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The farmers, the state and the climate change in Ethiopia

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Preface: *out of places, out of time*

This thesis will present the ethnographic research I conducted in Ethiopia in 2021 and 2022 as constitutive part of my PhD programme, in collaboration with Comunità Volontari per il Mondo (CVM), an Italian non-governmental organisation (NGO), entitled *Sustainable technologies to provide drinking water and improve the energy efficiency of rural communities in 8 Woreda in Ethiopia-WASH UP*. It is funded by the Italian Agency for Development Cooperation (AICS), running from the end of 2019. Specifically, the project intervenes in Water Sanitation Hygiene sector (WASH) sector, and broadly in the field of rural development, food security, sustainable agriculture, and renewable energy. The basic activities of the project concern the improvement of water supply, the construction of latrines and biogas systems, the creation of women cooperatives and several capacity building trainings related to plant management, soil and water conservation, hygiene, and sanitation. They are designed and differentiated for two intervention areas that cross Ethiopia from North to South, in two of the country's twelve regions. In the North, CVM operates with WASH UP in four *woreda* (districts) of the Eastern Gojam Zone in Amhara Region, Enibse Sar Midir (henceforth Enibse), Shebel Berenta, Goncha Siso Enese (henceforth Goncha), Enarji Enawga (henceforth Enarji). In the South, Region of Nations, Nationalities and Peoples (SNNPR)[1] in four other *woreda*: Demba Gofa, Geze Gofa in the Gofa Zone, SemenAri in the Omo South Zone and Basketo Special Woreda (henceforth Basketo).

Among the eight *woreda*, I focused on four, two in Amhara, Enibse and Shebel Berenta, and two in SNNPR, Demba Gofa and Basketo. Within the four *woreda*, I selected from the various sites where the NGO is conducting its project activities, eleven rural *kebele* (smaller administrative units), Yeguch, Tenta and Doma in Enibse, Woniye, Mojen and Mergech in Shebel Berenta; Ubabarè and Lote Zata in Demba Gofa and Awra Sosta, Sassa and Bunobasa in Basketo.

Following the activities envisaged in WASH UP project, which had already won before my doctoral research was included through a project variant approved by donors, the objective of

[1] Currently, as of the results of the referendum held on 6 February 2023, the SNNPR region no longer exists. Gofa Zone and Basketo special *woreda* together with the areas of Wolayta, Gamo, South Omo, Gedeo and Konso, as well as the special *woreda* of Dirashe, Amaro, Burji, Ale have become part of a new region, the Southern Ethiopia Region. The remaining part constitutes the Central Ethiopia Region. Since the research and preliminary drafting of the thesis took place before the outcome of this referendum, SNNPR will continue to be used throughout the thesis.

the eight months of fieldwork, was to identify for future development cooperation projects, pathways, activities that could specifically fall under the huge umbrella of Sustainable Development Goal (SDG) 13 of 'climate action'. The 17 SDGs and their associated 169 sub-goals form the core of the 2030 Agenda and have driven the efforts of development cooperation since they were approved by the UN General Assembly in September 2015.

Although climate change is transversal, it represents a new "field" of policy, plan, and activities, to the CVM, which is therefore not an Environmental Non-Governmental Organisation (ENGO) and has always worked in WASH and social protection sector, supporting female domestic workers, orphans, and minors for forty years in Ethiopia. Hence, my whole research was a long assessment, a long identification phase (Bassi 2018,78), which is not usual in the world of cooperation where pace of work prevents such intensive periods of analysis being in the field.

Dedicating a period of time exclusively to this analysis through the lens of anthropology was necessary, but perhaps not obvious, in order to enter and deepen an issue as sensitive and vast as that of climate change. The aim of including an anthropologist in the project was to understand, on the one hand, how climate change is experienced by the people in the rural contexts where CVM works in Ethiopia, the so-called "beneficiaries" in the language of cooperation, and, on the other hand, how the issue has penetrated the country's policies and how it is implemented by the institutions, i.e. by the "stakeholders" who had to be identified in order to frame the NGO's future projects in the country's documents and strategies.

I was aware of the "greening of aid" (Hicks et al. 2008) taking place in the development world in the name of climate change. This process has only increased my curiosity and focus on what it actually means to think about activities that support people in the fight against the effects of climate change.

