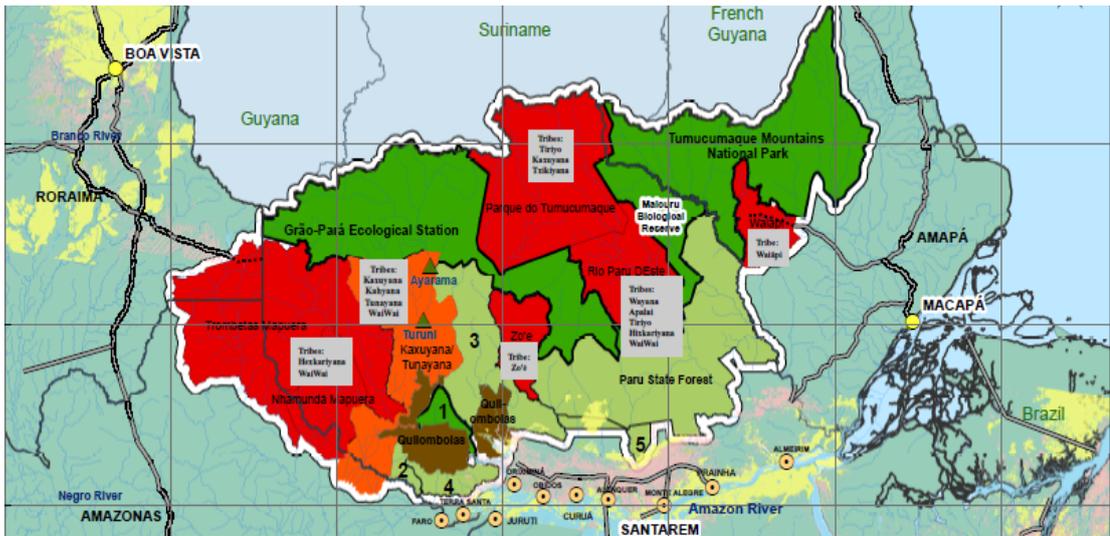


Ulf Rasmusson
Rain Forest Society
Trip report from project visit in Brazil November 3 -27, 2019

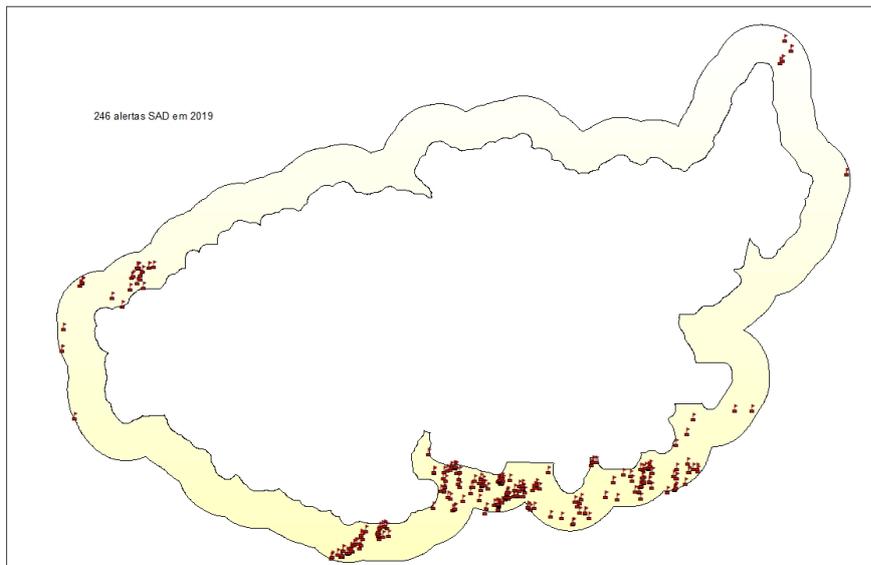
Itinerary

November 4 arrive Brasilia
Nov 5-7 National Congress of CNS the extractivist populations
Nov 8 at Ecam meeting with director Vasco and financial staff
Nov 9 preparatory work in Brasilia
Nov 10 arrive Santarem, evening night boat to Oriximina
Nov 11 and 12 visits to cattle ranchers and talks with the consultants
Nov 13 visit to a riverine community in Saraca-Taquera reserve, talks with leader
Nov 14 visit to a Quilombola slave-descendant community, talks with leader. Night boat to Santarem.
Nov 15 meeting morning meeting with Ecam and Imazon about the Mosaic work
Nov 15 afternoon monitoring self-review work with Ecam
Nov 16 meeting Ecam on cattle work
Nov 16 afternoon boat travel along the Amazon river, then car travel to Monte Alegre.
Meeting with leader of the cattle farmers' union
Nov 17 visit to cattle farmer in Prainha
Nov 18 boat to Renascer extractive reserve, visit to communities together with leader, return in the night to Prainha
Nov 19 boat travel to Almeirim
Nov 20 up the Paru river with Ecam, visit to communities. Evening by car to Monte Dourado
Nov 21 visit to ecological reserve Jari, talks with park guards
Nov 22 travel to Almeirim, met with community leader from Paru
Nov 23 – 25 a planned trip had to be cancelled for logistical reasons. Spent the time in Santarem writing, meetings with one NGO person about Paru, one government official about extractive and other reserves, one ex-mining company person.
Nov 26 in Belem, met with Imazon on the Mosaic work
Nov 27 return to Sweden

Most of my trip was organized by Ecam which did this very well. Ecam is our long-standing partner, specialized in strengthening the autonomy and territorial management of indigenous and Quilombola slave-descendant populations in a systematic and integrated way. The work is being expanded to cattle owners, protection of conservation areas and environmental work with the municipalities of the region. Ecam is based in Brasilia with field offices in Santarém in Pará state and Macapá in Amapá state. Ecam is executing the project supported by Rain Forest Society with funds from Forum Syd/Sida, Erteco and Save the Rainforests. Ecam is doing this very well. It is possible to execute the work despite the worsening environmental situation in the Brazilian Amazon and the rising deforestation.



Map 1 The Karib corridor comprising indigenous lands in red and orange, Quilombola slave descendant lands in brown, the Mosaic of conservation areas in green (dark green for strict conservation and light green for conservation with sustainable use possible in selected areas after approval). Map by Wesley Pacheco, Ecam.



Map 2 The ring of deforestation alerts during 2019 in a 50-km buffer zone surrounding the Karib corridor. Source: the SAD system. Map by Muryel Arantes

With the maps above providing a background, the project has two over-arching goals:

- The conservation and sustainable use of the protected areas of the Karib corridor including traditional community lands destined for indigenous, Quilombola slave-descendant and riverine population as well as areas of state and federal strict conservation and conservation with sustainable use with no deforestation.

- Reducing the drivers of deforestation and reaching a sustainable, high-productivity use of lands, in particular pasture, combined with forest regrowth of degraded lands, in the Karib corridor buffer zone reaching to the Amazon river to the south.

1 The Mosaic work

The Mosaic work covers the protection of the Mosaic of conservation areas, marked in dark and light green in map 1.

The following is what I have understood in talks with Imazon and with Ecam, which is rapidly expanding its involvement and with the plan to gradually take over the work, in the beginning working in parallel with Imazon. Together with Ecam staff I first met Imazon at Ecam's office in Santarem, followed by a meeting with Imazon at its office in Belem, followed by more talks with Ecam. I also got input from other persons at a trip along the border of Paru State Forest and from the management plan for Paru.

1.1 The protection of the conservation units

The Pará state conservation units Paru State Forest (Flota do Paru), Trombetas (the area marked with a "3" in map 1 and formally including the Kaxuyana-Tunayana orange-colored reserve) and Faro (area marked with a "2" in the map) along the southern boundary of the Karib Eco-corridor are facing the relatively slowly, but steadily, advancing cattle ranching and agricultural frontier to the south.

