

2. Concluding remarks

A little more than 50 years ago, the Brazilian Military Government decided to grant private capital almost unlimited access to the largest tropical rain forest area in Amazonia with generous tax incentives after the failure of the widely announced state-led agricultural colonisation of small farmers. The exploitation of the complex Amazonian ecosystems has been carried out against the warnings of scientists, without regard for the Indigenous as well as the regional rural population and the ecological fragility of the natural conditions. Scientific preliminary studies and the necessary management control were largely lacking. Infrastructure projects, large-scale cattle grazing, extensive slash-and-burn agriculture and mining dominated the Polamazônia programme.

The military's economic development model was based on an "El Dorado" mentality of unlimited economic growth. Hasty, inadequately prepared project planning of conservative modernisation "from above" without consideration of social and ecological consequences characterised the state's approach. Tropical ecosystems and the regional population were seen more as obstacles to economic "progress." The lack of understanding for sustainable regional development, the deficient coordination of state and private projects at the federal, regional and above all local level resulted in high follow-up costs and social burdens. This continued to be the case frequently after the end of the military dictatorship in 1985.

Land speculation and conflicts with the regional Indigenous population and with squatters led to serious problems. Some national and international investors were more interested in increasing the value of their estates than in cattle breeding, favoured by nearby road building and other investments in infrastructure. A highly speculative land market emerged, and cattle grazing projects served as a suitable means to acquire land using the tax breaks.

Pioneer front areas in Amazônia Legal are characterised by clashes between different social actors in a permanent struggle for land access and spatial domination of rain forest areas and their natural resources. Land grabbing at the Amazonian frontier is associated with ubiquitous illegal procedures (*grilagem*), corruption and violence. The untrustworthiness of land titles, sometimes based on dubious or falsified historical documents or by forging of the land register through bribery was one of the basic problems. For a long time, the riverine population was not supported by targeted government programmes, so that, like the Indigenous population, they suffered most from illegal and often violent land grabbing, displacement and forced migration to the poverty-stricken neighbourhoods of large cities.

It is most regrettable that the state monopoly of violence is rarely existing in peripheral frontier regions, or the official institutions were weakened – sometimes in-

tionally – or frequently corruptible. Violation of law plays a key role in most conflicts of interest. Indirect “structural violence” is the result of unequal power relations and unequal distribution of natural resources or even leads to direct violent activities between persons or groups involved.

Most democratic governments that followed the military dictatorship were also unwilling to invest in Indigenous affairs and often did not admit their indifference, lack of appreciation and little understanding for Indigenous people. The responsible authority for Indigenous affairs, FUNAI, has not been able to adequately address the problems of the Indigenous population. This agency was dependent on changing government strategies, worked with small financial resources, and suffered from persistent corruption, lack of qualified anthropologists and administrative ambiguities. Only recently this has changed among some decision-makers in Amazonian states, as it has become clear that preserving biodiversity through reduced deforestation will have positive effects.

In their regionally dispersed territories, the Indigenous population was frequently seen as an obstacle to the economic exploitation of Amazonia. Amazonian states saw the establishment and registration of Indigenous territories by the federal government as a negative influence on their economic development opportunities. Although more than 22% of the area of Amazônia Legal are Indigenous territories and mostly legally recognised, they suffer from the pressure of advancing pioneer fronts, constant border violations for illegal exploitation of natural resources. They are jeopardised by the lack of state presence and administrative weakness. However, it is generally recognised that the real guardians of the rain forest are the Indigenous peoples or traditional peasant communities native to some Amazonian regions.

Due to modern infrastructure, expansion of cattle breeding and agribusiness, mining activities, wood extraction, drug trafficking, biopiracy and environmental degradation, the physical, economic and especially the socio-cultural vulnerability of Indigenous societies in Amazonia is highly endangered.

In general, Indigenous peoples are still the losers of the regional policy for Amazonia. There was a fundamental conflict at the moral-ethical level in addressing Indigenous problems within regional development programmes: granting financial compensation for the deprivation of habitat, the destruction of the cultural identity and self-determined economic existence of a minority that was the government’s protégé under the Brazilian Constitution.

In the smallholder sector, the Polonoroeste programme, with financial support from the World Bank, attempted to implement “development from below” based on credit for small-scale farmers, cooperative organisation and agricultural extension services. The positive impulse of the programme suffered from an overly optimistic timetable and was hampered by grossly underestimated immigration and conflicts on the pioneering front, as well as by the weakness of regional institutions.

