and very conspicuous fragmentation processes.

Violence is omnipresent. In 2019, the Pastoral Land Commission denounced that in all municipalities in Pará around the highway (Trairão, Itaituba and Novo Progresso) there are small farmers, settlers, extractivists and Indigenous peoples threatened with death. The concession of the Amazon section of the BR-163 highway for a period of 10 years in 2022 transformed it into a privatized highway for corporate use and increased conflicts.

The reason for this overall situation is clear: The highway should not have been paved until after a state of law had been established. Furthermore, it should have been independently certified that sufficient governance arrangements prevails to secure and finance protected areas and enforce environmental legislation (Fearnside 2007; Rodrigues and Nahum 2023). This, of course, before making *de facto* decisions on the implementation of infrastructure projects at the expense of a large part of the regional population for whom the state has a duty of care. Improvement of governance in the Amazon failed widely.

Public and private sector strategies of valorisation led to a continuous transformation of social relations with nature. Due to the resulting dependencies, this transformation represents a socio-ecological challenge. The concept of post-frontier shows the narrative shift that discusses the frontier-governance between modernisation-oriented development and valorisation towards socio-ecological protection modalities of “sustainable development” (Klingler in Coy *et al.* 2017; Klingler 2022).²⁶⁷ In the post-frontier phase, the Amazonian rain forests have long since become “political forests” (Vandergeest and Peluso 2015, 162).

267 Klingler’s research of the example of Novo Progresso shows how new peripheries develop into spaces of global significance in the course of the expansion of resource frontiers.