The meetings of the management council of the Paru reserve and of the management councils of the Trombetas and Faro reserves (a partly combined meeting of the latter two) were held, after over two years of absence because the state government did not have funds to pay for the travel costs for the NGO:s and civil society. It is a humbling and surprising fact to me that it is the relatively limited funds from Sweden that enabled the meetings to be held for these reserves totaling over 7.1 million hectares of rain forests.

The management councils are comprised of persons from the state and local governments, from NGO:s and civil society. They were held, as I understand it, in a positive spirit of cooperation. For me it was a happy surprise that decisions have been made to construct bases of integrated management at the boundary of the Faro reserve and of the Trombetas reserve, which are subject to incursions by fishermen and Brazil nut gatherers respectively. Construction has already started on one of the bases.

There will be five-day workshops for each of Paru, Trombetas and Faro to revise the outdated management plans from 2010. There are also planned to be three annual meetings of each of the management councils of the three conservation units. As stated, none of the councils had met since 2017.

Behind the positive spirit of the meetings is a change of opinion in the state government of Pará. The new governor there had entered with a stated intention to reduce the areas of the state conservation units which in particular means Paru, Trombetas and Faro. As a reaction to the policies of the new federal administration of Brazil and the cancellation of the Norway-funded Amazon Fund, there has been interest from the governments of Germany and Norway for a possible financing of a new "Eastern Amazon Fund". The governor travelled to those countries, and with the funding opportunities that may become available, Para state has developed a more environmentally

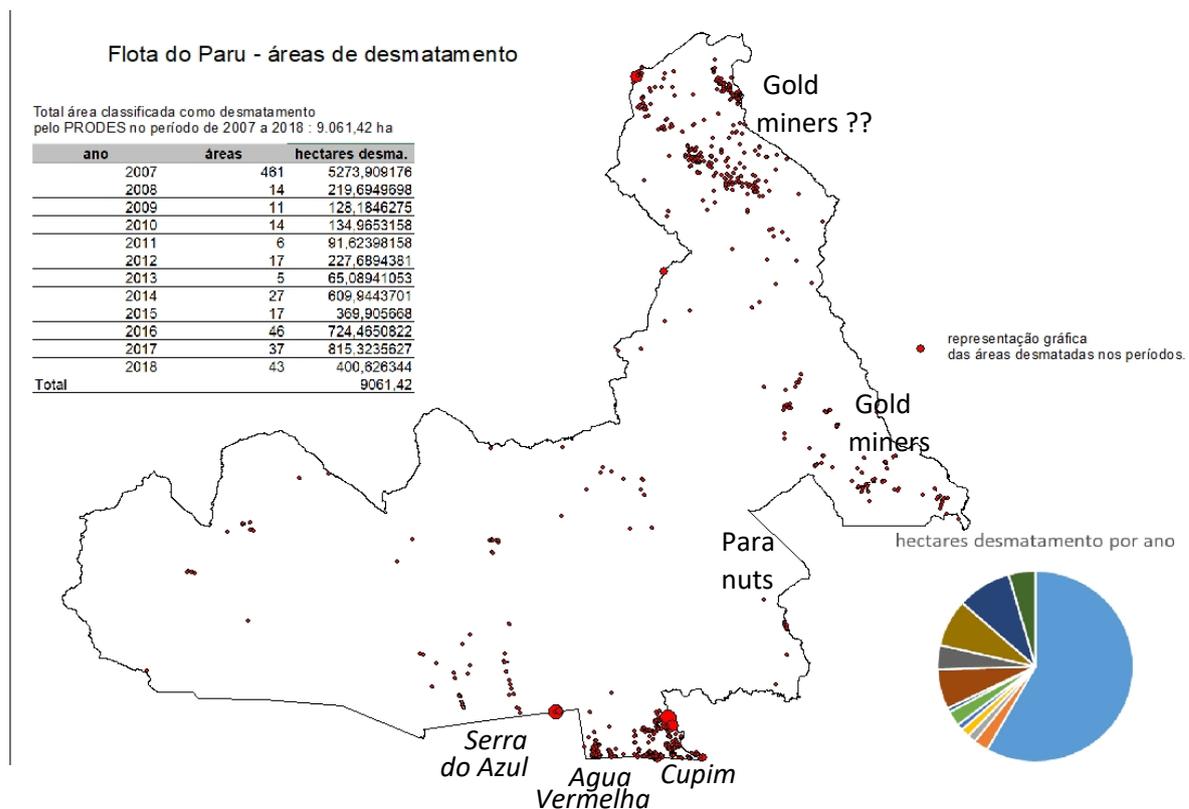
progressive view. I have also heard the change being a felt need to counterbalance the policies and rhetoric of the new president. However, Brazilian politics are complicated and there are other circles of power in the state government; a key competent head of the conservation units was recently dismissed. It should be noted that possible new Amazon Fund does not have the safeguards of the previous fund in terms of necessities of inputs from civil society and indigenous groups.

Another crucial aspect is the positive spirit from the major part of the involved municipalities, which participate in the management councils of those reserves in which a part of the respective municipality is located. The state has limited funds, and it is the municipalities that have to pay the costs of constructing the bases. Until now mainly means the municipality of Oriximina in the case of the bases at Trombetas and Faro. One reason for financing this is that there are instances of criminal persons entering the reserves, and the municipality wants some order. It also wants regulation on an issue like the collection of para nuts.

To formalize the Mosaic at the federal level is currently not possible given the administration there. It is with the state and the municipalities that the work has to be done.

The plans by the federal administration for a road through the Mosaic until Surinam and for a large hydroelectric dam in the Mosaic have not progressed.

1.2 Flota do Paru – State Forest Paru



Map 3 Deforestation spots in Paru until 2018. Map by Muryel Arantes (names of areas and activities added by me).

The reserve with the greatest threat in the Karib Eco-corridor is the 3.6 million hectare Flota do Paru (Para state forest Paru). With the exception of the recently discovered deforestation in Saraca-Taquera (see section 7), the bulk of recent deforestation in Karib is in Paru. The map above shows historical deforestation until 2018, with black dots and, when large, in red circles. The table on the side of the map shows 9 000 hectares having been deforested historically in Paru. Most of the scattered black spots apparently represent tiny spots of deforestation incurred many years ago and are smaller than they appear on the map, with the exception of the Cupim area. The major threats or actors will be detailed here:

Cupim – Agua Vermelha - the hot spot.



Map 4 The red spots mark recent deforestation in Paru. They are all in its rectangular southern extremity. The red spots in the yellow-colored border are in the buffer zone outside the Mosaic. The blue area is the National Forest Mulata. Map by Muryel Arantes.

The largest threat in Paru is in the quasi-rectangular Cupim – Agua Vermelha section that juts southward of Paru reserve. Almost all of the deforestation in Paru of the latest years, 400 – 800 hectares per year, is in that rectangular section. This is the hot spot of the Mosaic.

Two roads enter the rectangle in a north-south direction. The western road, by the Agua Vermelha area is currently subject to limited invasion, but in the eastern area called Cupim there is significant deforestation probably for cattle ranching of some hundreds of hectares per year. Whereas sustainable uses of land in Paru, Trombetas and Faro such as low-impact logging may be permitted subject to rigorous standards, deforestation is clearly not permitted and all recent deforestation is illegal. The primary motive of the invaders is unclear. Maybe this has as much to do with hopes of land value appreciation as with income from cattle ranching. An attempt was made a few years ago to delete the rectangular section from Paru but failed since it was legally judged too complicated. The invaders may be hoping that deletion will ultimately happen which will create land values.



7 km inside Paru, in the Cupim section, photo taken on our trip November 2018. This was the worst spot of recent deforestation on the eight kilometers we travelled along that poor road. The road probably continues until almost the end of the rectangle, on its east side, see maps 3 and 4.