However, the almost simultaneous establishment of the mega-project Programa Grande Carajás (PGC), whose planning concept originates from the authoritarian military regime, completely ignored the positive approaches to integrated rural development of *Polonoroeste*. The PGC was announced to be the world’s major integrated regional development project. The new democratic governments after 1985 were confronted with a development programme that proved to be a model of “development from above,” placing the Amazonian periphery entirely under the control of Brasília

without taking into account the basic needs of the marginalised rural poor or ecological and environmental issues.

Unchanged authoritarian decision-making structures, confusion of competence in planning or even unrealistic solutions of project implementation prevailed in the PGC administration. SUDAM, which never had a sound regional development strategy, was deprived of its former status. An unclear situation with dubious land titles, invasions and land conflicts of all kinds dominated the scenario. The destruction of tropical rain forests' biodiversity by huge fires and the unimaginable deforestation rates alarmed the international public.

The iron ore project in Serra dos Carajás, organised by Cia Vale do Rio Doce (CVRD), was the core project of the PGC, which made Brazil the largest iron ore producer and exporter next to Australia. In contrast to the well thought-out environmental planning in the CVRD concession area, obliged to comply with the conditions of the World Bank loans, the directly related projects such as the railway construction and the other PGC large-scale projects (Tucuruí hydropower plant, alumina and aluminium industry, charcoal-based pig iron production) led to mass migration and a chaotic and violent situation in the surrounding PGC region. In addition, the gold rush at Serra Pelada increased social tensions and demonstrated the lack of state control over regional development.

The PGC didn't have a clearly defined regional planning strategy that included all social actors. It was a development programme without a budget of its own, living of state subsidies and financing projects to integrate Amazonia's natural resources into the world market. Unfortunately, the "sell-out" of Amazonia did not bring sufficient financial resources back into the region to enable ecologically and socially sustainable development for the benefit of the majority of the population. In PGC, the living conditions and protection of Indigenous territories in East Amazonia were not given special consideration. The landless rural population of the PGC region had very difficult access to land and remained marginalised. There was a lack of political will to implement communal programmes for integrated development to achieve sustainable forms of agroforestry and agricultural production to meet the social needs and a socially balanced regional development.

The socio-economic and environmental impacts of large-scale projects and the related social and ecological costs were not duly considered. There was a lack of assessment of the environmental impact of projects during preparation and monitoring of ongoing projects. Reasonable doubts arose about the seriousness of the environmental impact assessments, as the side effects associated with the implementation of the projects that caused environmental damage were not taken into account. In many cases, consulting companies prepared reports favourable to the approved projects, because they were contracted by the proponents of the projects, interested in the positive assessment.

These projects directly interfered with the municipal development in the affected areas and were by no means coordinated with municipal necessities. Large-scale projects often lead to spatially isolated enclaves, polarisation effects prevail, and intra-regional disparities steadily increase. Information of the population affected by such projects – if available at all – was inadequate and delayed. Follow-up costs and the financial burdens for the protection against environmental damage remained with the regional or municipal administration which were neither prepared nor financially

able to cope with this. Tax breaks for large projects resulted in low tax revenues in the municipalities.

Large hydroelectric power plants like Tucuruí were considered to produce “green” energy but the process of anaerobic decomposition of biomass in the huge, flooded area of the reservoir caused emissions of toxic greenhouse gases such as CO₂, H₂S and methane. Resettlement projects were not planned in advance and had disastrous social and economic effects on the population. The already low compensation payments were often deliberately delayed and devalued by inflation. Retention and dumping of red mud produced in the refining process of alumina caused lasting dangerous environmental problems and were the reason for severe groundwater pollution. Large-scale projects attracted tens of thousands of construction workers. After the end of construction only few permanent positions remained, which were filled by well-trained technicians. Unskilled workers were dismissed but remained living near the project in precarious conditions.

The Grande Carajás programme must be evaluated as an administratively and functionally inefficient, institutionally uncoordinated and vertically incoherent mega-programme. The objective of decentralising spatial planning decisions and involving the affected regional population was not achieved. By far the majority of the regional population judged PGC to be an “attack on the heart of Amazonia.”

