

beyond and above the ticking clock by exploring various and valuable resources with relation to MEG.

The contributions have lead to a literary gold rush, which covers different types of resources. The reader will encounter solid (and sterilized) equipment provided by the MedTech company Noor Medical, then explore waste on the occasion of an initiative during the European Week for Waste Reduction and visualize resources through a photo series on the distinction between civilization and nature. The resource 'water' is key in internship experiences in Stockholm, and other student experiences will take us to Mexico, Kenya an the region of Freiburg. More abstract types of resources are found around Herderbau including the 'knowledge' attained in the module on system thinking and the 'human resources' at our faculty. On the staff side, Prof. Michael Pregernig has taken office as Programme Director as Prof. Heiner Schanz is appointed Dean, further staff updates will follow shortly. On the student side, a new devoted MEG generation has arrived and according to tradition participated in the recent MEG13 graduation party.

For this and more, I would like to thank the contributors dearly and wish the reader an enjoyable read!

Albert-Ludwigs-Universität Faculty of Environment and **Natural Resources**

Program Director: Prof. Michael Pregernig

Program Management: Ms. Esther Muschelknautz Ms. Seirra Römmermann

Edited by Sofie Hovmand

79085 Freiburg I.Br. Germany

www-meg.uni-freiburg.de



A Warm welcome to our new staff

1 O Taking part in the collective

1 Mach's gut, MEG!

7 Generations Working Together

Noor Medical: From the United Nations in NYC to Dubai Expo

72 Immersion in system thinking

6 The European Week for Waste Reduction

7 "Groetjes" from MEG15

Capturing resources

26 It all began two years ago with orientation days

A glimpse into the world of water

20 Connecting the dots

13 Reflecting on REDD+, participatory processes and privileges

A WARM WELCOME TO OUR NEW STAFF

WHO ARE YOU AND WHICH RESOURCE DO YOU TREASURE THE MOST?



Picture: geographie.uni-freiburg.de

Prof. Dr. Hartmut Fünfgeld

My name is Hartmut Fünfgeld. I have been Professor of Geography of Global Change at the University of Freiburg since February 2018, after living and working in Australia for the previous eight years. My research and teaching focuses on the social and institutional responses to climate change, including normative questions of planning and decision-making for climate change adaptation.

The resource that I treasure the most is social connection between human beings. If we are talking about more conventional, material resources, water would have to be my favourite resource that I also feel very dependent upon.



Picture: Private

Prof. Dr. Cathrin Zengerling

JProf. Cathrin Zengerling, LL.M. (Univ. of Michigan) is Assistant Professor for Transformation to Sustainable Energy Systems at the Faculty for Environment and Natural Resources since August 2019. She is a lawyer and her main expertise and research interests are in the fields of (international) environmental, energy and planning law as well as sustainable urban development. Her current research focuses on the role of cities in combating climate change and resource depletion. Part of her team are Nikita John and Lisa Harseim, both holding an M.Sc. in Resource Efficiency in Architecture and Planning from HafenCity University Hamburg.

The resource I treasure the most is time.



Prof. Dr. Stefan Pauliuk

Stefan Pauliuk is an expert for method development to assess sustainable development strategies. He works with supply chain analysis and scenario modelling for sustainable material futures. He is an assistant professor for sustainable material and energy flow management at the Faculty for Environment and Natural Resources, University of Freiburg, Germany.

The resource I treasure the most is a society in which individuals can thrive sustainably.

MACH'S GUT, MEG!



Dr. Olga Malets

After four years as a MEG faculty member and a research associate at the Chair of Environmental Governance, I left Freiburg in September to take a new position at the Office for Research and Innovation of the Technical University of Munich. The time in Freiburg was exciting, with motivating students and inspiring colleagues in an ambitious research and teaching environment. There are many great things I will remember MEG for. In this brief note, I will only focus on three.

As a **MEG faculty member**, I taught classes in several modules, including Global Environmental Politics, Research Design in Environmental Governance and Leadership and Social Entrepreneurship and several others. Whereas all of them were special in some way, the Leadership part of the LSE module is particularly dear to me. I developed it from scratch, and it is quite unique to the best of my knowledge, since it does not focus on management and organization, but takes a critical look at the concept of leadership and specifically environmental leadership as a process and as an interplay of leaders' personal traits and strategies, followers' behaviors and the social and organizational context into which both leaders and followers are embedded. Something similar occurred in my classes: not every class of mine went well, but when it did, it was never just my efforts, but much more students' interest, openness and engagement in the context of the MFG's excellent academic environment.



As a **MEG internship coordinator**, I learned about dozens of organization and places that I will never be able to visit. I often thought "Wow I wish I could do that internship" while going through the paperwork students submitted to me after their internships. I was fascinated to see many students pursue their interests with an exceptional persistence and optimism writing hundreds of applications, applying for financial support to dozens of foundations and public offices and continuously re-arranging their travels, accommodations and studies in order to take advantage of new opportunities. I learned every day from MEG students' determination. and flexibility in their pursuit of knowledge and experience.