At the council meeting of Paru a working group was formed on the issue of the invasions. Cupim is judged too difficult to start with, so the first option is probably an initiative to train local environmental agents based in the Agua Vermelha area, with the aim to get some persons from Cupim involved in that work.

The cattle part of the project is targeting precisely the regions of Cupim and Agua Vermelha immediately south of the boundary of Paru. Expected greatly increased yields will contrast favorably with clearing of rain forests for new, low-yield pastures in the adjacent conservation area of Paru.

Serra do Azul

The Serra do Azul area (see map 3) further to the west has limited deforestation now. But pressures exist and the small black spots going north-south just northwest of the red circle mark deforestation along roads built by loggers. A large logging concession there was cancelled after it had failed to live up to the standards of low-impact logging. There is concern about the risks of other actors advancing on the roads built by the company .

There will hopefully soon be made a decision to construct a base at the boundary between Paru and the adjacent Serra do Azul area which borders the logging roads and the large red circle. Serra do Azul is an “assentamento”, an “agrarian reform settlement” of small farmers and others, and has major problems. It is planned to have military police of the regional capital man the base, with their daily salaries taken care of by request from the state government conservation authority.

Parts of Serra Azul is subject to logging, agriculture and cattle ranching deforestation. The objective is to train local “environmental agents”, park guards, there.

In 2018 Ecam and I met with the union for small farmers and rural workers of Monte Alegre municipality, one of whose sections represent Serra do Azul. Later we discussed the merits of at some point in time supporting the union or its section in Serra do Azul.

Gold mining

The black spots in the far east of map 3 (certainly the south and probably the more intensively marked spots in the north but this has to be confirmed) represent deforestation for settlements of gold miners. A census made in 2009 for the management plan for Paru of 2010 showed over 600 gold miners including support personnel ranging from cooks to prostitutes based in southeastern Paru. The deforestation spots are apparently all tiny, for the construction of simple houses and the excavation of gold. The major problem is the release of mercury and an assortment of other issues.

Forest companies



Logs in southeast Paru, photographed on my visit in November 2019

A logging concession is mentioned above under Serra do Azul. Another very large concession, with dozens of workers and an airplane strip, is operating in the southeast of Paru and described under section 4 below. This is operating under strict regulations of an approved forest management plan. It would be most interesting to have this verified.

Para nut gatherers

There are para nut gatherers staying for the six months of harvesting of the nuts inside Paru close to its southeast border. See map 3. They do not deforest except perhaps for construction of simple housing and at the most two tiny deforestation spots are because of them. I visited the single largest community of nut-gatherers, in Recreio, see section 4.

Non-contacted indigenous peoples

There may be signs of presence of non-contacted indigenous peoples in Paru. It is not known if they are recent.

1.3 Future funding and organization

Future availability of funds from other sources, including the possibility of the “Eastern Amazon Fund”, is speculative and the work with the Mosaic will need funding for the next few years, with the exception of the future work with the management council of the Faro reserve. The latter is expected to receive royalty income from a mining company present in that municipality.

The costs for the meetings of the two large federal conservation units, Grao Pará and Maicuru totaling 5.4 million hectares, are met by funds from the mechanism ARPA. Grao Pará as of now apparently has no threats whereas there is some concerning Maicuru. Indirectly protection of many millions of hectares of indigenous, Quilombola and other conservation areas will be aided with the protection of Paru, Trombetas and Faro.

Ecam was already a member of the management councils of the federal conservation units and has now also become a member of the councils of the state conservation units (in the case of Paru becoming a member, this is expected to happen soon). Ecam will shortly meet with the head of the Para department for protected areas and has recently met the heads of the regional sections based in Santarem and Oriximina. Support to training and fiscalization (prevention and control of invasions and other problems) are potential areas of cooperation.

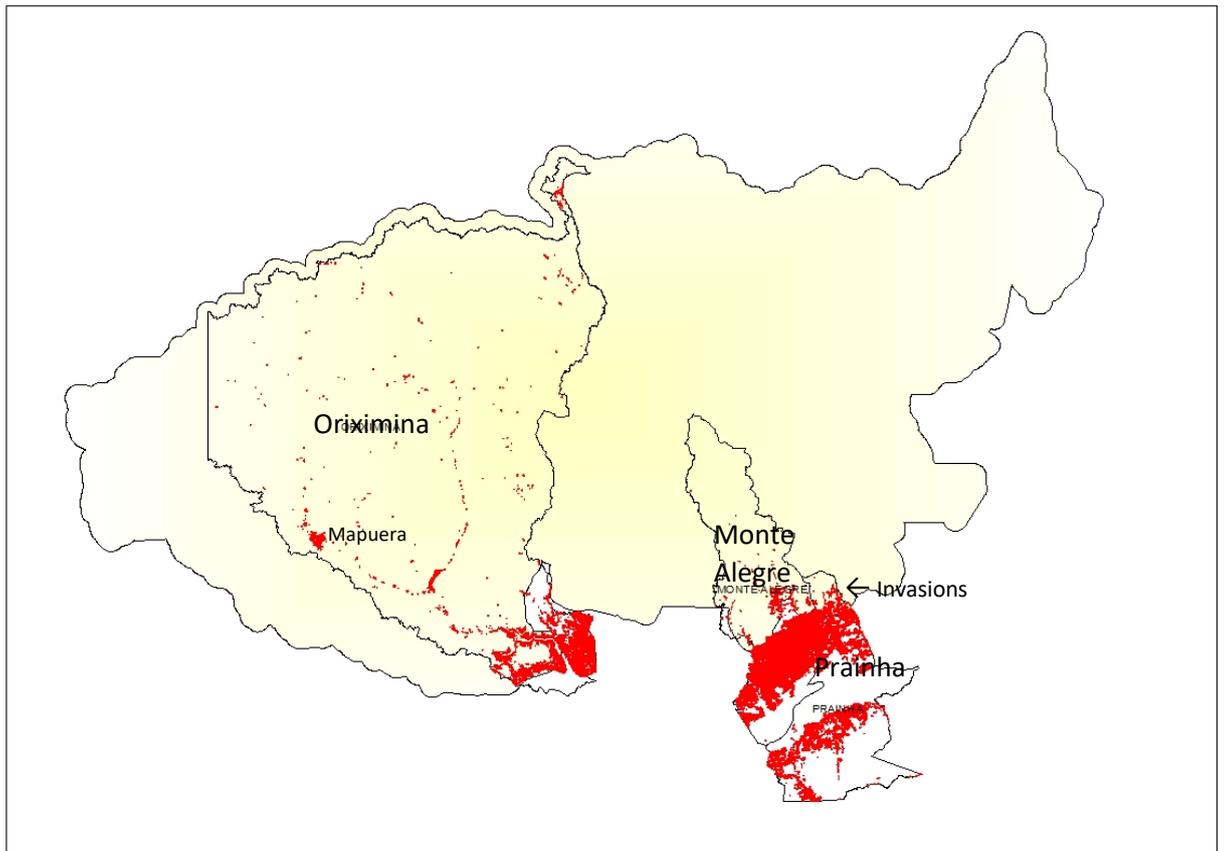
2 The environmental work of the municipalities

This work is after a delay restarting. All involved municipalities have shown interest in the creation of the Forum of the nine municipal environmental secretariats of Calha Norte. It is expected that the identified 18 environmental transgressions will be updated. Hopefully and eventually many of them be addressed with the ability of the municipalities to pool their resources through a Forum. Although there is differing capacities of contribution between the municipalities, all appear to be willing to participate and several of the heads of the secretariats are quite dedicated.

Likewise there is, I understand, enthusiasm for the training of the councils of the seven most important municipal environmental secretariats in Calha Norte.