I never thought I would be doing research on climate change, applied to an already established and assigned topic. On the one hand, I was excited to chart a course that would allow me to navigate the complex scientific and social debate on climate change with a grounded and informed knowledge. On the other hand, I was apprehensive because I was still operating within an essentialised and therefore partial, yet to be deconstructed and reconstructed, common sense view of climate change as an "environmental" phenomenon that needed to be framed within particular contexts of rural Ethiopia. Such contexts inevitably evoked trees, plants, soils, seeds, and I was frightened, feeling unprepared and unable to understand the non-human. I was never particularly adept at 'reading' and interacting with the environment. I grew up in a highly

anthropized context, with a beautiful urban park in front of the house, my horizon and at the same time an integral part of my home, which I could touch from the window; the family farmland as a productive activity that was not particularly creative and exploratory, and the blue sea of Puglia amidst cement and rock caves that escaped human control. But I had no direct knowledge of woods, forests, the environment and 'nature', except through art, literature and philosophy.

However, my first serious encounter[2] with the topic of climate change, or perhaps its revelation in all its social weight, occurred in my first year of high school, the class of 2005-2006, with the geography textbook entitled *Kyoto. La geografia dei problemi*, reprinted by Edizioni il capitello (Turin). On the introductory page, the authors explained the choice of the book's title, after clarifying what the Kyoto Protocol was, a milestone in the process of building the climate change debate:

> *The case of the Kyoto Protocol seemed to us to be perfectly representative of the problems of today's world and an effective way of understanding geography. Firstly, it is an issue that can only be tackled from a global perspective by global institutions: the goodwill of a single state is certainly appreciable, but it is not enough. Secondly, it concerns the relationship between man and the environment, our models of life and consumption, the contradiction between development and underdevelopment: in essence, it requires geography to build on what has already been achieved in describing the world in order to reconstruct its problems. All these considerations have led us to the title of this handbook: "Kyoto. Geography of Problems". It is a highly innovative proposal that we believe can respond to the need for renewal expressed by Italian schools.*

A high school textbook that covers the topics of physical and political geography, presents the issues of demography, migration, intensive and extensive agriculture, exploitation of raw materials, urbanisation, El Niño phenomenon, carbon storage, but above all has a holistic, critical, and integrated approach. Indeed, such approach is essential to understanding climate change, to facing its ontological pervasiveness, through which all our knowledge and actions need to be rethought.

In this regard, I recall being a few weeks into my first fieldwork in Debrewerq, East Gojjam, in March 2021, in a guesthouse still under construction, during one of the fortunately rare episodes of camp sickness, and trying to distract myself from the thought that my less-than-optimal health would not allow me to participate in a community consultation for a spring on site, and relaxing by watching a TV series I had on my hard drive. It is a totemic item among the staff

[2] As in any ethnographic meeting, it is customary to tell how the realisation of the urgency of the climate change crisis came about. For example, Isabelle Stengers talks about the Inuit, and Mara Benadusi recounts an episode from a few years ago when one of her children burst into tears while reading a newspaper on the beach that talked about climate change and the end of the world.

and an essential item in the toolbox of camp life in the Trobriand Islands of the third millennium[3]. The TV series was called *Discovery of witches*[4], and thanks to the fortunate and unaccustomed presence of the evening electricity I soon reached episode number two and a dialogue between a vampire, Mettew, a well-known creature who transcends the time limits of human life, and a witch, Diana, who is still discovering her own magical powers, both threatened with extinction because as "creatures" they are persecuted by humans. At one point they have an interesting exchange of words:

> *Diana: But we won't be extinct tomorrow!*
> *Mettew: We perceive time differently. Humans talking about climate change make this kind of argument: What's the problem? It will take a long time for the polar ice caps to melt. Who cares? I remember when the Thames used to freeze every winter. I used to skate on it. Anyway, you are right. It certainly won't happen tomorrow, but the process has begun. And so, one day, there will be only one species left. Humans. At first, they won't notice anything, because they never noticed us, but in time... little by little they will realise that the magic will have disappeared from this world. They will look around and they will all be the same.*
> *Diana: Suppose I have powers; do you think I should use them?*
> *Mettew: At the very least, you should try not to be afraid of them. Although as far as I know, there are two emotions that make the world go round, one is... desire and the other is... fear.*