As a supervisor of Master's theses and as a member of the Faculty of the Environment and Natural Resources, I was lucky to get to know a lot about global environmental

change and societal attempts to govern it beyond my own research interests. Skeptical voices suggest that the humanity should accept that we cannot prevent the global environmental and humanitarian catastrophe and should resign in the face of it. Indeed, the state of cli-mate and biodiversity, for instance, is devastating. Yet I believe that surrender does not do justice to the work many MEG students, alumni and faculty do. We have the resources and technology to solve many problems we face. What we need is more research on the complex nature of human inaction on environment and the ways to overcome it. This is probably my most important takeaway from Freiburg.

It was an honor and a great pleasure to be a part of MEG. I would like to thank MEG students, alumni, directors, faculty members and staff for making my time in Freiburg so special. All the best in your endeavors!

FROM THE UNITED NATIONS IN NEW YORK TO DUBAL EXPO 2020 NOOR MEDICAL'S SOCIAL-IMPACT JOURNEY CONTINUES



Text: Laila Berning (MEG12)

About Noor Medical

Noor Medical, a MedTech company established in Freiburg, Germany on April 9th, 2019, is a new venture dedicated to developing market-based ecosystems of care for safe surgery. By providing medical equipment to sterilize medical instruments, with the capability to work in a variety of operational contexts, we are working towards improving the provision of safe surgery in rural and off-grid medical clinics. Over 1.5 billion people in the world lack access to medical clinics with capable surgical instrument sterilization equipment, resulting in the unfortunate statistic that 1 out of 3 patients in the developing world

suffer from postoperative infections. Unsafe surgery results in approximately 17 million deaths annually. Noor Medical works with a variety of partners to rectify these conditions (www.noor-med.com).

The Noor Medical team

The Noor Medical team is a highly international team from with diversity of backgrounds. The co-founders stem from the MEG12 and MEG11 generation and hail from 4 different countries: Laila Berning (Germany), Andrew Bonneau (USA), Federico Castillejo (Colombia) and Saji Zagha (Palestine). United by the vision to improve humanity's access to equitable healthcare through social entrepreneurship, we started working on Noor Medical in December 2017. Since then we have proceeded through several business accelerator programs, advanced to the Global Final of the Hult-Prize and were invited to present our safe surgery enterprise at the United Nations headquarters in New York City last year on September 15th 2018.



Most recently, Laila Berning was nominated as a UN Young Champion of the Earth Finalist in Europe and Andrew Bonneau travelled to Dubai to represent Noor Medical at the Expo 2020 event. We're excited to have been selected as one of the social impact enterprises which will receive support over the next 12 months as we continue to develop our technology and conduct user-interface testing in Uganda.

Noor Medical and the MEGs

The Noor Medical team is proud to be part of the MEG module "Leadership and Social Entrepreneurship" for the third time. It has always been a valuable experience for the Noor Medical team to receive input from the a diverse group of students interested in entrepreneurship, sustainability and development. We are also glad to welcome new MEGies supporting us in different areas of our business to the Noor Medical team. Special thanks to Narte-Adjoka Nartey for your research on certification procedures within Sub Saharan Africa and Chloé Ludden for taking leadership on applying to the Geneva Challenge. We would also like to highlight the excellent work of REM

student Brendon Bingwa in the areas of capital and product development and Jayanth Murthy for his engineering research.



Andrew Bonneau, COO at Noor Medical, at the Expo 2020 event in Dubai

Join the network

If you would like to get engaged with Noor Medical, please reach out to us!

Contact: Laila Berning

E-mail: laila.berning@noor-med.com

Website: noor-med.com

Press: medium.com/@noormed.media **Facebook**: facebook.com/NoorMedicalPR/ **LinkedIn**: linkedin.com/company/noor-

medical/

Twitter: twitter.com/noor_medical

Instagram: instagram.com/noormedical/

THE EUROPEAN WEEK FOR WASTE REDUCTION

STUDENTS COORDINATE LOCAL EVENTS ABOUT SUSTAINABLE RESOURCES AND WASTE MANAGEMENT







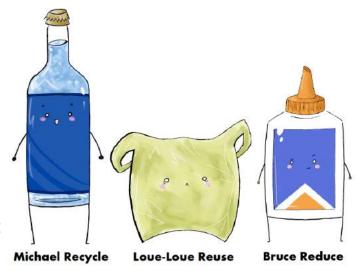


Text: Adriana Duarte Animation/programme: Anina Hartung, Jennifer Petz, Marina Bauer (MEG14)

After finishing a delicious wrapped pastry from the bakery or saying farewell to your broken computer have you ever stopped and thought to yourself, where does all this garbage go after it's thrown away? It may not cross your mind - or if it does - it would be quite easy to forget and go about your day. This is a question that a group of MEGs have come together

to tackle in their preparations to take part in the European Week for Waste Reduction (EWWR), which takes place from the 16th to the 24th of November. The idea to get involved came about after a student presentation by Claire Gallacher on her experience researching municipal waste on the Island of Trinidad and Tobago.