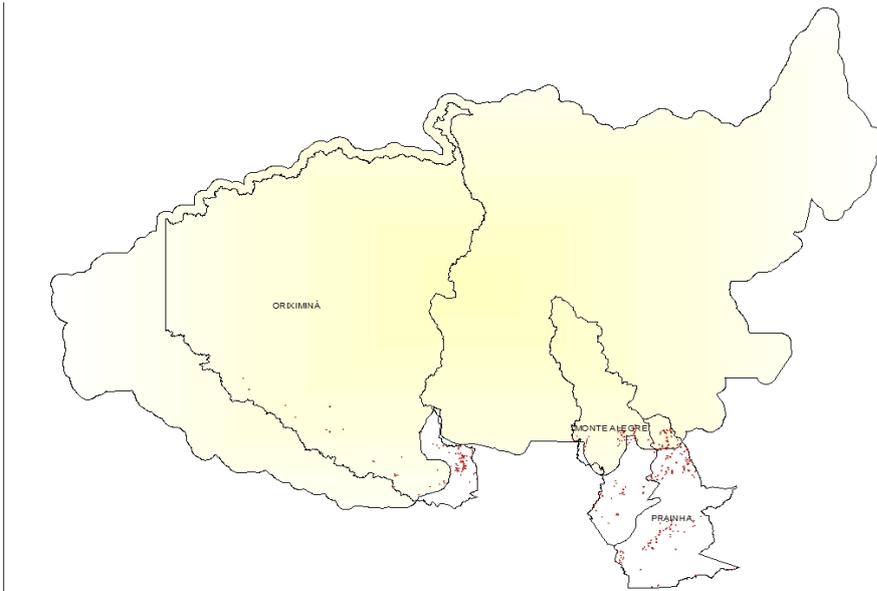
Ecam is in the process of recruiting a person to be responsible for this work as well as the work with the Mosaic of state and federal conservation areas. This may, together with the Mosaic work and the cattle work in two new municipalities, also mean that Ecam will join environmental councils of additional municipalities; presently it is a member of the council in Oriximina.

3 The cattle work



Map 5 The three targeted municipalities of the cattle work: 11-million hectare Oriximina, and Monte Alegre and Prainha. Massive deforestation mainly for cattle pasture in red color is approaching the yellow-colored Karib corridor of protected areas. The smaller red areas closest to the arrow represent the invasions in Paru (section 1:2). The smaller red spots to the west in Oriximina show small-scale deforestation by indigenous peoples, with the single largest red blob being the by far largest indigenous village, Mapuera with over one thousand persons. It remains to be confirmed that the other minor spots in the centre and north of Oriximina represent historical minor deforestation by indigenous peoples. Map by Muryel Arante.

Oriximina, the original site of the cattle work, was chosen because of its size, 11 million hectares. The cattle work has recently expanded to Monte Alegre and Prainha, chosen because it is from them that the single largest threat to Karib originate: in the Agua Vermelha area (Monte Alegre) and Cupim (Prainha).



Map 6 Areas deforested in the target municipalities during 2018 shown in red color. Map by Muryel Arantes

The immediate goal of the project is to gain a sustainable higher productivity so ranchers no longer have to deforest for new pasture. This has been achieved for the participating ranches. None of them are deforesting any more. 11 out of the 14 participants in Oriximina municipality are now, in several cases after initial hesitation, implementing the recommendations, two are implementing but only slowly and one has dropped out because of lack of time and focus.

In my trip report from 2018 dramatically increase yields of a milk cattle farmer were shown. To assemble data from a beef cattle ranch takes more time and is more complicated, but now it is ready from the first ranch, that of rancher Luiz Souza Junior.



Junior and his father who is also a rancher, in front of the green green pasture. This is at the end of the dry season, in November 2018, and the pasture is still so green, robust and without invasive species. A wonderful sight! Normal pastures at this time of the year are weak, and often have a yellowish colour and with invasive, non-eatable species.

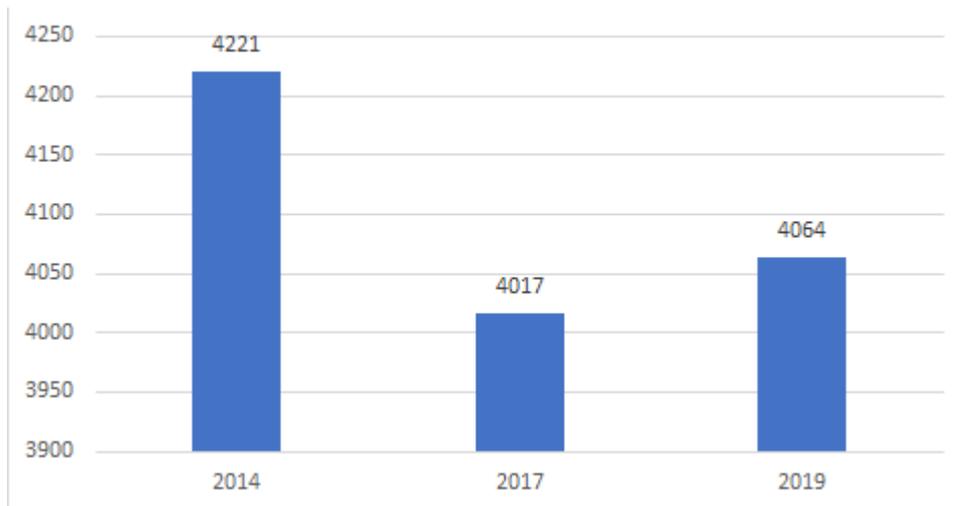


Junior’s animals spontaneously leave their recreation place (shade with water and mineral salt) around 4 pm, when it is less hot, to walk to the pasture. They walk along the narrow path linking their recreation place with each section of pasture; only one section is open for them at each time period, so they can only enter that section. In Junior’s intensive management, they are moved between small sections daily, leaving precisely when the grass has been eaten just enough and uniformly over the entire section, but not overgrazed. That is the basis of the improvement management, combined with lime, fertilizer, construction of wells, salt, limited or large feed supplementation in the dry months, rehabilitation of old pastures if needed. Behind the pasture is rain forest, which is not touched except in places for extraction of a small number of trees for fencing and ranch buildings.

Comparison between very intensive and average beef cattle ranching		
Column 3 shows data from 9 months of intensively managed pasture at beef meat ranch Rancho da Serra, owner Luiz Souza Junior		
Column 2 shows data from the average beef meat ranch in the same municipality, Oriximina, based on estimates of participating ranchers.		
Weight in kilos.		
Price, income and cost in Brazilian reais.		
	Average	Rancho da Serra
Number of hectares	1,72	1,72
Number of cattle	1,42	21
Number of cattle per hectare	0,83	12,21

Average weight of cattle	381	381
Number of "Animal Units" (450 kilos) per hectare	0,7	10,3
Number of days	275	275
Weight gain per cattle and day	0,7	0,694
Weight gain per cattle for the 275 days	192,15	190,5
Total weight gain for all cattle per hectare	159	2326
Sale price per kilo of cattle weight	4,5	4,5
Total income per hectare corresponding to those 275 days	715	10467
Costs allocated to 9 months/275 days (e.g. phosphates is needed once every 24 months, so that cost was multiplied by 9/24)		
Fence for cattle rotation. Steel wire, poles, solar panels +8 other items.	0	167
Maize (supplementary food during the months when rainfall is limited)		2346
Mineral salt		879
Nitrogen fertilizer	0	1116
Phosphate, potassium, lime and superphosphate	0	620
Purchase of machine services	0	262
Manpower (no need for increase since excess manpower initially)+ fuel	72	72
Medicine for cattle and other items		29
Variable costs for the average ranch (for Rancho da Serra these costs are included above - mineral salt, medicine etc)	417	
Total costs per hectare	489	5491
Total income per hectare (see above)	715	10467
Income minus costs = net income (profit) per hectare	226	4976