The vampire's last sentence summed up my feelings at the beginning of this experience. For on the one side, I perceived the limitations and problems of historicising climate change, fearing that the time frame of my research would be too short to grasp the 'meaning' of climate change, and on the other side, a burning desire to make the responsibilities of my research take shape. In any case, I decided to interpret this banal conversation as a sign of fatalistic approval of my research. Moreover, Mettew's words made a good point in comparing the inexorability and inevitability of climate change, the extinctions and losses it will cause and is already producing between humans and non-humans, the "creatures", a constant crisis of de-Martinian presence and a paroxysmal solastalgia. Solastalgia is a neologism from the Latin *solacium* (comfort) and the Greek root *-algia* (pain). And it refers to an overwhelming sense of loss and helplessness in the face of sudden changes in the world we live in, a form of emotional or existential distress caused by environmental change, more than just eco-anxiety.

In addition to the feelings of confusion related to the climate crisis, at the time of my fieldwork, in Italy and in much of the world we were still in the midst of the dramatic pandemic phase

[3] Previous experiences in Ethiopia with CVM, as a volunteer in civil service and as a social facilitator ,had prepared me for the 'technological' needs of the field, especially in view of the importance of research and its unique opportunity and richness. That is why I had with me the Wi-Fi soap; two mobile phones with as many power banks given the frequent power cuts in the country, especially in rural settings; the tape recorder; the work PC and even a tablet fearing theft or breakdown.

[4] The TV drama is based on a novel is a British fantasy television series based on the *All Souls Trilogy* by Deborah Harkness.

caused by COVID-19, and in Ethiopia, in the capital or in the towns, it was common to hear the expression used to address or apostrophise non-blacks in the streets or in random situations such as “farenji” or “china-china” replaced by “corona corona”, as a disease and condition precisely associated with whites, with foreigners.

Figure 1 - Flayer information sanitation regulations against the covid spread.

Although the pandemic certainly delayed my departure and vaccinations dictated the timing of my first and third trip, it did not prevent me from carrying out my fieldwork, and in some ways also opened up a range of opportunities for access, exchange and networking that would probably not have been possible in the pre-pandemic world, and which have been crucial to my training. I refer to the opportunity to attend the 2020 *International Conference on the Nile and Grand Ethiopian Renaissance Dam: Science, Conflict Resolution and Cooperation*[5]. It was a topic of great relevance in Ethiopia and, moreover, fascinating to follow because of the dynamics and discourses that are built within these contexts of scientific diplomacy. And also, the one organised by the Association for the Study of Literature and Environment (ASLE) entitled *Emergence/Y*. In addition, among the various trainings received remotely, two courses organised by the School of Higher Education International Volunteering for Development (VIS) -an Italian NGO- *Ambiente e cambiamento climatico nella cooperazione internazionale* and *Environment and Climate Change in International Cooperation*. I took these courses in the spring of 2021 and 2022, respectively, while on the field in Ethiopia, in synchronous and asynchronous mode, depending on the availability of internet and electricity. This training was certainly helpful in understanding the mainstream development cooperation approach to climate change in a more structured way.

The Corona Virus syndemic was an intense, relatively long period and a temporal watershed with which to redefine personal, family and work memories. Only a little more than a year after the end of the state of emergency in Italy, on 31 March 2022, the hanging sanitiser dispensers are now empty, the strips of tapes marking the divisions are increasingly worn, and these are

[5] The Conference was organized in August 2020 by FIU (Florida International University) Institute of Environment, Addis Ababa Institute of Technology, Addis Ababa University and the Bahir Dar Institute of Technology, Bahir Dar University.

images that give me a certain *déjà-vu*. In the research areas, already by the time I arrived in February 2021, it was possible to see how the flyers posted by the CVM staff who had been mobilised in the project areas to organise dissemination activities among the population on the hygiene rules to be followed in order to prevent the spread of the virus, had already become relics, increasingly faded and crumpled, testifying to what had happened had been passing and now archived. The flyers on hygiene-health recommendations mingled with others hanging on the walls of the various *woreda* offices, indicating the passage and action of other international agencies or institutions from United Nations International Children's Emergency Fund (UNICEF)'s neonatal care campaigns to United States Agency for International Development (USAID)'s HIV prevention awareness initiatives, such as those on seeds and hybrid animals by the Bill and Melinda Foundations institutes, to German Agency for Development Cooperation (GIZ AID)'s cook stoves.