Upon reflecting on the realities of the global waste crisis, MEGs wanted to figure out ways that they could make a difference on the University and community level. Topics such as more effective waste separation, and increasing collection rates came up but



a recurring theme in discussions was the need to simply reduce the overall production of waste before it reaches the landfills and recycling facilities, no easy feat in this age of modern conveniences. Waste can be generated not just from our plastic packaging from the grocery store, but also behind the scenes in industrial settings where the World Bank estimates that 18 times more waste is generated annually than from households. These types of eye opening statistics awaken us to the complexities involved in waste reduction stretch beyond our

individual behavior but MEGs have never been a bunch to shy away from such complexity.

Now that you've reached the end of this article, I'm sure you are marking down the days in your calendar until the European Week for Waste Reduction arrives. Until then, we invite you to imagine ways in which you can make your own strides in reducing waste in your own circles. Who knows, maybe you will begin to think about waste management while biting into your next pastry.



CAPTURING RESOURCES AND NATURE



Text and pictures: Adam Oliver (MEG15)

Top: Winter in Schwarzwald near Emmendingen

Right: A steadfast island off the coast of Phuket, Thailand

Below: A beach in Dorset, South West England, which is part of the 155 km long Jurassic Coast







CAPTURING

RESOURCES AND CIVILIZATION

Top: Carnaby Street in London, home to fashion and lifestyle retailers

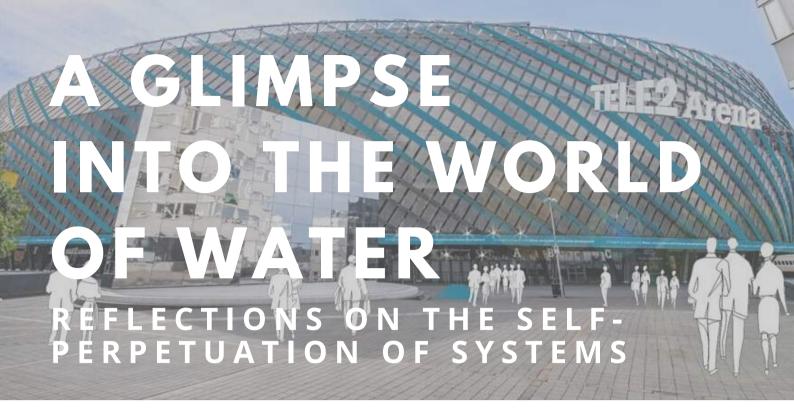
Right: The Gallery of Diana an eighty-meter long corridor lined with bookcases in Palace of Fontainebleau, France

Below: Budapest, Hungary, the second fastest-developing urban economy in Europe according to Brookings Institution











Text and pictures: Willow Sommer (MEG13)

Each year a weeklong conference is hosted in Stockholm that aims to convene worldwide practitioners of water. The conference addresses the challenges that the world faces in achieving SDG6: ensuring clean water and sanitation for all people, among other interrelated goals. This year's title was "Water for Society: including all", which will join the ranks alongside 27 other successfully completed conferences. The whole affair began in 1991, even before the Earth Summit in Rio that established the concept of sustainable

development, as we MEGs know well. The conference is hosted by the Stockholm International Water Institute – a government funded research institute that tackles policy questions around water and development. Aside from conducting research, one of the institute's main functions and sources of revenue is planning and implementing the annual World Water Week.

For a single guest, a full week entry ticket runs for 9500 SEK (about 880 EUR) and anyone who's in water and development cooperation will pay an additional fee to set up a booth on the arena floor. This booth may be used as a platform for showcasing an organization's activities to conference participants, as well as a site for hosting side events, meetings and receptions with wine. The entry ticket also gets you access to the sessions that run all week long (6 days in a row), and cover a wide



range of topics that all bend to fit under the guiding title mentioned above. But as I and all the other firsttimers quickly realized, the real value of the ticket is not privileged access to the variety of knowledge amassed by the water and development community, sloppily presented in generic and rushed power point showcases - no, that is not what has propelled the World of Water to reconvene for 28 years and counting. Rather it is the opportunity for networking and pitching - both individual and organizationnal – that is offered by such a grand and magnetic event as this one.