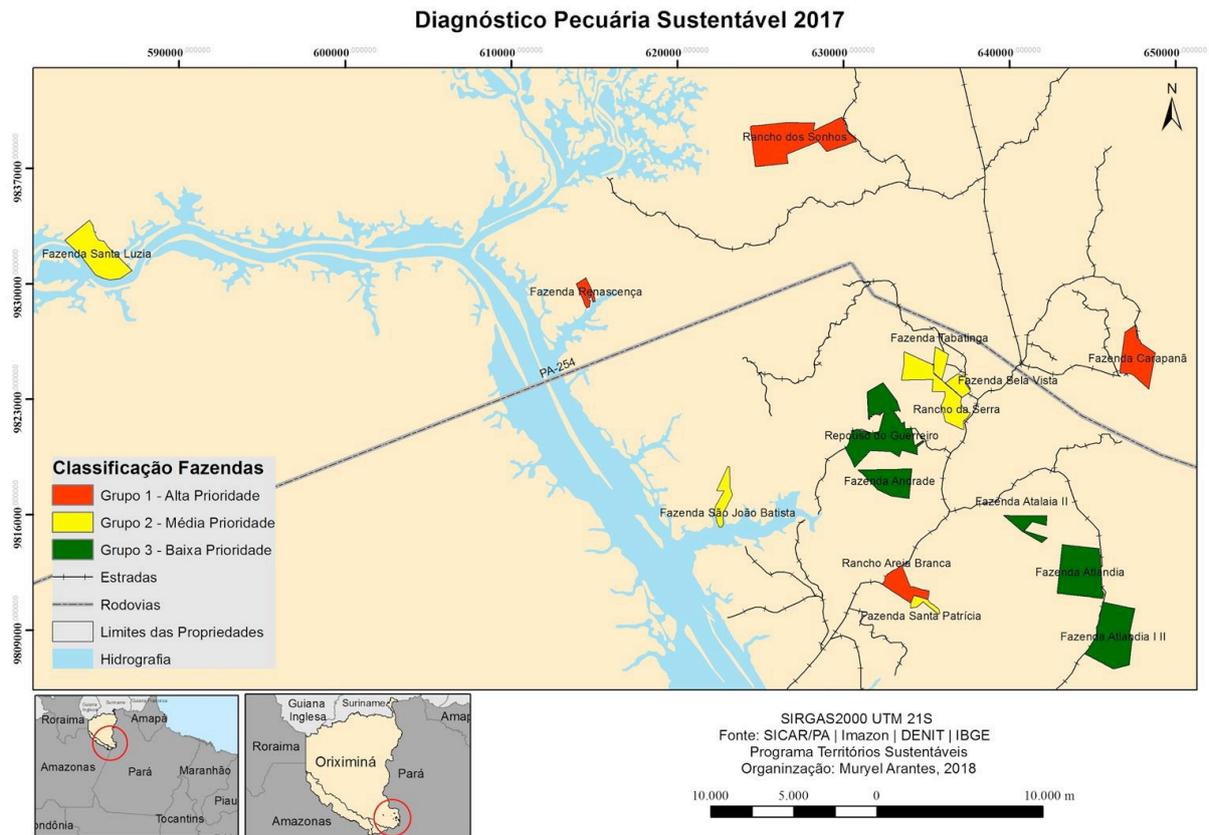
The data above shows net income per hectare 22 times larger than average (4976/226) and over ten times more cattle per hectare, with ten "animal units AU" per hectare which is the highest achieved in the project. It is from a small area; over an entire ranch that intensity cannot be supported in a year with unusually poor rains. Around five AU/hectare is what realistically can be aimed for, but just getting to 2 – 3 AU/ha on a sustainable basis is a big advance. Much costs are incurred early, so if adjusting for interest the profit will be slightly less. What is needed is data for more hectares that reflect more "normal" improvements in the 2-5 AU/ha range. Additional, not complete data, is shown in a separate excel table in the attached file.



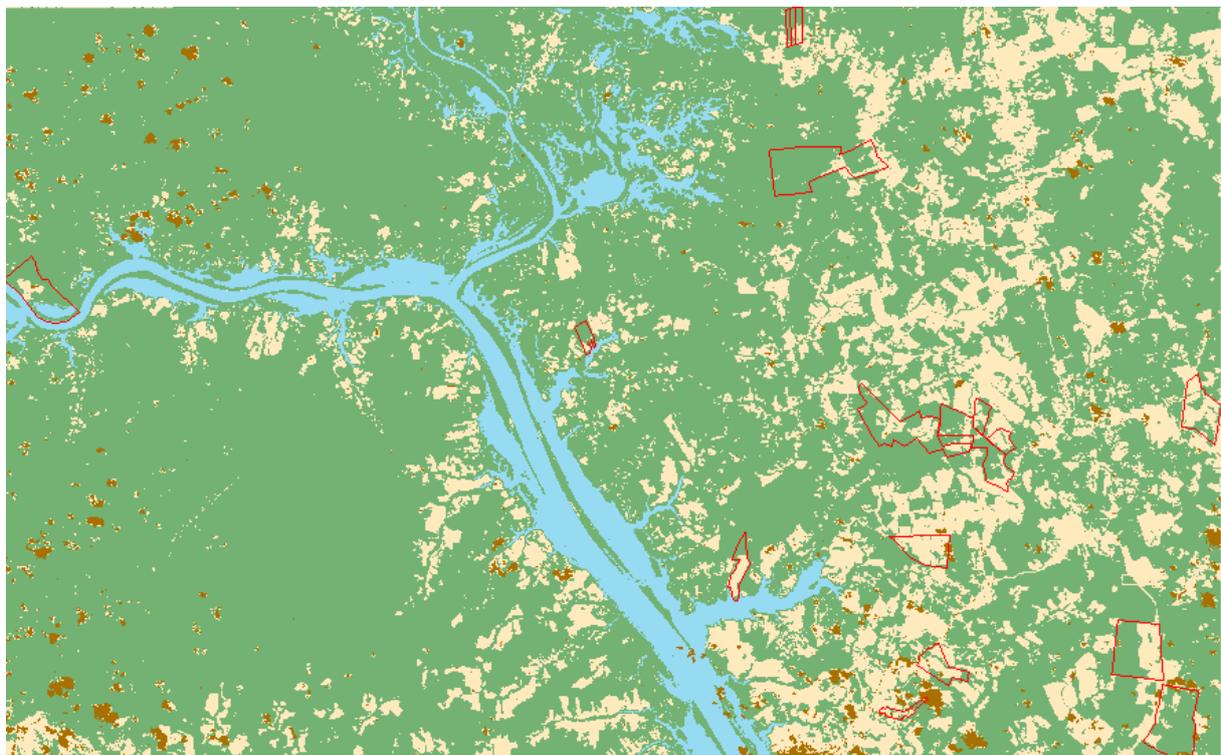
Change in the number of hectares of forest cover in the ranches of the project. From 2014 to 2017 deforestation was carried out in the ranches but after the project start in 2017 satellite imagery show that no deforestation at all has occurred in any of those ranches. The increase in forest cover after 2017 must be secondary forest emerging from degraded probably ex-pasture lands. If these emerging forests are left alone or managed carefully what can be defined as rain forest will ultimately come back after a long time if there is surrounding mature natural forest. Chart by Muryel Arantes, Ecam.

Between 2014 and 2017 the forest cover was reduced by 68 hectares per year $((4221 - 4017)/3)$ on those ranches. Actual deforestation of rain forest was likely on the one hand higher because it is partly "hidden" by regrowth of secondary forest, which came to 23 hectares per year in the following two years $((4064 - 4017)/2)$. Although different time periods complicate, total annual avoided deforestation may be calculated as $68 + 23 = 91$ hectares. A minor part of this may have been secondary forest, rather than rain forest, being cleared for pasture (probably this part is small, given that burning of rain forest will increase fertility much more than secondary forest). On the other hand, some more hectares of rain forest may have been saved because (at least) one rancher would likely have purchased another property with more land to deforest in the absence of the project. What the net effect of these adjustments means is impossible to say and also different time periods are involved. Here the rough estimate – an informed guess - is made that the round figure of 90 hectares of rain forest annually, or around 180 hectares during the two years of the cattle work, remain as a direct result of the cattle work.