The new Brazilian Constitution of 1988 created the basis for a legally regulated environmental policy with a separate chapter on environment protection. However, the establishment of environmental agencies was no guarantee for the practical implementation of the new regulations, as the control of compliance with the legal provisions in a frontier region remained difficult. On the basis of the Constitution, numerous NGOs were founded which, together with environmental activists and grassroots organisations, were important actors in the socio-ecological movements in the 1990s. Environmentalists campaigned with great commitment for the anchoring of environmental protection in the Constitution of the federal states. NGOs, which increasingly had scientifically trained staff members, have also contributed to the realisation of public policies through participatory processes and incorporation of local communities in environmental management and monitoring of state regional policy. NGOs strengthened good governance processes.

Pressure from international environmental NGOs has mediated government policy and – two decades later – led to important agreements, such as the soybean moratorium and the cattle agreement. However, in conservative and nationalist circles in Brazil, the socio-ecological activities of international NGOs are viewed with some suspicion.

As deforestation increased rapidly, the G7 proposal to financially support the Brazilian review of new regional development models for the Amazon region was accepted by the Brazilian government. The aim of the International Pilot Programme to Conserve the Brazilian Rain Forests (PPG7), with Germany as its main donor, was the implementation of a sustainable development approach. It was a unique opportunity to realise the principles of the Agenda 21 of the 1992 UNCED summit in Rio de Janeiro.

PPG7 was the starting point for some significant environmental and regional policy improvements for Amazonia. One of the main contributions was the elaboration of joint management in strengthening federal government entities in the implementation of sustainable environmental policies, with public-private-partnership integrat-

ing the different groups of civil society, such as active networks of NGOs. On the other hand, decentralisation of environmental management in priority areas of Amazonian states was strongly supported, improving state-controlled environmental policies with the management of natural resources and of protected areas.

The implementation of so-called demonstration projects gave a very important impetus to small-scale projects by regional groups and NGOs. The aim of this “development from below” was to generate income and strengthen the livelihoods of local communities, which had been completely forgotten by the government for a long time. Improving the security of the Indigenous population, demarcating and protecting their territories and disseminating the traditional knowledge of these groups also received international attention.

Unfortunately, some relevant ministries did not participate in PPG7, and thus many problems of small farmers, tenants, and *posseiros* were not considered. Problems of urban development also remained excluded.

However, despite deficits or organisational and implementation obstacles, PPG7 was the most comprehensive example of an international environmental cooperation programme realised in the Brazilian Amazon with the explicit participation of the Brazilian government and the civil society.

All the more incomprehensible was the implementation of extensive infrastructure programmes almost simultaneously, which aimed at a conservative modernisation and were without any environmental component or social relevance for the mass of the Amazonian population. These programmes, counterproductive to previous environmental goals and with determined private economic interests, had far-reaching negative consequences and were associated with enormous deforestation.

In the first government of Lula da Silva, the Minister of Environment, Marina Silva, succeeded in reducing deforestation very significantly. Prevention and control of deforestation were at the centre of the measures. The strict application of environmental laws successfully tried to detect illegal deforestation activities. Blacklists of municipalities with high deforestation were established, and farmers involved in illegal deforestation were not admitted to public agricultural credit programmes.

The highly controversial Forest Code had been increased to a legal forest protection of 80% for private property in the Amazon rain forest biome under the Cardoso government, amidst great protest from the agribusiness sector. Under the Rousseff government, Lula da Silva’s successor, forest protection in Amazonia was reduced from 80% to 50% under pressure from the agribusiness lobby. In 2018, the Supreme Court revised the amendment.

Clear title deeds existed for only 10% of the private land in Amazônia Legal. In 2010, the federal government made it mandatory to map all private rural land and register it in the Rural Environmental Registry, an important component in keeping deforestation under control. Protected areas and conservation units were created with the aim of protecting biodiversity in the ecosystems of the Amazon region and promoting sustainable development. The combination of deforestation control and the establishment of the Amazon Fund enabled state governments to elaborate own plans for prevention and control of deforestation with projects relevant to smallholders.

Lula da Silva’s Plan of Sustainable Amazonia could not resolve the severe conflicts between the powerful supporters of infrastructure development and the engaged, well-prepared environmental groups with the aim of regional sustainability. Agribusi-

ness was specially supported, and the extensive activities of cattle ranching could not be reduced. Environmental policies were frequently realised without consideration of important environmental issues. The government was unwilling or unable to implement the sustainability approach in its programmes after the departure of Marina Silva, provoked in 2008 by the president's caving in to pressure from agribusiness and the hydroelectric power plant lobby. This was a setback for Brazil's ambitions to become a major voice in global environmental debates.