World Water Week 2020
"Water and Climate Change:
Accelerating Action"

Stockholm, Sweden
August-2020

SIWI

I had the opportunity to attend the conference as part of my internship with the Global Water Partnership (GWP). GWP is an intergovernmental organization with headquarters in Stockholm that promotes Integrated Water Resources Management around the world (IWRM). The organization sets itself apart through its network of regional offices, which are locally staf-

fed and forge contextually relevant water management solutions through the formation of multi-stakeholder partnerships. Our headquarters in Stockholm is responsible for coordinating the activities of the regions, and for promoting their work and IWRM on the global water policy stage.

Due to our organization's proximity to the conference, a few of my colleagues were on their 10th attendance. Each member of the staff had at least 20. scheduled meetings with various donor representatives or potential partner organizations, so much so that their sessions tended to take the backseat to their meeting prep, as did their sleep. They appeared at best efficient in their engagement; they had mastered going through the motions, having demonstrated again and again their place in the water world. When we got a chance to talk as they rushed from meeting to session to reception each evening, the more disillusioned of the veterans expressed that the topics had not changed much since years past. One colleague, who had flown all the way from Jakarta, the sinking city, to attend, relayed a particularly depressing story. He had come across a schedule from 2004 buried in a desk drawer and found that the sessions' titles all seemed remarkably similar to this year's.

Indeed, the title in 1998 was: "Water is the Key to Socioeconomic Development and Quality of Life." While no one at the conference this year would disagree with that, many wondered candidly what progress has occurred in between the lines of an unchanged conference schedule pamphlet.

In terms of events, there has certainly been progress, the SIWI team was sure to announce at the opening ceremony. It was the first year for the conference to be hosted within the Tele2 Arena, a large event center more often used for football games and concerts to the south of central Stockholm. As with most things in Sweden, everything transpired smoothly. The new location and set up were a hit, the design was clean and pleasant and the receptions were beautiful and aesthetic as only Stockholm can be - surrounded itself

by deep, blue water. At the end of it all, there were over 250 sessions and 4000 participants from 138 countries. That means, just from the ticket revenues, the conference amassed something in the realm of 3.5 million EUR, and this is not including all the revenue from hotels and airlines that provided the accommodation and travel from those 138 countries. And for what return on investment: the donors always like to know. Thousands of power point slides that will be recycled for the next conference, hundreds of tight-lipped pleasantries that mask a not so subtle plea for funds, and how many cups of coffee stained water consumed? That statistic did not make the website. And I was left to wonder if such events are really hosted for the sake of water, or for the sake of the world that has sprouted up in endless pursuit of managing it.



REFLECTING ON REDD+, PARTICIPATORY PROCESSES AND OWN PRIVILEGES

AN INTERNSHIP WITH THE ASA PROGRAM IN MEXICO*



Text and picture:
Charlotte Gengenbach (MEG13)

In discussions about sustainability, I seek to understand power relations between different countries and their respective policies and actors. This was one of my main drivers for applying to Germany's oldest development policy educational program, the so called 'Arbeits- und Studien-Aufenthalte' (ASA) program. In this program, a three-month internship is embedded in a yearlong cycle of global learning, which encompasses three preparatory and follow-up seminars on critical perspectives on international cooperation, colonialism, and capitalism.

Even before I started MEG, I wondered how socio-ecological conflicts (over land use) could be resolved in a way that protects the environment while redistributing privileges between actors from different countries, classes, genders and ethnicities. This focus led me to dedicate my ASA experience to a project concerned with a REDD+ public consultation process in Mexico.



Above: REDD+ consultation with indigenous Wixárika community in San Miguel: Participants demanded more consultations and specific projects, which include their traditional knowledge and safeguard their rights.

*Disclaimer: This contribution depends... on my own, subjective perspectives. This makes it impossible to draw general conclusions about public institutions, Mexico, the REDD+ instrument or an ASA internship. Please keep this in mind as you continue reading.

REDD+ is short for Reducing Emissions from Deforestation and Forest Degradation. The political mechanism was anchored in the UN Climate Agreement 10 years ago and aims to financially incentivize countries of the Global South to promote forest conservation and thus climate protection. Further it aims at an array of goals related to rural development. These goals include e.g. conserving forest biodiversity and strengthening participation opportunities and livelihoods of women, young people and indigenous communities.

As an intern, I worked in the Secretary for Environment and Territorial Development (SEMADET) of the Mexican state of Jalisco, which carried out a consultation on the state level REDD+ strategy. When I started my internship in August 2018 in Guadalajara, the capital of Jalisco, the consultation process was already in full swing. I accompanied my team to meetings with stakeholders from agriculture, livestock farming, forestry, public institutions, academia, as well as geographically dispersed local and indigenous communities. My tasks included documentation and communication of

participation, and systematization and evaluation of opinions gathered during the consultation. The consultation process resulted in an extensive report with recommendations for an improved REDD+ strategy.

REDD+ mechanism: a win-win story?