With a population half the size of Ethiopia's, Italy has had 26.257.548 confirmed cases of COVID-19 with 192.554 deaths reported to the World Health Organization (WHO)[6] from January 2020 to November 2023. In Ethiopia, there have been 501,060 confirmed cases with 7.574 deaths reported to WHO over the same period[7]. However, although the feared carnage did not materialise (Berhan Y. Will 2020)[8], the Corona virus triggered a series of historical events and processes with devastating consequences in the country. Indeed, at the end of March 2020, Ethiopia's National Election Board announced that the federal elections, scheduled for August 2020, had been rescheduled for 2021 due to COVID-19.

More than 70 political parties were registered, including the Tigray People's Liberation Front (TPLF). This was the only party from the old ethnic federalist coalition of the Ethiopian People's Revolutionary Democratic Front (EPRDF), which ruled the country for almost 30 years, that did not join the Prosperity Party (PP). The Prosperity Party is the new coalition government, formed in December 2019 under the aegis of Prime Minister (PM) Dr Abiy Ahmed. He was appointed Prime Minister by Parliament in March 2018 following the resignation of former PM Haile-Marian Dessalegn, due to a wave of protests on the outskirts of the capital, Addis Ababa. However, following the federal government's decision to postpone the elections, the Tigray Regional State Council challenged the federal government by announcing that the planned

[6] Italy: WHO Coronavirus Disease (COVID-19) Dashboard With Vaccination Data | WHO Coronavirus (COVID-19) Dashboard With Vaccination Data

[7] Ethiopia: WHO Coronavirus Disease (COVID-19) Dashboard With Vaccination Data | WHO Coronavirus (COVID-19) Dashboard With Vaccination Data

[8] Berhan Y. "Will Africa be Devastated by Covid-19 as Many Predicted? Perspective and Prospective" in *Ethiop J Health Sci*, 30(3):459-467.

regional elections would take place in September 2020, which they did. In addition, tensions in the country escalated in June 2020 with the murder of Hachalu Hundessa, a prominent Ethiopian singer and rights activist from the country's largest ethnic group, the Oromo, sparking protests and violence that resulted in hundreds of deaths and injuries and thousands of arrests. In an atmosphere of increasing tension, a few minutes after midnight on 4 November 2020, the TPLF launched simultaneous attacks on the barracks of the Northern Command (NC) of the Ethiopian National Defence Forces (ENDF) in Mekelle, Dansha and other locations in Tigray. With the refusal of the TPLF cadres to surrender to the ultimatum given by Abiy in the afternoon of 22 November, and with the assault on Mekelle, capital city of Tigray, by the ENDF forces with the support of the Amhara Region's Special Forces, Amhara militiamen and Eritrean troops, the Ethiopian civil conflict had begun (Labzaé 2022, 239). Since then, there has been a gradual escalation of the conflict and a broadening of the forces on the ground, given the ethnic based tensions that have long historical roots in Ethiopia, such as the alliance between the TPLF and the Oromo Liberation Army (OLA) forces in late 2021.The representatives of the Ethiopian government and a team sent by the TPLF came to a formal agreement on a permanent cessation of hostilities in Pretoria, South Africa in November 2022. This agreement has been described by the Prime Minister as a "monumental breakthrough", but in reality it leaves a trail of instability and tension in different parts of the country, and a staggering toll of atrocities, war crimes and destruction, not only in terms of the number of dead, wounded and displaced civilians, but in terms of the proportions of what has been described as a humanitarian emergency in Tigray amidst the violence and famine, the consequences of which are still very severe and far from being resolved.

This is certainly not the place to recapitulate the dynamics of the conflict, which in essence has never really ceased, as the clashes that began in Amhara between the Federal Government and the Amhara Regional State prove, but it is important to clarify the general material and emotional conditions under which the fieldwork took place. Indeed, if I had not been embedded in a development cooperation project and not only benefited from its logistical support, my research between February 2021 and June 2022 would probably not have taken place at all. In this sense, cooperation, not unlike colonialism, turns out to be for anthropologists the possibility of being there, always within certain limits, limits that have a profound ethical price.

