

# 2 / 2021



# BULLETIN

## EDITORIAL

### *Dear friends of ADES*

*The year 2021 will set the course for ADES. In Madagascar, a new, local management is bringing a breath of fresh air. The sales figures will clearly exceed the target for 2021.*

*On 9 November, ADES won the international .ORG Impact Award in the category "Overcoming Climate Change" and was afterwards named Organisation of the Year 2021. This is a wonderful recognition of our years of commitment to Madagascar. The award will help us to present our work worldwide.*

*In order to protect the forest in the long term, it is essential to find alternative energy sources in Madagascar. We want to devote space to this topic in this bulletin. ADES is testing whether the cultivation of bamboo can relieve the pressure on forests. A visit to Madagascar's international trade fair, FIM, provides an overview of the status of other alternative energy sources.*

*We look forward with hope to the UN Climate Change Conference COP26, which took place in November. For Madagascar, which is also participating in the COP and is already suffering greatly from the climate crisis, significant and binding steps by the international community are particularly important.*

*Our heartfelt thanks go to our donors, volunteers and partners who make our work possible. According to our motto: Sustainably effective for Madagascar!*

Yours  
Rita Bachmann

## SUSTAINABLY EFFECTIVE FOR MADAGASCAR

### BAMBOO: ALTERNATIVE TO WOOD?

Climate change and environmental degradation are major threats to Madagascar. The depletion of forest resources and the difficulties with water supply and pollution urgently need to be alleviated. At best, a contribution can be made at the same time to combating poverty and the precarious situation in rural communities. The situation is serious: In November 2020, the Ministry of Water, Sanitation and Hygiene warned of difficulties in the supply of drinking water throughout the country. According to the ministry, Madagascar has faced various impacts of climate change in recent years, including long periods of drought and very heavy rainfall. The decline in water resources has had a major impact on agricultural yields for the 2021 harvest season, leading to a sharp increase in prices. Rice in particular – the staple food of the Malagasy population – became more expensive.

Is bamboo a possible alternative to firewood and charcoal? Madagascar is one of the countries with the most bamboo species. The national bamboo policy was validated in February 2021. There are 35 endemic species of bamboo on the island. Until 1958, ten new species were brought by Chinese immigrants. Since 2010, the International Bamboo and Rattan Organisation (INBAR) has introduced another 14 new species in a government-sponsored programme. The reasons are many and include erosion control, soil conservation and bank protection, carbon sequestration, water resource protection and biodiversity protection. Supermarkets in



Bamboo forest (symbolic image)

## DONOR PORTRAIT KARIN FREI

Karin Frei has been supporting ADES for many years. The long-time journalist and SRF presenter started her own business in 2017. With her own company, she offers moderation and, above all, mediation. She took time out during her holidays by the sea to tell us what connects her to ADES.

“For my master I wrote my book ‘Good wicked stepmother’ about stumbling blocks in patchwork families. Former family therapist and ADES founder, Regula Ochsner was one of the experts. The contact remained even after the completion of my book.

Regula told me about her plans to create an NGO in Madagascar that would work to preserve forests and livelihoods. This motivated me to travel to Madagascar. The fresh vanilla that Regula brought back from Madagascar was also absolutely unique.

During six weeks in 2010, I finally travelled to Madagascar. I combined my passion for kitesurfing with learning as much as possible about the country, its people and nature. Madagascar left a lasting impression on me. The incredible beauty and natural wealth of the country stand in stark contrast to the omnipresent poverty, starving and sick people. I was particularly moved by the city Fianarantsoa, where I saw people living on rubbish dumps next to the beautiful nature. Multinational companies from all over the world seemed to help themselves to the island's wealth of resources at will, while a small local upper class left millions of compatriots to live in poverty. In addition, there was the progressive destruction of the unique natural environment.

The contradictions were hard to bear. I wanted to support a sustainable local project. In this environment, the ADES approach convinced me. A lot of personal commitment, local production and the people benefit directly from the cookers. This is close to everyday life and the reality of people's lives. This way, I can contribute a small part to the protection of the wonderful nature and help people who were less fortunate than me.

For the future, I wish ADES that you can reach many more people, plant trees and teach children.”