Prior to my stay in Mexico, I considered the REDD+ mechanism as an interesting - yet controversial - instrument. On one hand, the mechanism can address synergy effects between social welfare and nature conservation by offering an economic alternative to local people and by strengthening community forest management. On the other hand, the mechanism can lead to local people becoming financi-ally dependent and loosing autonomy over their land. This has been observed among existing REDD+ projects around the world.

ous communities. My tasks included During the internship I gained a more documentation and communication of thorough understanding of REDD+'s workshop results, statistical analysis of limitations through examples brought



Above: Consulting rural women in Mascota: Participants called for making women responsible for tasks that they are normally excluded from, such as land surveillance.

forward by actors involved in the consultation process. One example that comes to my mind revolves around conflict of interests, e.g. between large-scale livestock, forestry and environmental conservation. Designing a comprehensive program for sustainable rural development seems difficult with the Mexican Environmental Secretary in charge. Similar challenges exist in Germany, where the Ministry of Agriculture works against the one of Environment. In my opinion it will be difficult to achieve the REDD+ goals, as long as there is no integrated vision for sustainable rural development.

Another example of a limitation is funding. REDD+ follows a logic of payment for ecosystem services: the financial value is linked to the results of the projects, e.g. greenhouse gas reduction, rather than the establishment of projects. For communities that often lack funding, the question remains how REDD+ projects should be financed initially. Participants of the consultation clarified their need for broad and easily accessible funding for rural development as opposed to funding tied to internationally set criteria for climate protection. Some of the people, who were consulted, doubted whether the payments would ever reach the local level due to existing corruption and drug trafficking problems in some regions where REDD+ projects are to be implemented.

A third example illustrates the issue of distributing benefits and responsibilities. For instance, existing forest stands are not included in the framework of REDD+. As a result, communities that are already striving towards forest protection do not receive any compensation for their efforts. I remember well the words of an indigenous chairman when being informed about the idea of REDD+: "We are already doing forest protection. And besides, we do not actually cause climate change. Why should WE change something?" This was one of many situations where I questioned my reasons for having flown to Mexico instead of pressuring German policy makers to stick to their (hilariously unambitious) climate protection goals. It felt even more contradictory when discussions about clearing of Hambacher Forest, coal phase out and climate justice became public issue number one in my home country. When I look into recent discussions about 'Waldsterben 2.0' ('Forest dieback 2.0'), I find it hypocritical how Germany calls on Global South countries to protect their forests, while only 1% of German forests are protected and the remaining areas serve for wood production rather than biodiversity conservation.

To conclude the above arguments: The REDD+ mechanism comes with holistic approaches and can facilitate cooperation between various actors, possibly towards a sustainable rural develop-

ment. Still I wonder, does the promoted win-win story of sustainable rural development through REDD+ exists at all? Or is REDD+ - with its origin from international discussions - neglecting local needs while serving as means for reducing the Global North's climate debt? And in the end: who is responsible for protecting climate and ecosystems - those who have the highest rates of biodiversity and deforestation or those who have already degraded their ecosystems in favour of economic prosperity?



Above: Can REDD+ contribute to protecting biodiversity AND securing local livelihoods?

'Say the magic word, say it!' - 'Stakeholder participation'

During my stay with SEMADET, I learned a lot about the challenges of a public consultation process. REDD+ is a fairly complex mechanism, which is manifested in complex policy arrangements. Hence, Jalisco's REDD+ strategy encompasses a broad range of complicated rules and guidelines, formulated in an abstract policy language. This

complexity and vagueness led to one of the main difficulties of the workshops: enabling participants to fully understand the topic so they could raise informed opinions – impossible. Another challenge was the participation rate of women and indigenous peoples. For instance: although workshops were held especially for rural women, our statistical evaluations revealed low participation numbers (only 30% of women in total). And even in workshops directed towards rural women, most recommendations were brought forward by male participants.

Moreover, it's interesting to see how different opinions made it into the updated policy draft. Some participants generally questioned REDD+ for example, as a neo-colonial instrument that turns nature into a marketable good or as a further threat to anyway poorly protected sacred places of indigenous communities. Though these comments were noted down, they were not included as recommenddations for the updated strategy. This made me realize how 'radical' opinions, or the ones that diverge from mainstream arguments, tend to be excluded from the public consultation process. Possible reasons might be that these opinions do not contribute to the consultation goal, namely updating Jalisco's REDD+ strategy, and that they question underlying structures of the system upon which REDD+ builds.

So I keep asking myself, who is participating in the design of REDD+ policies and projects and whose opinions are heard?

Firstly, consultation and participation processes cannot be understood as an open-ended process within which policies are discussed fundamentally, but they instead have to be put in context of their historical emergence and overarching discourses. To me, participation processes around REDD+ have to be understood in the context of global discourses on forests in climate change, on economic growth, on sustainable development - on discourses that tend to neglect 500 years of Western colonisation and exploittation.