At some point in late November 2021, during my second fieldwork, the situation had become particularly critical. Firstly, I had not been able to return to East Gojjam *woreda* since May

2021, as the disbursement of visas by Immigration and Citizenship had been blocked throughout the summer of 2021, and only resumed regularly in September 2021.

In the months that followed, the declaration of a state of emergency (SOE) on 4 November 2021, one year after the outbreak of the conflict, in accordance with a practice that is absolutely common in the country and under which I had already repeatedly lived from January 2018 to September 2019, had blocked my return to the SNNPR.

I had decided to "fall back" at the CVM project headquarters considering that the Amhara had meanwhile become inaccessible for security reasons, as happens cyclically. Therefore, I was already in Addis Ababa when the stampede of *farenji* began. Some left of their own free will, others were forced to leave by the police because they were employed in NGOs or agencies that had sided against the government forces, expressing harsh condemnation of the violence perpetrated by the federal army even on the civilian population in Tigray.

While I was banally looking for epistemological anchors in the readings of a course on the anthropology of violence and, in particular, in Fabio Dei *Antropologia della violenza* (2005), I was following with bated breath the military development of the event with the members of the Italian NGO staff in Addis Ababa. The pages of the field diary written during this period are intense, built like war bulletins on the basis of the news that arrived and circulated on the web, especially on a YouTube channel and from government sources. The treatment of this issue is beyond the scope of this research, but it was an absolutely brief but important and delicate phase of my life.

As white people, we did not feel that our safety was in danger, even though in the evenings, checkpoints were stepped up even in the city, and patrols of neighbours wrapped in blankets and armed with sticks went out into the streets as soon as it got dark.

I was bewildered by the country's situation in the midst of conflicting geopolitical analyses, where the geography of onomastic inheritance in a lifetime of marriages and migrations, or ethnic Tigrinya membership on an identity card, could be grounds for summary and preventive arrest until proven to have nothing to do with the TPLF. Such dynamics, however "normalised in these latitudes", revealed the weight of the privileges that we, the direct actors or collaborators of the world of international development cooperation, carried with us, to be powerless spectators, guests in a country at war, free with our powerful passports to leave when it was no longer appropriate to stay.

It was shocking to witness the epilogue of "Abiymania", the t-shirts for all ages and the stickers on taxi cars with pictures of PM Abiy who had meanwhile become the international pariah. It

was to see how the focus of the rhetoric and euphoria of change and rebirth of unity that had been ignited in 2018 between the peace with Eritrea in July and the award of the Nobel Peace Prize, had given way to the language of war, to the fiery expression «we will crush them like snakes» often heard and circulated on social media in reference to the Tigrayan forces. Accusations, insinuations, suspicions and verbal clashes had become the norm, even among the NGO staff members themselves, among Ethiopian acquaintances and friends. In all this situation, the Italian embassy and the AICS were at the mercy of uncertain and partial information, unable to be a real point of reference and dependent on the plethora of information disseminated in the field collected by the NGOs themselves. The coordination of compatriots involved online meetings between the local offices, which we always followed with a certain apprehension, waiting to know what our future would be, especially mine, as an unnecessary visitor, according to the AICS classification.

And that is the reason why I had to leave Ethiopia a month before my visa expired, at the end of November 2021. I was dropped off at the airport by one of CVM's staff drivers in Addis Ababa and I was deeply uncomfortable, I was not the '*Vali'* with whom we had shared a daily routine, field trips between the Kaffa, Wolayta, Gofa areas in my previous experiences with CVM, but I was effectively the *farenji* on the run. Concerns about further interrupting my research in what had been a cocktail of disasters went by the wayside, as did the thought of missing an opportunity to analyse what was happening in people's lives, to gather the opinions of those close to me. I actually ran away. They, colleagues, friends, neighbours, the owners of the *sukrs* (shops) in the neighbourhood, the representatives of academia and civil society with whom I had come into contact and with whom I had painstakingly built the network of my research, Ethiopians with different perceptions of the situation at hand, were staying there and there was no telling what might happen. «If it were up to me, you would find all the gates closed on your return», Bygnam replied to the guilt on my face. He had nothing against me, he knew that it had been a painful decision for me and that I had made it mainly so that I would no longer be a problem for the NGO and possibly even the university. But Bygnam was also aware that sooner or later the situation would calm down and each of us would resume our place at "work". It was in this rehearsal of the systemic and ontological failure of the world of development cooperation that I reached the definitive and perhaps even extreme realisation that I no longer wanted to belong to the sonorous, harsh and arrogant English term 'EXPAT', in which I had

never even recognised myself in the past, and that I preferred the intimate *perduzione*[9] of the term 'spatriato' from Mario Desiati's famous book *Spatriati* (2021). A white woman, a *farenji*, out of place, out of time in all the fieldwork of research.

