



# Die Ofenmacher e.V.

## Rauchfreie Küchenöfen statt offenes Feuer



# Annual Report 2021

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**Cover Picture:** Mud stove in Kenia



<https://www.ofenmacher.org>

## Reports from the Countries



### Stove Projects Nepal



Traditional Nepali house cooking on one of our stoves for ten years.

In the second year of the pandemic, Nepal was hit hard. From mid-April, everyone was trapped in a lockdown for four months. Schools were closed, stores, offices, banks and government offices were not opened or only opened to a limited extent. Public life was forced to grind to a halt. In Kathmandu, many schools offered online classes, but in rural areas, classes were simply canceled. Government agencies continued to pay salaries throughout, but many private businesses were running out of money, pushing large sections of the population to the margins of poverty. Many aid organizations distributed food rations and materials to the people in need.

National health care during the pandemic was anything but perfect. Although vaccinations were

started, they were suspended due to a lack of vaccine and continued from September using Chinese serums. Country-wide decisions were repeatedly prevented, because the government was more focused on itself than on dealing with the pandemic. Ongoing mistrust votes severely hampered regular work. A high number of unreported cases of illness, death and recovery called official statistics into doubt.

At the same time, we wanted to celebrate the tenth anniversary of the Swastha Chulo Nepal (SCN) association, look back at the work done and the successes achieved in the board meeting. Also, we have exceeded the number of 100,000 stoves in Nepal this year. But the celebration had to be cancelled.

Distrikt	2021												Total
	Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sept	Okt	Nov	Dez	
Arghakhanchi	806	1538	1303	798	135	60		61	478		28		5207
Dhading	66		82	4		54				96			81
Dolakha	405	444	456	356		167	148	351	429	174	373	280	3583
Kavre-Palanchok													
Nuwakot									232	68	92	408	800
Pyuthan							24						24
Ramechhap												152	152
Sindhupalchok													
Udayapur													
andere													
<b>Total</b>	<b>1277</b>	<b>1982</b>	<b>1841</b>	<b>1158</b>	<b>135</b>	<b>281</b>	<b>172</b>	<b>412</b>	<b>1139</b>	<b>338</b>	<b>493</b>	<b>921</b>	<b>10149</b>

Nevertheless, we were able to build a respectable number of more than 10,000 smokeless stoves in Nepal. The work in Arghakhanchi was largely completed before the long lockdown. A request from the Nuwakot district had been received for quite some time, reporting a significant need. After extensive bureaucratic preparations with the Social Welfare Council (SWC) and the local authorities, the project

## Smoke-free Cooking Stoves

application for 30,000 stoves was approved and stove construction in Nuwakot could begin. By the end of the year, 800 stoves had been built there.

In late summer, the official monitoring by the SWC for the climate protection project was completed. We continue to build stoves in Dholaka and Ramechhap on request, but they are no longer counted as part of the climate protection project. Monitoring continued on a limited basis in 2021. The lockdowns prevented Anita, our SCN manager, from sending fieldworkers on their tours to the stove construction areas. Instead, telephone monitoring was carried out on a regular basis. Fortunately, these could be collected and recognized in sufficient numbers for the evaluation of the CO<sub>2</sub> project. Re-establishing monitoring is a post-pandemic task and will be addressed in 2022.



Repaired stove in Gulmi

The maintenance project for the care and repair of stoves that had already been built suffered particularly from the lockdown, because the maintenance experts were unable to promote their work in their villages and were often not permitted to enter the kitchens. It is therefore all the more remarkable then that they managed to carry out 1,325 repairs anyway. Yamuna Devi Khadka, who alone reported 380 maintenance services, is particularly noteworthy. In her community of Jimruk, the community representatives decided to cover the households' own share (50 percent of the costs incurred) with the budget from their environmental budget, so that Yamuna was not faced with discussions with the homeowners about the amount of the costs. The promised feedback meeting for the maintenance experts had not yet taken place in 2021 and was postponed to 2022.

Group training did not take place in 2021, but is planned for the Nuwakot district. In parallel, individual stove builders were repeatedly instructed and

## Die Ofenmacher e. V.

corrected so that a consistent quality of the stoves can be assured.



Yamuna Devi Khadka is praised for her efforts

Important for the trainings is Bel Bahadur Tamang, the trainer for the practical part of stove building. He and his whole family fell ill with the Delta variant of the Corona virus in the summer. He was in the Dulekhel hospital for a month and went through a terrible time. It is all the nicer now that he has fully recovered and has resumed his work. In this context, the consistent registration and payment of the SSF (Social Security Fund) contributions also paid off, because this coverage also includes health insurance. This meant that large parts of the costs could be reimbursed.



Anita Badal

Anita and her family suffered, like everyone else, from the constrained situation.