Secondly, I have the impression that stakeholder participation is perceived as a magical process - you let several actors sit around one table, they discuss a bit and that creates an outcome to which everyone agrees. Unfortunately, it's not as easy as that. Relations between stakeholders are embedded in complex power relations. Thus, I keep telling myself do not get complacent and let yourself sink down on the cosy cushion of stakeholder participation. Always be ready to question the system on which the governance arrangement is based. Along this line of thought, my ASA experience has revealed many important reflections for my understandings of global Environmental Governance. I know more than I did before: for me it depends on questions of power and privilege.



Above: Combining cattle ranching and silviculture: integrated land use is nothing new to traditional highland farmers. What can be learned from them?



Join and support the ASA program

Applications for the ASA program are accepted each year from November 20th to January 10th. The program addresses students and people with a completed professional training, who are between 21 and 30 years old and live in Germany, no citizenship is required. For more information go to: here [1] and on the German website [2].

Sadly, the ASA program is undergoing some structural changes at the moment. Engagement Global, the organization responsible for the program under the German Ministry for Econ-

omic Cooperation and Development, seeks to reduce participation of civil society and volunteers drastically. ASA was brought to life 60 years ago by civil society actors and has ever since made indispensable contributions to postcolonial, anti-racist and antidiscriminatory perspectives within the ASA program. The ASA experiences provided my fellow participants and me with a unique opportunity to reflect on personal learning process and, in case of being white, internalised racism. I want others to get the same chance and hereby encourage you to support the petition [3] of the ASA Alumni and Volunteer Network on this issue (in German).

- [1] https://asa.engagement-global.de/index-en.html
- [2] https://asa.engagement-global.de/teilnahmevoraussetzungen.html
- [3] https://www.change.org/p/bundesministerium-f%C3%BCr-wirtschaftliche-zusammenarbeit-und-entwicklung-bmz-erhalt-zivilgesellschaftlicher-mitbestimmung-in-derentwicklungszusammenarbeit

TAKING PART IN THE COLLECTIVE

MY INTERNSHIP AT DIE AGRONAUTEN THROUGH MY CAMERA LENS



Text and pictures: Adriana Duarte (MEG14)

Over the summer I was fortunate to spend my time with passionate individuals working with a local research association called Die Agronauten. Along with my colleague Emily Herman we took part in the arrangement of an NGO lunch celebrating diversity and local food we called Mittagstisch der Deutschen Vielfalt in cooperation with Zusammenleben and Food Relations and spent many lovely days cooperating with a local farmer in Tunsel at his organic farm. As these past few weeks have been harvest time in the region, we participated in several harvests with different farmers, some with a refugee class from the Villa Nova School.

The following pictures are from the many enriching experiences we had. It would certainly not have been possible without the hard work from local chefs, educators, eager students, city leaders and proud farmers of this beautiful region.





Top: Enough squash to make soup all winter long. Mid left: Loads of apples getting washed before entering the juice press. Mid right: Rescuing grapes from the bottom of the barrel. A normal day in the office. Bottom left: Nothing tastes better than homemade Apfelsaft straight from the harvest. Bottom right: Secretly these hens run Michel's Kleinsthof.











About Die Agronauten

Forschungsgesellschaft für Agrar - und Ernährungskultur is "a non-profit association that researches and communicates many aspects related to food and farming culture – especially regional, organic agriculture and food systems that are viable for the future." (Die Agronauten 2018)

Die Agronauten 2018, http://www.agronauten.net/



Above: After a successful apple harvest outside of the Panorama Hotel in Herdern with the Villa Nova school class.



Catherine Mungai (MEG4) Lucy Njuguna (MEG11) Jiji Plecha (MEG14)

In Nairobi, Kenya, three generations of MEGgies work alongside each other at the International Livestock Research Institute (ILRI), a CGIAR Research Center. Catherine Mungai (MEG 4) works with the Climate Change, Agriculture, and Food Security Program (CCAFS) as the partnerships and policy specialist. She is currently promoting dialogue between policy makers and scientists on the uptake of Climate-Smart Agriculture (CSA). Catherine is also a prominent figure in the Multi-Stakeholder Platform (MSP) which aims to create a vibrant platform for CSA across Kenya.

In August, Jiji Plecha (MEG 14) joined Catherine and the CCAFS team as an intern. Jiji is researching and developing a journal article, evaluating the boundary spanning activities of CCAFS on African policy-making across scales. Lucy Njuguna (MEG 11) is a graduate fellow with the Sustainable Livestock Systems Program. Lucy works on an ongoing Program for Climate Smart Livestock (PCSL) which is funded by the German government through GIZ. Lucy's research aims at developing protocols for tracking adaptation to climate change for the livestock sectors of Kenya, Uganda and Ethiopia. This research is also part of Lucy's PhD. Catherine, Lucy, and Jiji often eat lunch together and discuss their work in front of Mara House on the ILRI campus.