Towards the end of the second term of Lula da Silva's government, Brazil had started actions in collaborating with the global programmes to combat climate change and implemented the National Plan of Climate Change and the Low-Carbon Agriculture Plan.

Some years later, REDD+ projects provided financial incentives for the results achieved in combating deforestation and forest degradation. Forest-related greenhouse gas emission reductions and enhancement of forest carbon stocks were rewarded with results-based payments from various international sources. These projects promoted changes in the political articulation, funding possibilities and mobilisation of civil society and led to the conservation of biodiversity and social benefits to the region. Lack of political commitment and inefficient local governance questioned the success of these projects.

Already in the late 1980s, the availability of large land reserves had caused migration of southern Brazilian farmers to the *cerrados* of the Planalto Central and the adjacent Amazonian region. Decisive for these activities were the significantly lower land prices compared to southern Brazil and the favourable natural conditions for mechanised agriculture, especially in the *cerrado*. The process of globalisation and world market integration of the *cerrado* and Amazon rain forest areas developed on the basis of rapidly expanding soybean monocultures in the 1990s onwards. Agro industrialisation was supported by agricultural research, technical assistance, a high degree of mechanisation and specific pricing and credit policies. Agribusiness was integrated into global value chains with agricultural production, marketing, logistics, financing, agricultural machinery and trade strategies.

The expansion of soybean cultivation first transformed northern Mato Grosso, introducing large-scale, modernised and export-oriented agriculture with new no-till methods, but with high pesticide use and genetically modified seeds. In addition to increasing economic power in rural and urban areas and socio-cultural conflicts with the traditional population, the farmers from South Brazil have also significantly expanded their political influence in the region at all levels.

Concentration of ownership of large soybean entrepreneurs led to the displacement of smallholders who had been traditionally engaged in subsistence agriculture in this region. The "winners" still cling to the frontier myth that they have successfully achieved their goal of setting up farms with government approval, but now complain about the rapidly changing laws and the new environmental and climate dialogue and its direct and indirect impact on their life and prosperity. They were now confronted with the soybean moratorium, which banned the sale of soybean from areas deforested in Amazonia after 2008. However, soybean expansion has not been suppressed because of the abundance of cattle pastures for conversion to soybean.

The most diverse conflicts of interest between the social actors led to a constantly escalating competition in land acquisition and land use combined with illegal actions

and often also violence. This is how the idea of an important cross-problem regional planning came into being. The Sustainable Regional Development Plan for the BR-163 area provided for land title regularisation along the Cuiabá–Santarém road and the delimitation of conservation units and extractive reserves, was not implemented properly by the Lula da Silva and the following governments. Provision of few financial resources, lack of trained personnel, insufficient monitoring, improper implementation of the protected areas were the most important failures which resulted in the advance of the agricultural frontier opening new areas for forest devastation.

The crucial issue for regional development and the question of asphaltting BR-163 was either an export corridor for world market-oriented agricultural products or socio-ecologically based sustainable development to protect vulnerable populations. Finally, asphaltting was completed in 2019. The expansion of transport infrastructure for commodity export, which significantly reduces transport costs, took precedence over poverty-oriented regional sustainability strategies.

The highway was the backbone of one of the most important export corridors in Brazilian Amazonia. Some federal ministries, the governments of the affected federal states and transnational agribusiness exerted strong pressure on the decision-making process. They were backed by soybean farmers, sawmill owners, timber trade, transport companies, representatives of the municipalities concerned and urban businessmen. On the other hand, a broad mobilisation of social organisations, small farmers' unions, rubber tappers, and Indigenous groups supported by national and international NGOs tried in vain to secure their livelihoods. The new highway benefited the economic elite of Mato Grosso and, to a certain extent, of the southwest of Pará. Former pioneer towns changed very strongly into globalised trading centres for commodities and very soon showed an alarming socio-spatial fragmentation.