Bygnam had been right. The swarm of fleeing expatriates, reminiscent of the August withdrawal of American and allied military forces from Afghanistan in August of that year, had returned in early 2022[10].

Figure 2 - May 2022: a boy in the rural area of Debrewerq wears a t-shirt that says: Translation from Amharic "Glory to defence" above, "Thank you for your sacrifices" under. General Bacha and General Abebaw.

The feeling of embarrassment at returning now that the situation had calmed down was exacerbated by the fact that, in Amhara in particular, I would have to come to terms with a conflict that was by no means resolved, where the traditional *neftenya*, the soldiers in Amharic, the armed Amhara's people, assumed a new meaning.

Here, involvement in the conflict was not only measured in kilometres from the troops, but also in the thought of one's own youth being involved and the economic consequences. In East Gojjam, as in the whole of Amhara, the possession of firearms is very common in the countryside as well as in the towns. And government officials in Amhara, as elsewhere in Oromia, Somalia, and in the capital Addis Ababa itself, had organised precisely a call to arms, urging civilians to take up arms to repel the ongoing TPLF offensive, to register their weapons, or to hand them over to their neighbours if they were unable to use them themselves.

This appeal puts people's rights and even lives at risk by encouraging the formation of untrained and uncontrolled militias.

Figure 3 - Translation from Amharic "Thank you for your sacrifice" above, "Those who paid sacrifices to keep Ethiopia unite and alive, will always be remembered" under – Bahar dar, May 2022.

[9] Piasere Leonardo, 2002, *L'etnografo imperfetto: esperienza e cognizione in antropologia*, Roma, Laterza.

[10] Vaccinations were another element that dictated the timing of the research. For safety reasons, I had to wait to receive the third dose of the coronavirus vaccine because infection levels in Italy were still very high. In the meantime, the vaccination took place in February 2022, which allowed me to resume the fieldwork at the beginning of March.

These groups have already committed war crimes in this conflict, summary killings, rape and other violence against people on the basis of their ethnicity.

Even in the SNNPR, where the warring factions were far apart, there was a tangible sense of the instability of a country sucked into a state of emergency, absorbing political priorities and economic resources, with rampant inflation. I was there, and had to be there, to carry out a research project that could not be renegotiated due to its nature as applied research for a development cooperation intervention, the constraints related to the topic, and the nature of the Eureka grant funded by the Marche Region. Basically, in a sense, I could not replicate in a small way what happened in the case of Anthony Oliver Smith (2013). The anthropologist, who was in Peru doing research for his doctoral thesis, had found himself changing the subject of his work and, on the recommendation of his supervisor, turning to the subject of disasters, which was still a virtually unexplored topic in the 1970s/1980s, following the very violent earthquake that had struck the very areas he was researching. Moreover, there was another concern that echoed in my mind, well summed up by the words of Susan Crate and Mark Nuttall in the introduction to the rich volume they edited *Anthropology and climate change: from encounters to actions* (2009): «For some people, climate change may not be the most immediately pressing issue facing them. Social, cultural, and economic change often has more immediate effects» (Crate and Nuttall 2009, 16).

Moreover, shortly before the start of my third camp, on 24 February 2022, another conflict had broken out, the Russian-Ukrainian war, which, like the rest of the world, was having a very serious impact on Ethiopia. I I was in Laska, in Basketo woreda, when news spread on social media and in major national and international newspapers about the queues of young and adult men outside the Russian embassy in Addis Ababa. They were offering to go to the Ukrainian front as soldiers because of their historical ties to Russia and, according to rumours, for a sum of money. But the impact of the Russian-Ukrainian conflict went far beyond that. In fact, Ethiopia, like many other African countries, is heavily dependent on the export of fertiliser from Russia and the import of Ukrainian grain for humanitarian aid, such as that administered by the World Food Programme (WFP), and both production chains had been completely disrupted by the conflict, with serious consequences for the lives of the farmers I met during my research. The situation was so serious that when I went with the translator to Bahar Dar to interview some representatives of the Amhara Agricultural Bureau, the host of the guesthouse where we were staying, whom we had asked for directions, wondered if we had come to the region to talk about

the fertiliser problem. Her parents had a farm in another part of the Amhara, in West Gojjam, and they were desperate for lack of fertiliser.