Text and photo: Nadia Ali (MEG14)

For a comprehensive understanding of complex and interrelated issues, such as a resource-energy-climate nexus, it is essential to identify, explore and understand key dynamics and patterns of complexity through contributions from various disciplines, theories and representations. The system thinking approach along with

the application of systems approaches, methodologies and tools, i.e. systems analysis and system dynamics, makes it possible to practice integrative systems science for studying and managing complex feedback systems in nature and society.

Thus, from July 1st to July 3rd, 2019, a workshop titled 'A beginner's immersion course in systems thinking, systems analysis and system dynamics' was organized for the MEG Programme and the Graduate School Environment, Society and Global Change. The workshop was organized in cooperation with Icelandic System Dynamics Center, University of Iceland and facilitated by Prof. Dr. Harald Ulrik



Sverdrup, Professor of Industrial Engineering at the University of Iceland, and Dr. Anna Hulda Olafsdottir lecturer at the University of Iceland.

The workshop was based on lectures, discussion, group work and individual tasks. The workshop participants were introduced to system thinking, system analysis and system dynamics and its importance in education, research and policymaking. Moreover students were given knowledge and practical

experience of using the system modelling software, STELLA, to draw causal loop diagram, flow charts and system modelling through interesting examples such as the exercise called "Red are the apples in Kivik village". Finally the workshop also guided us through our own system dynamics model projects.

The workshop kept our interest intact throughout the teaching and provided us with new skills, expertise and insights into addressing sustainability issues and environmental problems.







Text: Mattia van der Laan (MEG15)

Hi everyone,

I am part of the fifteenth generation students of the MSc in Environmental Governance, who recently set off on new academic adventures in Freiburg. After getting to know each other, Prof. Schanz, Prof. Pregernig, Ms. Muschelknautz, and Ms. Römmermann, we have had our first taste of the programme. Needless to say, we have an appetite for more!

During the introduction days Prof. Schanz and Prof. Pregernig took us to the Physik-Hochhaus. From the terrace, we enjoyed the view of the surrounding landscape and heard about the history of the city incl. the Freiburger Münster.

Groetjes! Mattia van der Laan

IT ALL BEGAN TWO YEARS AGO WITH ORIENTATION DAYS

MEG 13 CELEBRATES END OF STUDYING TOGETHER WITH FULMINANT GRADUATION PARTY



Text: Charlotte Gengenbach (MEG13)
Pictures: Thomas Hermanns

After months of preparation by a voluntary graduation planning committee and with the indispensable support of Esther Muschelknautz, September 28th had finally arrived. From six pm onwards, professors, MEG fellows, families, friends and beloved ones poured into Freiburg's Peterhof-keller to celebrate this special day with MEG13: their day of graduation. Matteo and Charlotte guided the 120 shiny faces (aka guests) through a colourful programme of speeches, games and cultural highlights.

Throughout the evening, Kate and Miriam disclosed the graduates' last secrets in a competitive game show. Guests got to know MEG13's diverse backgrounds, from dive masters, dungeon masters, and cooking masters, to master of disasters. Worried family members learned about a myriad of potential pathways for their graduates: from Meggies making big business, to Meggies turning to politics, living completely off the grid, or becoming a boyband leader (looking forward to the release of the first album!).



Two years of studying compressed into two hours of performances revealed an interesting mosaic of reflections:

Rafaella (below), MEG13 student representative, pointed out what being a Meggie meant to her in her speech: "it's understanding that not the world, but people are complex, and only when one understands that one is not better than the other when achieving a common goal, they can then work together with each other's strengths, and attain grand change." She expressed her gratitude for having studied with "so many overachievers, intelligent, aware, beautiful, critical, thirsty to learn and do their best, and simply nice people".

all want to become founders, founders of what lies hidden somewhere between midnight and the next horizon, unravelling, surviving and arriving with the new. [..] But the best part is being friends with several humans who have forged friendships amidst differences like the ring of power from the fires of Mordor. Humans who found love in the eyes of each other and pain in the journey of coexisting. [...] We would leave here, living and hoping that someone would make us feel one day again exactly how we felt in these moments we have shared!".



Fafali (right), in a special spoken word poem dedicated to his fellow graduates, reflected: "Our stories are made of brothers and sisters, sons and daughters who have left home with promises of catching dreams that were salvaged from the palms of time. [..] We



Anna (below) revealed what being both Meggie and parent at the same time felt like – and why all MEG13s, whether reproductive or productive in the future, will grow into wonderful coconut trees.