Nevertheless, she managed to get the framework work for SCN and the new project in Nuwakot underway and completed

the official work under the most difficult conditions, reported regularly to Germany and also managed the personal contacts for the worries and needs of the individual stove builders. Without her, the stove builders in Nepal would not have been able to take on such proportions.

We are going into the coming year with confidence and have carefully planned 13,000 stoves to be built for Nepal.

*Christa Drigalla*

# Gold Standard®

Climate Security & Sustainable Development

## Climate Protection Project Nepal

### Gold Standard Project GS 1191: “Smokeless Cookstoves for Rural Districts of Nepal”

In the year under review, the stove construction phase in the project area was declared to be completed with respect to Gold Standard. This was at the end of April 2021. Although stove construction continues, particularly in the Dolakha district, because the demand is as present as ever. But the CO<sub>2</sub> savings from additional stoves can no longer be credited to Gold Standard, as the upper limit of 10,000 tons of CO<sub>2</sub> savings per year for micro-scale projects has already been reached with the existing stoves.

The stove construction record for the project area shows 16,216 installed, efficient and CO<sub>2</sub>-saving stoves. Behind this, however, lies an eventful history. The terrible earthquake in April/May 2015 destroyed almost 6,000 of the stoves built at that time.



Distribution of Rocket Stoves 2015, a small contribution of stove makers to improve tragic situation.

As emergency and immediate aid, Swastha Chulo distributed over 6,000 portable Rocket Stoves to the population in the project area. This is the name given to stoves that look like buckets of water with a fire running inside. The pot is placed on top of the only cooking place. There is no chimney. Rocket Stoves made of clay are portable and require very little space. Cooking can be done indoors in bad weather and outdoors in good weather. Efficiency is about twice that of open fires. The stoves distributed at that time are either due to the limited service life

today not more operational, or are used as additional cooking facilities outside the house.

From 2016 onwards, more and more stoves of the standard type could be built again. Even after the official end of the construction phase, stoves continue to be built in the three districts of Dolakha, Kavre-Palanchok and Ramechhap due to the ongoing high demand.



A new stove in Dolakha, built on 19/08/2019

The last monitoring report to Gold Standard due covered the period from 01/08/2019 to 30/04/2021. During this period, the use of the distributed stoves was able to demonstrate the saving of approximately 17,000 tons of CO<sub>2</sub>. This amount of VER certificates is now available again for climate compensation to all interested parties.

The Ofenmacher were able to retire 1,572 VER certificates in the year under review. This means that 1,572 tons of CO<sub>2</sub> were removed from the global cycle. The donations for CO<sub>2</sub> compensation came from guests of Wiking Reisen, other private donors and companies. This modest contribution to climate protection is in line with the UN Sustainable Development Goals (SDGs). Our project makes a substantial contribution to the four goals:



Reinhard Hallermayer

### Stove Projects Ethiopia

In November 2020, troops from the central government invaded the Tigray region. This escalated the conflict that had been rumbling for months between the government led by Abiy Ahmed and the TPLF (Tigray People's Liberation Front), which had been deprived of power by Ahmed's takeover in April 2018 and had held the strings in Ethiopia until then.

Initially, government forces seemed to have the situation under control, but the TDF, the military arm of the TPLF, rebounded in the middle of this year, recapturing large parts of the Tigray, crossing the region's borders and moving into the neighboring Amhara and Afar regions.



Northern Ethiopia

The warfare has dramatically deteriorated the supply situation in Tigray and created a hunger catastrophe. Both the humanitarian and military situation remain unclear due to the restrictive information policies of both sides.

Toward the end of 2021, TDF forces were pushed back into the north of the country, and martial activities are confined to that part of Ethiopia.

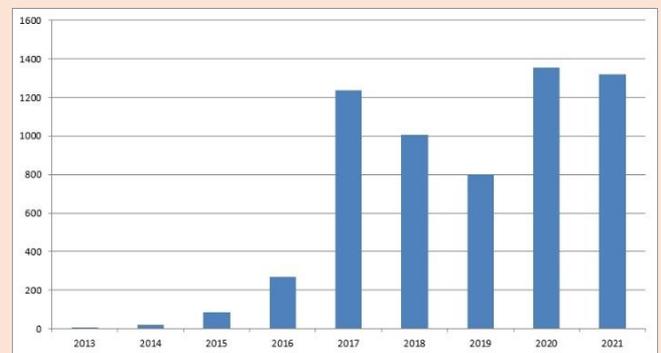
### Alem Ketema and Merhabete

Alem Ketema is located south of the Amhara region and, seen from a distance, does not appear to be directly threatened by the TDF. Nevertheless, the people there were anxious for a long time that the conflict could spread to them. Nevertheless, our employees did everything they could to keep the project alive. Abebaw, local manager of "Die Ofenmacher Ethiopia": "Although we are in danger of

being invaded by the forces of Tigray, we are working hard to do the best we can, as the use of cooking smokeless stoves is associated with health problems and solutions."