Therefore, in the light of the multiple crises that occurred during the period of ethnographic research, briefly reported here and presented as limits to my research, what weight could the ethical dilemma of conducting applied versus pure anthropological research and of being a servant of two masters (Biscaldi 2016) in an *anthropology in development* (Colajanni 1994) [11]? As already pointed out, the fact that I was not called upon to conduct monitoring and evaluation, although in the Potterian[12] experience of being chosen by the research, rather than in choosing it, I had a wide spectrum of possibilities for action in constructing the research field.

Additionally, I had begun to learn the "fundamentals" of cooperation, an unwritten dynamic in which I had worked in previous years through careful and critical participant observation, a fertile and unique experience for a recent anthropology graduate, but one that already contained the choice of an applied and public dimension to the research.

Furthermore, it was about working within the complex and diverse development world, not for the neoliberal institutions of the World Bank (WB) and Monetary Fund International (MFI), but for NGOs that propose another kind of model of action and intervention in development contexts (Declich 2012; Zanotelli and Grillini 2008). After all, James Ferguson and Akhil Gupta, two major critics of the development world, identify the work of NGOs as the possibility of reformed development, as revealed in the interview in Spring 2011 with the journalist Jennifer Curtis[13].

In the end, my previous experience in the same small NGO, CVM, and my knowledge of its vision and mission to act in favour of the poorest, allowed me to focus, without ambiguity or tension, on the importance of doing good, careful and well-argued work that would allow me to support and validate what the field was proposing. The first step was to rid the field of the porno-ecology (Guattari and La Cecla 2019)[14] that crowds the public debate on climate change

[11] Colajanni (1994) highlighted how anthropology is situated in the world of development by defining itself in three distinct fields: we speak of anthropology of development, when anthropologists study the planning processes of economic and socio-cultural change; we have anthropology for development, when we are concerned with translating and transmitting anthropological knowledge to practitioners working in development processes; and finally, anthropology in development, is the applied branch in which anthropologists carry out research and offer their advice in the course of change activities planned and implemented by others).

[12] The reference is to chapter 5 of the book *Harry Potter and the Philosopher's Stone*, to the meeting between Mr Ollivander and the protagonist, in which the former enunciates the famous sentence "The wand chooses the wizard, Mr Potter" and explains that it is the wand that chooses the wizard, and not the other way around.

[13] https://polarjournal.org/2012/03/10/interview-with-james-ferguson-and-akhil-gupta/

[14] Guattari, Alex and La Cecla, Franco *Le tre ecologie. Interventi di Jean Baudrillard*, *Paolo Fabbri, and Wolfgang Sachs*, Edizione Sonda (2019).

and legitimises inappropriate interventions on the basis of the prevailing emergency, and to try to grasp the complexity of the issue beyond the dichotomy between mitigation and adaptation interventions. The starting point for thinking about how to combine climate change action in CVM's operative contexts was to track planned and ongoing activities[15].

The starting point for thinking about how to combine climate change action in CVM's work contexts was to follow up on planned and ongoing activities. Unfortunately, it was not really possible for me to follow up and monitor some of the key renewable energy activities, such as the construction of the biogas plants, for which I had done a preliminary literature review[16], as they had already been completed by the time I arrived in East Gojjam. Moreover, it had not even been possible for me to travel to the *kebele* where these interventions had been implemented, due to a tight project schedule that had already been delayed by repeated crises, to avoid wasting fuel, which was often in short supply, and because these places were inaccessible to me and the translator by public transport or motorbike.