What does avoided deforestation of 90 hectares annually mean? A perspective is given by the following maps.



Map 7 The participating ranches shown in red, yellow and green. Map by Muryel Arantes.



Map 8 The participating ranches shown in light yellow (deforested) and green (forested) areas surrounded by brown boundaries, all to the east of the river. The solid brown patches signify deforestation carried out in other areas between 2014 and 2017. Map by Muryel Arantes.

Forest cover in Oriximina municipality in 2018 was reduced by 1124 hectares, with deforestation of rain forest probably being slightly higher. The reason is that secondary regrowth masking deforestation probably is higher than clearing of secondary forests for pasture. As a guess, to have a number, say 1300 hectares of deforestation of rain forest. With 90 hectares of avoided destruction of rain forests this means a reduction of deforestation of 7 % as a direct result of the project, compared to what would otherwise have been the case. The percentage will be significantly higher in the areas east of Trombetas river where the participating ranches are located. Of course total deforestation in Oriximina may well have increased significantly - we don't have segregated data for that yet – along the lines of the large increases in the Brazilian Amazon as a whole that have happened.

90 hectares of avoided deforestation per year will of course by itself not change the deforestation trajectory in the region to any significant degree. Ways must be found to gain scale so we reach our ultimate goal: To get a massive adoption of improved cattle ranching so that deforestation in Calha Norte is halted widely. To this end, the project has after two years of work become widely known in the region. The Pará state government has expressed interest and wants a dialogue. Just after I left Brazil, Ecam's project leader met with the head of the cattle directorate of the Para secretary of agriculture in the state capital Belem, who will soon visit Oriximina to see the cattle work there. Encouragingly and parallel to this, the cattle work will also be visited by the government training institute SENAR, see below. The project will attempt to exploit the resulting potential of wider dissemination of the ideas and methods of the achieved successes. In this context it should be noted that Ecam has a full-time communications person based in the region who is accompanying the project.

Scaling up also means a geographic expansion and the project has recently expanded to Monte Alegre and Prainha municipalities. Seven ranchers from each municipality have been selected and the first two series of technical visits by our consultants have been made. Four of those in Prainha are in the conflicted Cupim area.

With its 11 million hectares Oriximina is the single most important municipality and with soon two years of work it be a test case for massive adoption. Data is scarce, but we know that there are 386 properties with more than 100 hectares in the municipality, of which probably the great majority have cattle. The number of owners is somewhat smaller since some ranchers own several properties. How many owners have to implement improved ranching in order for some kind of tipping point to be reached? Nobody knows, since it's apparently not happened yet in the Amazon. We will have to find out!



With cattle owner Raimundo. Can the grass be greener? Can it be stronger, at this time at the end of the dry season? I don't think so!

The technical assistance is relatively intensive and costly, with half-day site visits made to each rancher once every two months, with assistance in between available over primarily the free what's app platform. It was decided that the time should be ripe to have part of the assistance be paid by the ranchers from July 2020, so our funds will be freed up for more assistance to more ranchers. Ranchers have expressed openness to doing this.

In number of ranchers the small dominate. Ways to train the small cattle owners in groups of two or three should be tested, with the site visit made to one of the ranchers at a time with the other one or two participating. The consultants preferred to do this only with new participants.

A more important scaling up will be done through getting local technicians. The assistance is costly in large part because of expensive travel to and from south Brazil where the consultants from Viaverde are based. Ecam has hired an agronomist and the plan is get an accelerated training for him by letting him accompany the consultants on their work in other parts of Brazil. A second local technician will be employed and based in Oriximina.

Parallel to this is a promising possibility concerning SENAR, the federal government institute for rural training. SENAR apparently has the ability to do the kind of technical assistance to cattle owners that Viaverde does, with the government paying half of all costs. Together with much less costs for logistics and time for more cattle owners per technician, this has the potential to really gain scale. Ecam has met with SENAR, who will visit Oriximina together with the Para secretary of agriculture. If it works out and the quality of the assistance can be assured it would start in the municipality of Monte Alegre and possibly neighboring Prainha. It was the dynamic president of the Monte Alegre ranchers' association, with connections to SENAR, who gave us the impulse for this. His networks are large and he should be able to find the 25 beef cattle owners there needed to make a start with one technician from SENAR.

In late January there will be a meeting for the associations of cattle ranchers of all municipalities of Calha Norte, to which Ecam is invited. Ecam will also visit Sao Felix do Xingu, site of a major cattle intensification project, to find out what lessons can be learned from that.

I talked with Ecam about finding out what neighbouring cattle owners think of the project in Oriximina, with a perception study. If we gain scale via SENAR, Oriximina will be the second municipality in Calha Norte to start that work with, and this would be a complementary way of finding out – will 25 more beef cattle owners join the project? A related issue that we discussed is that the Oriximina ranchers' association is weak and needs to be strengthened.

I attended one of the regular meetings between cattle owners, Ecam and Viaverde the consultants, where some decisions related to the project are taken jointly between all three. The cooperation between the cattle owners has amongst other things led to common purchases for better prices.

Just across the Amazon river is the municipality of Juruti, which is becoming a reference for sound environmental work. As an example, its mayor has even stated that the municipal government wants to buy beef meat sourced from sustainable cattle ranches. Encouragingly, a number of institutions ranging from the powerful "land reform" agency INCRA to the university are partners in the environmental work. The local government has asked for Juruti to be included in the cattle project, and although strictly not part of the defined project region, there are clear merits to including this municipality and some resources will be allocated there.

In my previous report I mentioned that one of the two largest ranchers of all in Oriximina was involved, but moving very slowly and not fully committed. I met him this time too and afterwards I heard that he was looking forward to invite me to one of his ranches on my next trip with the "Dia do Campo" (Field Day) to be held there. This is the bimonthly event with all ranchers and the consultants present, which hopefully means that he will show substantial improvements to that ranch by then.



Although several wives work along with their husbands, there is just one female cattle owner in the project who is the leader of the farm: Dona Zelia, hear together with consultant Denis.

Data is scarce, but we know that there are 386 properties with more than 100 hectares in the municipality, of which probably the great majority have cattle. The number of owners is somewhat smaller since some ranchers own several properties. How many owners have to implement improved ranching in order for some kind of tipping point to be reached?

Does it matter where in the municipalities that cattle owners are included in the project? In Prainha and Monte Alegre the assumption has been that reaching ranchers close to the invaded areas, i.e. Cupim and Agua Vermelha respectively, is justified, but what about Oriximina? In map 8 above, more deforestation is happening to the west and northwest of Trombetas river than east where the participating ranches are. Should an effort be made to reach cattle owners with land in the southwestern part of the map? Or doesn't it matter?

What type of actors are behind most of the current deforestation? Large, midsize, or small cattle owners? Agriculturalists? One study hints that in Calha Norte assentamentos, the collections of various people having received land through "Agrarian Reform", could play a major role. Whether this is mainly cattle is not known.

4 Visit to the Paru river region – adjacent to State Forest Paru



Community along the Paru river

Starting in the town of Almeirim on the Amazonas river together with Arleson of Ecam, I travelled a 100 kilometer stretch up the Paru river as far as it was possible, until the waterfalls just before the conflicted state conservation unit mentioned in section 1 with the same name, Paru. I wanted to get an impression of the situation outside this huge unit. On the way we stopped at two of the three main communities upriver, Barreiras and Recreio, and at two places with individual homes, talking with residents. Main income is from cultivation of manioc and making farinha, often a small number of cattle as a bank when money is needed for some special purpose, and sometimes gathering of forest products.