It is quite understandable that, against this background, concerns about Corona have taken a back seat. The threat posed by the virus is considered to be rather low among the population. However, at least in the urban environment in Alem Ketema, hygiene measures such as wearing a mask and hand disinfection are observed.

It is astonishing that stove construction did not collapse under these circumstances. In 2021, Abebaw and his team built 1,320 stoves, almost as many as the year before.



Annual stove construction figures in Ethiopia

### Simien Mountains

The district of North Gondar directly bordering Tigray with the capital Debark, where our stove construction area in the Simien Mountains is located, is affected by the warfare. TDF troops have been on the move there since August 2020 and fighting is underway. According to the report of our Country Director Abebaw, all stove construction activities have ceased. To date, no significant improvement in the security situation is in sight.

Frank Dengler

### Stove Project Kenya

After a significant decline in stove construction in 2020, the number of stoves built doubled to 258 in 2021. Advantages of the stoves made of clay are the low price and the clean air in the cooking room, because the smoke is led outside through the chimney. This distinguishes them from the other models available on the market in Kenya. On the other hand, the poor quality of the clay in Laikipia caused us problems and we had to take additional measures to give the stoves stability, such as installing a combustion chamber made of fired clay and a casing made of cement.



The classic clay stove in Kenya

At the beginning of this year, Hillary Mutuma, the person responsible for the stove project at Ol Pejeta, and Gilbert Mithamo, a long-time supplier of the burnt clay components, made a new attempt. Together with the Tigithi Technical Training Institute and the Nanyuki Technical Technical Training (two technical schools in Nanyuki), they developed a stove that overcomes the above-mentioned disadvantages.

The basic shape of the new stove is similar to a bucket of metal, in which there is a fire opening and an outlet for the smoke. The interior is lined with burnt clay. A metal chimney pipe can be connected to the outlet. This distinguishes it from most other so-called Rocket Stoves offered on the market. It is very simple in construction and therefore cheap to produce (about 1,500 KeS, which is about twelve Euros).

The model, called "Jiko smart", is portable, making it suitable for nomadic folk groups. Efficiency is more than double that of open fires, so the stove saves half the firewood. It can be used outdoors in good weather, while when cooking indoors the smoke escapes outside through the chimney. Although the model, unlike the clay stove, offers only one cooking place, but obviously this does not significantly limit its appeal.



Two new Jiko smart

The stove is currently being manufactured at the technical colleges in Nanyuki. This provides the students with training that will enable them to produce this type elsewhere on their own initiative. So far, 25 students have already successfully completed the course.

In the first year, 185 "Jiko smart" stoves have already been distributed, about two and a half times as many as clay stoves. Is this a success story?

*Frank Dengler*

Review of our Help

The distribution of smoke-free mud stoves is, according to the purpose of the association of 'Die Ofenmacher', first and foremost a contribution to the preservation of health of the rural population. The hazardous smoke is eliminated from the living rooms. Families can breathe clean air. Wood consumption for cooking is roughly halved. This not only relieves the wife of the house of the need to provide firewood, but also protects the surrounding forests. Health care, environmental protection, climate protection means an all-round package for the development of the country. This is true for Nepal as well as for the African regions.

Stove Building Figures

	2019	2020	2021
Nepal	16,208	8,107	10,149
Ethiopia	800	1,353	1,320
Kenia	184	128	258
Total	17,192	9,588	11,727

During the 2021 reporting period, the Ofenmacher had a total of 11,727 stoves built. On average, a family in rural areas consists of five people. As a result, the living conditions of around 60,000 needy people have been fundamentally improved. In Nepal, Swastha Chulo installed stoves in six districts of the country during the reporting period.

The effects of the global Corona pandemic are still clearly noticeable. Despite this, we were able to match the previous year's figures in Ethiopia. In Kenya, we even built twice as many stoves as in the previous year.



This house in Nepal owns the stove with the registration number CZ1633.



Fatima's healthy stove in Ethiopia



"The harmful smoke gases now go directly to the exterior," Tadla is pleased to say.

### Active Stove Builders

In our project areas, around 130 stove builders were active in the year of the reporting period, installing 11,727 new stoves. This means an average output of 117 stoves per year per woman or man. In return, they received an average wage of around € 700 per year from Swastha Chulo in Nepal. This sum corresponds to an average annual income in Nepal. It is welcomed as an additional income for our stove builders, who earn their living mainly from farming.