Antananarivo such as Jumbo Score or Shoprite, consumers have been able to use bamboo charcoal for a good three years. The manufacturer was also present at FIM (see article: Alternative energy sources at FIM).

Bamboo has various advantages: Thanks to a dense root and rhizome system with very thick surface roots, bamboo has an impressive soil-binding capacity and achieves a very high erosion control index. Bamboo has the ability to absorb nitrates and phosphates present in the soil and thus purify the soil. In addition, the plant improves the structure of the soil through leaf fall. Combined with its rapid biomass production, this makes it an important ally in soil remediation and regeneration.

According to an INBAR publication, due to their rapid growth, bamboo plantations sequester carbon in their biomass at a rate comparable to or even higher than some tree species. A one-hectare bamboo plantation can sequester up to 60 tonnes of CO<sub>2</sub> per year, depending on the species and cultivation.

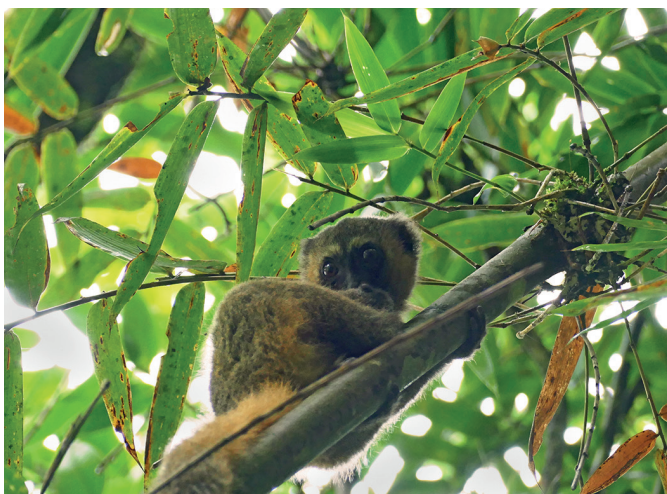
Bamboo slows down runoff and thus improves the infiltration of water into the soil. In this way, bamboo plantations increase the soil's ability to capture and retain rainwater and contribute to raising the groundwater table.

Especially in the east and north of the island, bamboo plantations have enabled the revitalisation of habitat for endangered species. Among the beneficiaries are the grey bamboo lemur, a very rare species of turtle, endangered reptiles and a species of poisonous frog endemic to north-eastern Madagascar, which breeds in tree holes filled with water or broken bamboo.

Bamboo belongs to the gramineae and, depending on the species, can mature in four to ten years and reach a height of 35 metres and a diameter of 30 centimetres. It can be harvested from the fourth year onwards. The trunk of the plant sprouts new shoots from the rootstock and can often be pruned annually. The yield of bamboo is therefore much higher compared to conventional wood due to its rapid growth and self-regeneration. By comparison, eucalyptus takes 10 to 50 years to mature. However, it can be harvested as firewood and timber from the fifth year onwards. The rotation period until the next cut takes three to five years, although, around Antananarivo – according to French researchers – there has been a switch to a one-year rotation period, which tires the rootstocks, some of which are already 100 years old.

Bamboo is also being tested as an alternative to charcoal. Compared to traditionally produced eucalyptus charcoal, the calorific value of bamboo charcoal is 1.6 times higher. The weight yield after charcoal production is also 10 percent and the volume yield 1.3 times higher than eucalyptus. For one hectare of bamboo used for carbonisation, 1.8 hectares of eucalyptus are needed. This suggests that bamboo charcoal is indeed more profitable.

In summary, bamboo appears to be an interesting alternative, especially for the afforestation of riverbanks and waters-



Bamboo lemur in Ranomafana National Park in Madagascar



heds. ADES will therefore analyse where bamboo can be integrated into afforestation efforts in the future. The afforestation partners in Ankazobe and in Mahajanga are already successfully testing bamboo plantations.

## ALTERNATIVE ENERGY SOURCES AT THE FIM

In September, the team of our centre in Antananarivo with project manager Axel Brückmann visited the industrial fair Foire Internationale de Madagascar (FIM for short). Besides house construction and solar water heaters, many examples of briquettes for cooking were shown. Some are made from pressed biomass such as sawdust - for example those from the wood industry region of Moramanga - or from plant waste. Welthungerhilfe and other organisations also showed briquettes made from charred biomass recycled from household waste. These are certainly encouraging examples.