Lula de Silva's government stuck to large infrastructure projects and hydroelectric power plants in Amazônia Legal. In 2007, the Growth Acceleration Programme was introduced with huge investments. The Belo Monte power plant mega-project, whose construction had not been approved in the late 1980s, now appeared revived as a re-named run-of-river power plant depending on the flow of the river and was considered an anchor project of the new investment plans. However, it was known that the Xingu river has one of the greatest annual variations in water flow of all Amazon tributaries. Belo Monte was met with great resistance from the riverine population and Indigenous peoples and triggered strong protests from NGOs. The project was also strongly questioned due to bureaucratic and insufficient public hearings and the lack of a qualified environmental impact assessment. Despite numerous lawsuits against the construction of Belo Monte and rulings to stop the project, as well as all environmental, hydrological, social, financial and economic counterarguments, Belo Monte was built with partial permits until its completion in 2019.

Belo Monte is a prime example of the lack of environmental justice in large hydroelectric projects. Common problems include the violation of basic human rights, measures that completely ignore environmental concerns, loss of biodiversity, landscape degradation, destruction of the livelihoods of people who depend on fishing or hunting, involuntary resettlement and lack of resettlement management.

The electric energy produced in Belo Monte is used for the electro-intensive aluminium, aluminium, iron, and other smelting industries in Pará and Maranhão, predominantly owned by global players. Belo Monte is one of the most inefficient hydro-pow-

er plants in Brazil, generating only 10% of its potential capacity of 11 233 MW for four months and only 39% on average for the year. The need for more dams upstream, officially denied by the government, threatens to ensure sufficient water flow.

Political pressure on technical staff in the approval process was omnipresent. Top managers testified in court that bribes paid by large construction companies to the petroleum sector also applied to the electrical sector and contracts for Belo Monte. The leading political parties obtained substantial financial contributions to election campaigns from construction enterprises. Brazilian prosecutors uncovered a system of corruption and massive fraud in the construction of mega-projects in Amazonia involving a kind of criminal association of Brazil's biggest construction companies, influential government officials and highest-ranking politicians. This has severely damaged the country's intentions for sustainable planning in Amazonia and Brazil's reputation internationally.

Despite serious problems with mega-projects in Amazonia, official measures for sustainable regional development have been attempted from time to time since the 1990s and some have also been implemented with varying success. Indigenous territories were approved, but unfortunately not always sufficiently secured. At least temporarily, government measures have been able to greatly reduce deforestation. The *ribeirinhos'* own initiatives for small-scale agricultural and agroforestry projects (e.g., honey production, use of fruits and vegetable cultivation, partly with a cooperative structure), which were not financed by the government, increasingly received support from local and regional NGOs.

When the far-right populist Bolsonaro came to power in 2019, all previous achievements were abruptly abolished, and the democratic constitution was endangered. Deforestation in Amazonia had already been on the rise since 2013, but the rates of increase were particularly high during his four years in office. Bolsonaro dismantled environmental licences and regulations as well as Indigenous rights. No new Indigenous territories were created, mining and timber companies could now operate in these areas with official approval. The president denied climate change, was an opponent of forest protection, disregarded scientific findings, was an enemy of NGOs and did not attach any importance to Brazil's commitment under the Paris Climate Agreement of 2015. With his aggressive and insulting behaviour, Bolsonaro attracted negative attention both nationally and internationally.

Under his presidency, Amazonia experienced a new phase of absolute exploitation without regard for social inequalities and environmental concerns. Deforestation for cattle pastures even occurred in Indigenous territories, conservation units and extractive reserves. Uncontrolled deforestation, excessive forest fires, gold mining, expansion of croplands and pastures and the advancing of infrastructural projects marked this phase. Land was illegally acquired and "legalised" by falsifying documents. Criminal networks also dominated illegal logging and timber trade undisturbed. Budget and staff cuts weakened the environmental authorities. Opponents of his extermination strategies were violently attacked or received death threats. The state's monopoly on the use of force disappeared in large parts of Amazonia and was replaced by violent actions of private criminal unscrupulous social actors.

In Amazônia Legal, there was a climate of violence, fear, despair and a weakening or absence of judiciary power. Ethical principles and environmental justice were intentionally ignored by the Bolsonaro government. The way he ran the government

contributed to squandering Brazil's ecological capital, dividing Brazilian society and radicalising his supporters.

Bolsonaro's government demonstrated how quickly environmental measures to protect Amazonia can be overturned in domestic political struggles and a change of political orientation. Environmental institutions were brought to a virtual standstill, and violence and chaos became omnipresent.