	2019	2020	2021
Nepal	58	41	37
Ethiopia	64	75	58
Kenia	10	8	5
Total	132	124	100

### Training of Local Experts

The way to a better life for the people in the global south is primarily through a sound education. The Ofenmacher are therefore pleased to be able to give a small but significant push by promoting local workers in the field of stove construction. The stove builder training is help for selfsufficiency. Women in particular will benefit from it. Due to reduced stove construction activity, no courses were held in 2021, especially in Nepal, but training is planned again for 2022.

	Training Courses	Participants	Including Women
2020	1	26	26
2021	0	0	0
Total	1	26	26



Last touch and the healthy oven is ready



A group of proven stove builders after receiving certificates recognizing their achievements

### Steps to Sustainability

The UN has defined 17 Sustainability Development Goals (SDGs) for the year 2030 to which development projects in the global South should be related. Each project should identify the goals to which it makes substantial contributions.

The stove projects of the Ofenmacher contribute to the following sustainability goals of the UN:





## Foundation Allianz für Entwicklung und Klima

Since 2019, we are a member of the Allianz für Entwicklung und Klima as Die Ofenmacher e. V., which was transformed into a foundation in 2020. The aim of the foundation is to support the climate goals of the Paris Agreement and the 17 Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda.

The foundation is intended to mobilize private funds for the promotion of development and international climate protection. The principle: private individuals, associations, institutions or companies support climate protection projects in developing and emerging countries that simultaneously strengthen economic development, improve living conditions and protect the environment.



*The future of the voluntary offset market.*

Panel discussion at the meeting of the Group of Supporters on September 16, 2021.

In return, they receive climate certificates that show the extent to which they are reducing CO<sub>2</sub> emissions

through their commitment. To select suitable projects, they can contact offset providers who support the foundation.

On September 16, 2021, the annual meeting of the group of supporters took place in virtual form for corona-related reasons. The intended goals were to intensify the personal exchange between supporters of the foundation and the compensation partners, to inform about exemplary projects and development effects and to seize opportunities for establishing new cooperations.

A workshop on "The Future of the Voluntary Offset Market - Development and Perspectives of Alternative Financing Approaches for Climate Protection" also provided an opportunity to exchange views on the future of the voluntary offset market. In the context of the implementation of the Paris Agreement on Climate Change and the resulting changes in the preconditions for the voluntary carbon offset market, the development of sustainable certificates and products was discussed in particular.

*Ernst Wehreter*



Expenses

Expenditures of year 2021

Expenses	2021
Project Funding, Project Guidance	161,000.00 €
Fees Climate Protection Project	3,108.20 €
Administration, Promotion, Public Relation Work	2,728.74 €
Other Expenses	558.04 €
<b>Total Expenses</b>	<b>167,394.98 €</b>

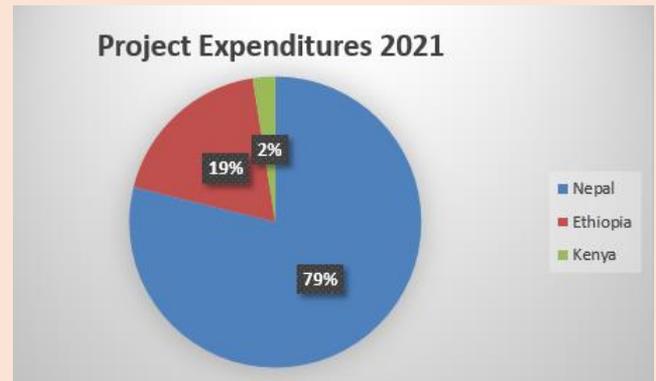
The objective of our non-profit association is to ensure that 100 percent of all donations for stove construction reach the project countries as humanitarian aid. The promotion of the stove building projects is therefore at the core of the association's activities and, with over 95 percent of the expenditures, is the absolute top priority. All other costs are comparatively low.



Allocation of expenses to the segments

Distribution across projects and countries

Expenditures for Nepal account for the bulk of project funding. The reliable local partner, Swastha Chulo Nepal, and many trained stove builders enable the installation of thousands of mud stoves in this area.



Shares of the countries in project expenditures

The implementation of stove projects in the countries requires consistent monitoring and control by „Die Ofenmacher“. In addition to regular Skype meetings between the project supervisors with the project managers in Nepal and Africa, the work on site is inspected during project trips. These personal meetings are a source of valuable impulses for the work and motivation of the whole association. By the way, the costs of the trips are covered by the project leaders themselves.

**Each stove is 12 Euro!**

Non-profit association "Die Ofenmacher e. V."

- 1. Chairman: Dr. Frank Dengler
- 2. Chairman: Matthias Warmedinger
- Treasurer: Robert Pfeffer
- Assessor: Theo Melcher
- Assessor: Dr. Maxim Messerer

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For climate compensation please enter the keyword: Climate protection or the number of tons of CO<sub>2</sub>