Residents of Recreio preparing manioc for producing farinha. Other times of the year they gather para nuts in Paru.

Before Recreio a great pile of timber could be seen on edge of the west side of the river, with a dirt road leading away into the forest (see the photo in section 1.2). Residents explained that this was from a forestry operation by a large timber company based in Paragominas that was exploiting huge areas inside the Paru reserve. One of the persons we talked to had worked for the forestry company. He told us it had a base maybe 50 kilometres away, with about 40 employees living there, and an airstrip for the company owner. The base had recently shifted from another location, perhaps 25 kilometers away, when the timber extraction in that region had been completed. The timber is processed in a large saw-mill that we saw on the beginning of our journey where the Paru river flows into the Amazon.

I was supposed to meet the president of the association of residents of the three upriver communities in Barreiras, Maquinhos, who is a long-standing fighter for communities and forest protection. However, he was absent and it was only possible to meet him on my return to Almeirim. He described the long struggle by the association and many community members to get a reserve, north of the Amazonas river and west of the Paru river, declared for those three communities as well as many more communities down river and along the Amazonas. The objective is to let the region stay in the main part forested, with much of it traditionally used by the communities for small-scale extraction and hunting. The work had proceeded well when it was stopped from advancing legally by the forest company mentioned above, which wants to extract timber there and has connections. The

company also bought off some community members and stoked internal conflicts in the communities, with some becoming opposed to the reserve.

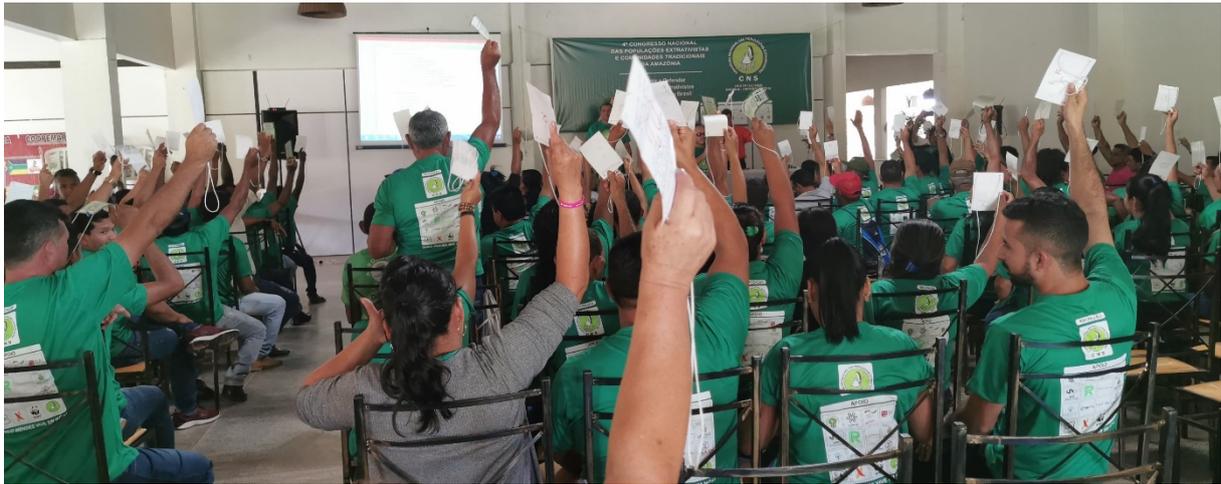
Later I had talks and lengthy correspondence with three persons based elsewhere with knowledge of the situation and who have supported the effort to create a reserve. In particular one of them, based in Rio, is a goldmine for information. As it was explained to me, the objective of the opponents of a reserve is first to do the timber extraction followed by conversion to pasture for cattle. Although presumably much of this would be for large ranchers from outside, there is amongst the communities a few who have relative many cattle, up to 200.

The judgement is that it is not too late to create a reserve, but the effort has to be started soon and it will have to be a state reserve (collective "assentamento") instead of the planned federal reserve since that is no longer possible because of the new federal government. The planned reserve is 326 000 hectares (although I have also heard a lesser figure from another source), with in all 35 communities, that make up one of four regions organized in RICA. Rica is now without any technical and financial support, and needs to do preparatory work followed by a large meeting for members from all 35 communities. It will be complicated, given the internal divisions, but doable, is the opinion I heard.

Our main priority is in the large conservation units, but having a reserve of this size, not far from the Paru reserve, stay forested rather being converted to pasture, is interesting and could be considered a strengthening of the Mosaic. I have separately written details of what I have learned and copied my correspondence with the support persons for the benefit of Ecam, who has to decide whether the effort is worth some limited funding. Further investigation is needed to judge the chances of success and what the end result in terms of forest protection can be.

5 The National Congress of CNS representing the extractivist, non-indigenous peoples living in the rain forests

I attended the three full days of the Congress. I was impressed by how well it was organized. It was professionally done. Complicated issues were discussed and decisions made in a democratic yet orderly manner. There was at times emotion but the Congress never got off track and the agenda was held with only minor delays. Knowing some of the leaders, I can say with confidence that the Congress resulted in a strengthened cohesion of the extractivist movement. And CNS was further strengthened as a legitimate representative of the extractivist peoples. All very much needed in these politically difficult times. The leaders returned to their bases and reserves with a strengthened resolve to protect their reserves and carry on the work of their local associations, armed with better knowledge and with better networks in CNS.



Voting at the Congress

A special donation from our long-time partner Erteco had enabled the purchase of 131 round-trip air tickets for leaders between Brasilia, where the Congress was held, and the regions mainly around the Amazon where they live in a wide variety of reserves for extractivist peoples. These harvest a variety of rain forest products such as fruits, seeds, nuts and rubber, small-scale timber e.g. for making boats and occasionally on a larger scale, carry out small-scale agriculture and sometimes have a small number of livestock. Their areas make up over 13 % of the Brazilian Amazon according to CNS with 682 defined reserves under different legal arrangements. With more strict definitions I estimate the total areas at just over 10 % of the Brazilian Amazon which is still huge and much less known than the indigenous areas.

This was the first financing for the congress, and crucial since the tickets were cheaper when purchased far in advance. Complemented by other funding a total of 220 leaders participated. The Congress was preceded by seven regional meetings with participation by around 700 local leaders.

One issue that stood out in the Congress was the protection of the reserves, given the political threats to these. Everyone participated in a demonstration outside the Brazilian Congress, where half a dozen sympathetic Congress delegates joined the demonstration as speakers. The following day all leaders entered the Congress for a hearing with the environmental committee of the lower Chamber. The message to not mess with the extractivist reserves and to support the extractivist movement was made very clearly, and well received by part of the committee including its chairman who is from an opposition party.

Another issue much discussed was the strengthening of the internal organization of CNS and its contacts with the hundreds of associations of the extractivist reserves. A number of decisions were taken in this regard.



The newly elected board and committees of CNS

Elections were held the last day for a new board and committees of CNS. With negotiations in advance and during the congress, a single list of candidates for the board and the committees were arrived at and presented for voting. The complicated issue of appropriate regional representation was solved and everybody was happy. The statutes prevented the reelection of the competent and popular president of the past eight years, Joaquim. The person elected to be the new president of CNS, Julio Barbosa, is a safe bet. He has participated in the movement for decades from his base in the state of Acre and is known for his competence. Nothing can wreck a movement as much as a badly performing new president with his own agenda. It seems CNS has the strength and cohesion to prevent such a thing from happening.

At the seminar I met several of the extractivists that I know from past work in the state of Rondonia. One of them, Luiz Gonzaga, is from the extractive reserve of Cautario which I have visited many times in the past. He described how a certain person has recently started a process to sell land in the reserve, which is obviously illegal but very dangerous since with the connections the person has. He is going to ask CNS to enter with a case at the federal prosecutor in Brasilia and I encouraged him to also enter a case with the local state prosecutor in Rondonia.