And **Frank and Charlotte (below)** invited the crowd to sing along to a MEG13 song, diving together into memories on how "it all began two years ago with orientation days"



Finally, all graduates received a selfmade certificate to acknowledge their achievements, handed over by Heiner Schanz, Michael Pregernig, Esther Muschelknautz and Seirra Römmermann. Not to forget the paper crowns which every graduate received, to humorously recall that, as the MEG professors had often emphasized, a master's degree is "the coronation of higher academic education."

Afterwards, the shiny faces were guided towards the buffet, where a range of culinary specialities, prepared by MEG13s themselves, as well as some delicious MEG beer were offered. Later Nicholas from MEG12 tuned the crowd into festive mood with some exquisite beats - and the graduates received serious dance competition by the newly arrived MEG15s. Needless to say, the party only got started! And now, you might curiously ask, what happened after this night of high spirits? Some left the country just the next day for holidays, family reunions or in search of a new horizon. Some are about to start a PhD position, an internship, a new job. Some finally have time to work on their thesis. And many, many wonder how two years of studying could pass by so fast, looking back at shared moments with mixed feelings. Maybe they have a MEG13-song line stuck in their heads: "in the end, what have we learned that is meant to stay? It's insights from the friends we made along our way".

CONNECTING THE DOTS

SUPPORT THE LAUNCH OF THE MEGNETWORK MAP AND EXPLORE THE RESEARCH VALUE BEHIND IT.



Text: Brendan McGill (MEG11)

Most of us would agree that Meggies are what make the MEG program so special. Our program brings brilliant and ambitious people from all over the world with a shared interest in sustainability and governance.

If we continue to invest in this global network of like-minded individuals, it should add value to our lives and careers for years to come! In this spirit, I am thrilled to share the MEG Network Map. This is a collaborative "crowd sourced" map of MEGs and MEG alumni.

By mapping where we come from, and where we are now, we can create a fun and useful resource for personal and professional networking. I kindly invite you to contribute! Just follow the link and follow the steps. And please forward the link to any MEGs or MEG alumni you know, anyone who has the link can contribute.

This map was built and hosted with canvis.app, which is a web platform built by me, a MEG11. I used a similar mapping method to do my master's research, which inspired me to build canvis. The idea behind canvis is that you can generate and customise a project right in your web browser, then send the link out to your contributors.

What can MEGs do with canvis?

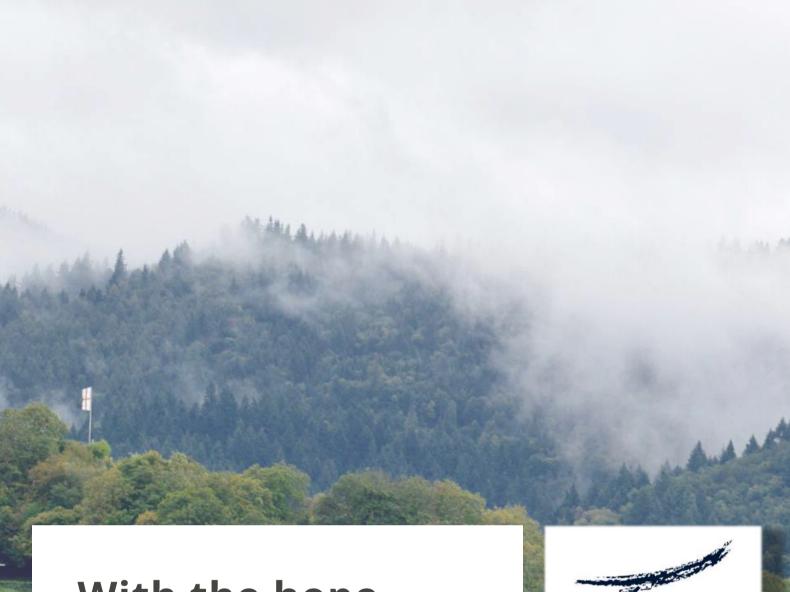
Ask locals to map environmental resources. Launch a citizen-powered trash cleanup effort. Gather feedback and ideas from citizens. Collaboratively map illegal logging or dumping. Do 'community mapping' and visioning exercises. And so much more!

If you think a collaborative map might add value to your research, please reach out. I am looking for partners and exemplary use-cases, and hopefully soon, some employees and interns as well! If you have any ideas, questions or comments please reach out.

Link to MEG Network Map:

https://canvis.app/meg-network/

E-mail: brendan@canvis.app



With the hope that resources keep your vision clear, the newsletter wishes you the very best from Freiburg.



Albert-Ludwigs-Universität Faculty of Environment and Natural Resources

Program Director:
Prof. Michael Pregernig

Program Management: Ms. Esther Muschelknautz Ms. Seirra Römmermann

Edited by Sofie Hovmand

79085 Freiburg I.Br. Germany

www-meg.uni-freiburg.de