Information stands at the Foire Internationale de Madagascar

Unfortunately, there were also briquettes that were critical to look at, such as those made from peat material from the Antsirabe region. Peat use is doubly damaging: firstly, when it is burnt, and secondly, once the ecosystem has been disturbed, the biological decomposition of peat causes significant CO<sub>2</sub> emissions. Therefore, peat should not be promoted as an alternative to wood or charcoal. Briquettes made from charred plastic were also shown with a photo of a masonry charcoal kiln. The dioxin contamination from burning plastic makes this use seem rather unclear. Plastic waste, waste oil and used tyres can be burnt relatively cleanly in cement factories. However, these materials should not be turned into fuel by amateurs.

When the current president, Andry Rajoelina, took office in January 2019, the use of ethanol was once again heavily promoted and advertised. A separate ministry directorate for ethanol was also established. There was virtually nothing more to be seen on this at the FIM. Ethanol production from sugar cane, maize or cassava requires so much process energy for distillation (about 2 to 3 kg of wood for one litre of ethanol) that it makes more sense to cook directly with wood.

Many stakeholders in Madagascar can imagine that electric mini-grids with solar panels, batteries, rice and water boilers could become an environmentally friendly and affordable source of energy. ADES will conduct comparative studies on this.

## EVENT NOTICE

**Public presentation:**

**“Climate change – challenges and opportunities”**

Friday, 26. November 2021, 7 pm  
Auditorium Technopark, Zurich

Weather extremes are increasing. While in some regions of the world months of drought dry out the soil, elsewhere rainstorms or hurricanes destroy the harvest. It is high time to act. But where are the challenges and opportunities on the path to saving our climate?

ADES presents a lecture by the renowned climate physicist Reto Knutti. The Swiss professor of climate physics is a member of the Intergovernmental Panel on Climate Change. In his presentation insights into the current state of science on the climate issue.

The lecture will be followed by an aperitif.

Admission free, collection.

Admission only with Covid certificate.

## ORGANISATION OF THE YEAR!

ADES is .ORG Organisation of the Year! At the .ORG Impact Awards ceremony on 9 November 2021, ADES not only won in the category “Overcoming Climate Change”, but shortly afterwards also won the top prize: the title of Organisation of the Year!

Non-profit organisations worldwide use the top-level domain .ORG for their internet presence. The .ORG is administered by the Public Interest Registry (PIR) based in the USA. Every year, PIR presents the .ORG Impact Awards to organisations that stand out and make a big impact with their work. 633 organisations were nominated in seven categories for the finals.

PIR presented ADES with the USD 10 000 Impact Award as the winner of its category in an online event on 9 November. As if that were not enough, ADES also won the top prize shortly afterwards and is officially the .ORG Organisation of the Year 2021! This glorious award comes with an additional prize money of 35 000 USD.

The PIR justified its decision in a press release of the Impact Awards among other things: “The work of ADES serves the protection of the climate, biodiversity and health, and at the same time enables a way out of poverty in Madagascar”.



First winner of the category “Overcoming Climate Change” and then also overall winner and “Organisation of the Year 2021”!

## AGENDA

Friday, 26.11.2021, 7 pm  
Auditorium Technopark, Zurich (information box page 3)