At this point, at the latest, it became clear to most that Amazônia Legal had become a scene of environmental destruction and crime in recent decades. To date, about 20% of tropical rain forests have been cleared, mostly illegally, and another 20% are severely degraded. Tropical forest ecosystems are a huge CO₂ reservoir. The Amazonian ecosystems store about 150 to 200 billion tons of carbon.

The main cause of deforestation continues to be expanding large-scale cattle ranches, which account for about 80% of deforestation in Amazonia and are responsible for two-thirds of Brazil's CO₂ emissions. Slash-and-burn releases enormous amounts of carbon dioxide emissions, destroys the high biodiversity and thus the habitat of Indigenous and riverine populations. Excessive emission of greenhouse gases cause dangerous impacts on regional climate change and global warming. Tropical rain forests protected by Indigenous groups, on the other hand, are very strong carbon sinks. Threatening problems of deforestation are destruction of the closed nutrient cycle of ecosystems, increasing temperature, regional instability of rainfall, reduced evaporation, severe soil degradation and erosion, changes in the hydrological cycle and problems of dryness, reinforced by El Niño effects. The intensity of extreme events such as droughts, the length of the dry season and floods is increasing. Regional climate change due to large-scale deforestation and the effects of forest fires make remaining tropical rain forests more vulnerable. The immense scale of CO₂ emissions in Amazonia is having an ever-increasing impact on the global climate.

The most alarming news is that Brazilian Amazônia Legal has changed from a CO₂ sink to a source of new CO₂ emissions in the last two decades. This means that deforestation, climate change and widespread forest fires at a total deforestation rate of 20-25% mark a tipping point where the Amazonian rain forests turn into non-forest ecosystems (savannahs), especially in eastern, southern and central Amazonia. This "point of no return" could be imminent.

After four years of presidency under the right-wing populist Bolsonaro, the new leftist government of Lula da Silva, in office since the beginning of 2023, has a great opportunity for a fundamental turnaround with the final reversal of destructive activities in the Amazon region and the aim of sound sustainable development. The new decisions to revitalise the environmental institutions, to strengthen their functions and to rapidly reduce deforestation rates were welcomed not only by Lula da Silva's supporters in Brazil, but also by many governments worldwide. However, it must be borne in mind that there is still scope for legal logging in many regions due to the existing Forest Code with a maximum logging rate of 20% for private property in rain forests.

The Lula da Silva government established a separate Ministry of Indigenous Affairs and the appointment of Indigenous persons to high-level positions in an attempt to increase the involvement of the Indigenous population. Due to the evolved self-confidence in parts of the Indigenous people, who know how to articulate themselves in defence of their rights, participation in sustainable solutions is now possible. However,

the promised improved participation of members of the Afro-Brazilian population in high-ranking positions has not yet been met.

The Amazon Fund, which was stopped under Bolsonaro, will once again provide the international community with the opportunity to compensate Brazil for environmental services in reducing deforestation and emissions and promoting sustainable land use. The Fund's resources allocated to government agencies have been one of the few sources of funding to control deforestation. Some foreign governments offered more financial support for conducting the new tasks.

Lula da Silva trusts the Minister of Environment Marina Silva and former staff members, advisors and some NGOs on Amazonian environmental issues. The country's economic situation - far from the times of an export boom during Lula da Silva's first term and high unemployment of more than 13 million people (2021) - and the political and social tensions raise doubts about the feasibility of all announced projects.

The Lula da Silva government is under environmental pressure at home and abroad. NGOs in Brazil and Europe reject the EU-Mercosur agreement as completely inadequate in content. The EU, whose residents as consumers of Amazonian goods were responsible for about 10% of deforestation between 1990 and 2020, has issued a new regulation on supply chains and will ban the import of goods from deforested areas in *Amazônia Legal*. In Brazil, agribusiness fears that the EU's prohibitive environmental standards are a deliberate pretence to make exports to Europe more difficult. In the EU, a complex coalition of opponents against the agreement had formed from the agricultural lobby to environmental activists.

Today, Lula da Silva has an autonomous foreign policy agenda, in which both the global supply of Brazilian agricultural and mineral commodities and Brazil's membership in the BRICS alliance together with China and Russia are particularly important. Brazil wants to be the independent voice of the Global South. This explains why Lula da Silva strongly opposes Western coalition sanctions against Moscow, despite Russia's war of aggression against Ukraine. China and the new BRICS Development Bank will play an even greater role in future investments in Brazil and the Amazon region.