6 The extractive reserve Renascer

To get a feeling for how an extractivist reserve functions today I visited the Renascer reserve later on my trip. It happened to be the one closest to our project area I just had to cross the Amazon river, 12 km wide at that point, to get there. I was helped in the logistics by the person representing Renascer who I met at the Congress, who got a fast boat for free belonging to the fishermen's union of Prainha, which has many members who live or have lived in Renascer.

Renascer is 211 000 hectares, and together with the larger adjacent and similar Verde para Sempre extractive reserve makes a combined size of 1.4 million hectares. The two areas were meant to be created as one unit, but powerful opponents in the form of loggers and ranchers managed to delete Renascer. After that there was a long struggle by Renascer extractivists against invading loggers and ranchers, which ended with a large number of residents camping by the Amazon river at the

entrance to the reserve in order to keep out loggers and their boats taking away the timber. Bullets were fired by the logger's henchmen, and three residents were wounded. This was during the Lula government, and the issue caught on at the highest level in Brasilia which resulted in the declaration of Renascer as an extractivist reserve as recently as 2009.



Domingos, the leader of the Uruará river section of Renascer, in one of eight communities along that river. Even though Renascer is now legalized, there are still fights. Only a few weeks after I was there, the communities managed to get government fiscalization to eject invading loggers who have massively carried out illegal logging. The kind of network building that CNS enables is so important, even if the link to the CNS congress was only indirect.

I travelled along the Uruará river, one of the three rivers where the Renascer people live, together with the president of the association who used the occasion to have meetings in the villages I visited. Making farinha, fishing and small-scale cattle are their main sources of income, supplemented with small-scale agriculture for their own needs. There is extraction of forest products such as acai fruit, but total income is low and forest management – a larger-scale extraction of timber – is being discussed. In the adjacent Verde para Sempre reserve, this is already happening, with forestry companies doing this. In one village, the residents themselves are doing the forestry operation, after criticism of the forest companies keeping too much of the income. Forest management can yield a large income, and is designed to be of low impact and sustainable, but can have strong negative consequences if not carried out well including on the critical issue of income distribution. I hope to see one of these operations on my next visit.

7 Indigenous, Quilombola and riverine peoples

On my first visits to the project my time was mainly taken up by journeys to the indigenous peoples, and later also to the Quilombola slave-descendants. Now time only permitted short visits to these groups, but they are of course just as important as ever. Having observed Ecam work with them, I am

confident that it is carried out well. On this journey, Ecam shared the direction and details of the work with me.

We visited a village in the 218000 hectare Jauari/Erepecuru Quilombola (slave-descendant) reserve (one of ten Quilombola reserves), together with its able president. We discussed the carrying out of the new Plano de Vida or Life Plan (management plan) of the reserve. This has been developed by the Quilombolas with technical support from Ecam after a lengthy democratic process in the villages. The Plano de Vida specifies what type of activities that can be done in the seven themes of work chosen. The Plano de Vida is to be funded by the Quilombola Fund which is mainly financed by the mining company operating in the region. The Fund is set up to only approve financing for the goals and activities within the Life Plan and nothing outside this. This is to avoid the often disastrous situation when money flows in and leaders become corrupt using the funds for their own purposes. So far Plano de Vida work in the various Quilombola reserves include training of their associations, internships for Quilombola youth, creation of internet access in the communities and their schools, legal and bookkeeping support, and training of youth for video filming.



With Quilombolas. The old man told me how his grandfather had described occasions during slavery when Quilombolas had chains to their legs.

When alone with a few Quilombolas, they told me how Ecam was different from other NGO:s, who come with their own priorities and ultimately both parties wind up dissatisfied. It was a powerful story of the effectiveness of Ecam's community-centered methodology which usually gives much better results also for conservation than priorities imposed by outside actors.



Producing farinha in a community of riverine people of Saraca-Taquera

We also visited a group of people who have recently been included in the project, the riverine peoples. They are of mixed ethnic origin but not indigenous and have lived for long at some rivers in the region. In Calha Norte, they make up 33 villages with around 6000 people in the 441 000 hectare Saraca-Taquera national forest (see the area marked with a nr 4 in map 1). Their number one income is farinha, made from the manioc plant. I met the president of the association, which is being strengthened with project funds. Work has started on developing a Life Plan for the riverine peoples. The cooperation with the riverine peoples include work to strengthen and regularize their association, carrying out of a Life Plan, and implementation of the IPS (Index of Social Progress) to highlight the necessity of future private and public investments.

Just after I returned from the visit to the riverine peoples, an analysis of satellite imagery showed substantial deforestation in Saraca-Taquera. There is a mining company legally active there. Further work can show if the deforestation is all legal, perhaps connected to the mining company.

Logistical problems prevented me from meeting Mauro, the elected president of APOIRCTRO, the new association of the the Kaxuyana and Tunayana people. This was finally formed after problems emerged in the previous association that were not able to be solved. Many activities have been on hold and will now be carried out with a new timetable. Mauro, who I have met when visiting the Kaxuyana villages, is well regarded and the outlook is favorable. I discussed this with Ecam and also the work with the other indigenous peoples in particular Wai-Wai and Hixkariyanas.

8 The Ecological Station of Jari



With Ecam-trained park guards in front of a Bero tree in Jari Ecological station

After the trip up the Paru river (section 4) I visited the 231 000 hectare Jari Ecological Station together with Ecam-trained park guards. They gave a competent and dedicated impression. There is occasionally a presence of gold miners and Para nut gatherers in the reserve, which the guards try to handle diplomatically. They are waiting for an administrative regulation to give them better recognition and working conditions.

The plan is for project to expand into Amapa with support of training of park guards.

9 Ecam self-review report

During much of my travelling, I had lengthy discussions with Pordeus, the project leader, and Beto, the manager of complicated logistics. I had a planning meeting with Ecam staff at its office in Santarém. We also made a self-review report then.



Meeting with Ecam staff for monitoring self-review of 2019. Photo taken by Vasco, Ecam executive director. From left is Ana Claudia, project technician; Brenno, IT specialist; myself; Pordeus project leader; Muryel GIS expert; Martha, regional communications coordinator; Beto regional logistics coordinator.

The self-review monitoring report shows that in general what had been planned has been done and that the project is making a difference. Deviations from plans have their cause, such as the slowing down of the work with the Kaxuyanas and Tunayanas which is now resuming see section 7.

10 Data needs

Confirm that the deforestation spots in northeastern Paru are old. And if possible whether there is active gold mining there, if that is the cause of the deforestation.

Confirm if the historical deforestation spots along the Trombetas river, apart from those next to the Tunayana villages, and those in the far north of Oriximina, are old and if possible if they are from indigenous peoples.

What is the cause(s) of the deforestation in Saraca-Taquera National Forest and if it is legal. Our target group partner there may know.

Get a rough estimate of the volume of secondary regrowth from degraded forests in relation to clearing of secondary forest for pasture, to determine how much rain forest is deforested.

What types of actors are carrying out most of the deforestation in our three target municipalities, starting with Oriximina.

Deforestation data for 2019 in our target municipalities of Oriximina, Monte Alegre and Prainha. Are the rising deforestation rates in the Brazilian Amazon as a whole reflected similarly in these?

Deforestation data for 2019 in the Karib Eco-corridor including Paru.

Find out what the neighbours of the cattle project in Oriximina think of it. Now there is only anecdotal evidence.

Find out the number of cattle in large, medium and small properties and owners in Oriximina, Monte Alegre and Prainha. This data exists in Adepara (Pará cattle health agency) and the president of the ranchers' union in Monte Alegre may be able to assist in this.