Saturday, 7.5.2022  
ADES General Assembly, Mettmenstetten

Friday and Saturday, 3. and 4.6.2022  
Afro-Pfingsten, Winterthur

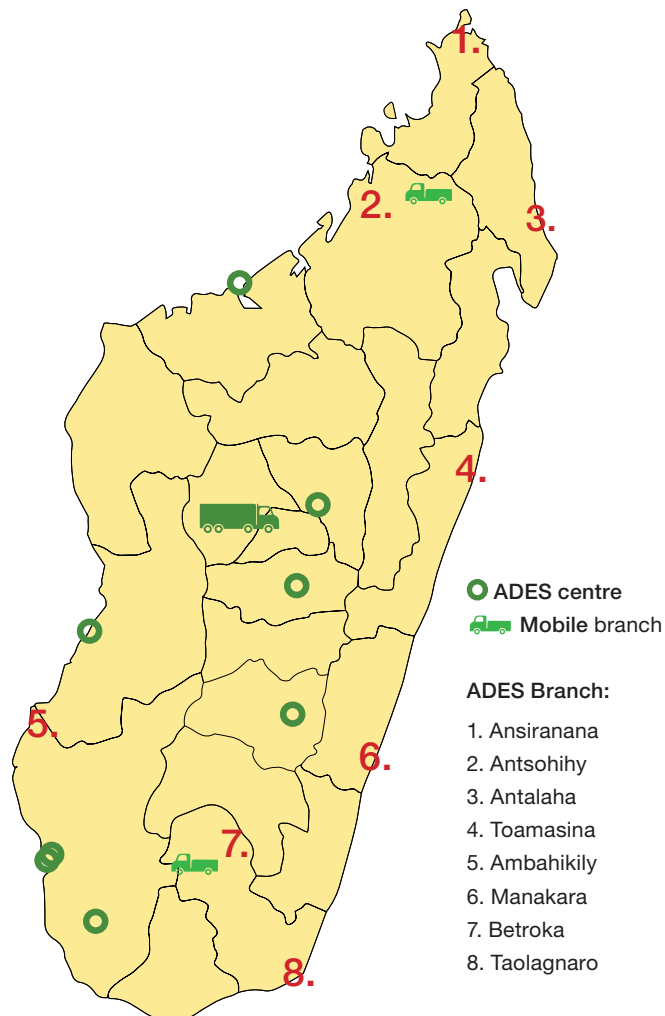
Further dates and information: [www.ades-solaire.org](http://www.ades-solaire.org)

For ADES, this international award is a great recognition of their work. The Impact Award confirms how efficiently and effectively we at ADES are implementing our vision, even with limited resources. Our work serves the protection of Madagascar's forests, but also all the inhabitants of this wonderful island. Receiving this award helps ADES to implement its ambitious growth strategy.

## NEW BRANCHES

With seven new branches, ADES wants to open up regions far away from its centres. They each include a small team and a product warehouse for sales. Educational projects are also offered. In Antsiranana (Diego Suarez), a first branch was already established last year. It recently celebrated its official opening.

Since May 2021 until today, the branches in Antalaha, Manakara, Betroka, Antsiranana, Ambahikily, Toamasina and Fort



## SUSTAINABLE CHRISTMAS: GIVE HOPE!

Are you looking for a sustainable Christmas gift? Give your loved ones a piece of hope and future: a gift certificate from ADES!

With 50 Swiss francs you can finance an improved cookstove for a Malagasy family.

With 90 francs, ADES will plant 30 trees for you and look after them for three years.

The gift includes a personal gift certificate and a bag of Madagascan pepper.

Required information:

- Donation amount
- Private address for shipping
- Name of the beneficiary

Please send orders to:  
[info@ades-solaire.org](mailto:info@ades-solaire.org)



Dauphin opened their doors one after the other. The three branches in the south (Ambahikily, Fort Dauphin and Betroka) are already operational but are still under construction and the official openings will only take place in 2022. Also next year, the branch in Antsohihy will open.

ADES will focus on the organisation of the centres and branches in Madagascar in 2022 and further improve the quality of services. This will be done through targeted education and training of animators and resellers. Another goal is to look for new partnerships in all regions of Madagascar.

## IMPRINT

Text and Layout: ADES Team, Mettmenstetten  
Print: Druckerei Odermatt, Dallenwil  
Edition : 2300

ADES  
Im Grindel 6  
8932 Mettmenstetten  
+41 44 466 60 50  
[www.ades-solaire.org](http://www.ades-solaire.org)

Donation accounts Switzerland:  
Raiffeisenbank, 8917 Oberlunkhofen  
IBAN: CH62 8080 8002 5845 3013 5

Postfinance  
IBAN: CH48 0900 0000 6039 8927 9  
Account number: 60-398927-9

Donation account Germany:  
Postbank Stuttgart, code bancaire 600 100 70  
IBAN: DE65 6001 0070 0067 6617 06