For Brazil, China is – if necessary – always a “worthwhile” export alternative to Europe and the United States, which are strongly focused on environmental protection. The hosting of the G20 summit in Brazil in 2024 and the UN Conference on Climate Change (COP 30), which will take place in 2025 in Belém in the Amazon region, naturally strengthen Lula da Silva's international role.

Amazônia Legal is still heavily marked by economic exploitation, a region where the invaders ruthlessly threaten and curtail the rights of the Indigenous population. Until then it has not been possible to eliminate speculation, illegality and corruption. The importance of the Amazonian ecosystems as a hotspot of biodiversity has been sacrificed to short-term economic success.

Brazil “is a territory geographically fragmented into regions that continuously reproduce a socioeconomically unequal and environmentally predatory development” (Theis 2019, 356). *Amazônia Legal* is one of these “regions that escape the needs and interests of the subaltern classes” and deprives the majority of the human beings of their means of living. The regional development strategies adopted in Amazonia are part of the problem, not of the solution (Theis 2022, 88 and 92).

The El Dorado mentality of exploitation and mere extraction of natural resources must belong to the past. Actually, this would now be the big chance for the new gov-

ernment to address and improve the core problems. In the Amazon region, this would contribute to greater resilience among Indigenous and smallholder societies. However, this must be actively promoted by the government at all levels with clear strategies and without reservations (Hecht *et al.* 2021). Ecological, social and economic improvements brought about by political measures were mostly short-term, regionally limited or insufficient and difficult to reverse. However, “expectations on ongoing initiatives for sustainable development, zero deforestation, and environmental recuperation should not be too high” (Pokorny *et al.* 2021; Pokorny 2013).

In summary, it is realistic not to overestimate the possibilities of President Lula da Silva to act as a “game changer”, as he and his supporters have in mind. As is to be expected and can already be seen, the National Congress, especially the Senate, will oppose the reorganised environmental protection and Indigenous policy of the Lula da Silva government with all conceivable resistance and will prevent or at least try to severely weaken corresponding bills.

The political split in the country prevents a political consensus, which is needed to guide the activities of the various social groups towards a regional development that meets the claim to sustainability and the socio-economic needs of the population concerned. Today, more than 28 million people live in Amazônia Legal. Since 1970, the Amazonian population has quadrupled, more than 80% are urban people. This means that one in eight Brazilians lives in Amazonia. About 3.3 % of the Amazonian population is Indigenous.

Amazonian rain forests must no longer serve as a field of experience for so-called conservative development models and must not be a space of action for conflicts of interest on the globalised periphery. Direct and indirect ecological and social costs as well as the follow-up costs must be calculated precisely before projects begin and the follow-up costs must be estimated in detail. Fearnside points out that “the intrinsic value of Amazon biodiversity is a key to maintaining Amazonian ecosystems with all their environmental functions” (Fearnside 2021b). In projects, understood as economically necessary, there must be a totally new classification scale in environmental impact assessments, on what “development” means, for whom this development serves and with which specific measures resilience of the population affected almost without warning by the economic and social changes can be achieved.

The realisation that a living forest is worth more than a cut-down forest leads to a new paradigm of sustainable development. This well-founded discussion, which is being conducted in the scientific field, could be taken up by politics for a new appreciation of the Amazonian region. New bioeconomic innovations open the way to a third path of development.

Brazil has the capacity in science, environmental knowledge and technology to analyse the pressing problems of Amazônia Legal and find sustainable solutions that will convince serious governments to put them into practice. To this end, Brazil welcomes multinational technical-scientific funds and environmentally oriented financial investments as part of the international commitment to combat deforestation in Amazonia and strengthen its population.

Brazil does not need lectures from outside, but the return to successful environmental initiatives for Amazonia in international scientific and financial cooperation could contribute in the best sense to overcoming the problems of implementing sus-

tainable regional development. Environmental programmes like PPG7 could help to find new ways.

The Brazilian government and appropriate critical actors from the ranks of Brazilian civil society must work together to avoid fundamental undesirable developments in Amazonia. The ecologically and socially vulnerable region must be protected from further questionable large-scale projects that are associated with serious social disadvantages for the majority of the regional population, far-reaching social conflicts and lasting ecological damage, and that overburden the state financially.

Protecting biodiversity in Amazônia Legal will have a positive impact on the living conditions of the Amazonian population and on global impacts related to slowing climate change and global warming. This would further strengthen Brazil's national prestige and international reputation.