Instead, the introduction and distribution to some households of solar cookers as a new sustainable technology took place after my fieldwork had ended, although I did witness some interesting tests of their construction by Sawla University. Similarly, I narrowly missed the exchange of experiences between the two CVM teams from the Amhara and SNNPR. It would have been an opportunity to take stock together of some of the issues raised during the research. Therefore, I engaged the research within the space bounded by social actors' perceptions of the change occuring, the topography of the places, the climate policies, national and regional plans and finally the projects already active in the *woreda* and particularly in the selected *kebele* by the government, international and local NGOs.

[15] At the beginning, I focused on forests because the NGO was interested in exploring the possibilities of agroforestry projects among the rural population. However, I found that the project areas did not lend themselves to this type of intervention due to the lack of the primary requirement, i.e. the centrality of the forest in the context of the farms.

[16] On topics such as the implementation of biogas plants, waste management projects I am carrying out a dialogue with the *Innovation and Technology* group within the Italian University Coordination for Development Cooperation (CUCS) involving Early Career Scholars (ECS), trying to overcome through multidisciplinary action the paradigm of technological appropriateness.

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The thesis is dedicated to our dear auntie Tonietta, who died in July 2023, during the "summer of ice and fire" from heat shock, because climate change kills.

Introduction. A matter of words

My research builds on the need for the NGO CVM to rethink its long-standing WASH interventions in Ethiopia from a climate perspective, given that aid actors are an important element of interlinked development and environmental challenges (Arndt and Tarp 2017). Indeed, in Global South contexts. «Even before the threat of climate change weighed on the minds of policy-makers, donors funded energy efficiency, renewable power generation, forest fire control, and other similar types of projects that are now classified as climate aid» (Hicks et al. 2008, 48-49).

And CVM, for its part, considered the massive replanting and reforestation effort in the country that Prime Minister Abiy Ahmed wants to launch in 2019, Green Legacy, as a national policy that is particularly sensitive to climate change issue.

In any case, there are already tools available to development practitioners that claim to integrate the exacerbation of existing problems due to climate change into the planning of major and routine development assistance activities, or at least take it into account.

For instance, there is "CARE's Climate Vulnerability and Capacity Analysis (CVCA) Handbook" (2019), already in its second edition; "Addressing the Climate Change and Poverty Nexus. A coordinated approach in the context of the 2030 Agenda and the Paris Agreement" carried out by the FAO (2019); "Integrating the environment and climate change into EU international cooperation and development" made by Directorate-General for International Cooperation and Development European Commission (2016); "Mainstreaming Environment and Climate for Poverty Reduction and Sustainable Development. A Handbook to Strengthen Planning and Budgeting Processes" (2015); Guía de la AECID (Agencia Española de Cooperación Internacional para el Desarrollo) para la Transversalización del Medio ambiente y el Cambio Climático; WASH Climate Resilient Development Strategic Framework (2014) by Unicef e Global Water Partenrship (GWP). These are the most common references, the ones most commonly mentioned in projects as guidelines or prerequisite knowledge to "apply" to certain positions in the world of cooperation. In Ethiopia, research conducted by the nonprofit organization, WaterAid-Ethiopia, has resulted in the formulation of "WASH Climate Resilience Policy Consultant: activities undertaken in Ethiopia to develop climate resilient water sanitation and hygiene (WASH) initiatives from 2013-2018". It was part of the United Kingdom's

Department for International Development (DFID)-funded project on "Building adaptation to climate change in health in least developed countries (LDCs) through resilient WASH".

The project aimed to help countries respond to changes in health risks as a result of climate variability and change through improved and *more resilient* health and WASH *adaptation practices*. Vulnerability, resilience and adaptation have been used to describe the options available to people and ecosystems to respond to (and adapt to) natural events long before we started talking about climate change. Their meanings are close enough that they are often competing definitions, although they have different histories and processes, but in the context of climate change they are subject to competing definitions (Klepp and Chavez-Rodriguez 2018, 15).

Reading this sentence, as well as the quick round-up of titles reproduced above, it is clear that there is a mantle of suffocating rhetoric, sentences constructed from concept words that would like to point to self-evident solutions. In fact, these remain hollow and are extremely common in the language of development, do not allow for a clear understanding of what a 'new' activity that takes account of climate change should consist of and, above all, how it differs from the past.

Furthermore, with the now institutionalised intertwining of the concepts of vulnerability, resilience and adaptation, anthropology, with the work of historicising the concepts by Oliver Smith (2013; 2017) and the American Anthropology Association's *Changing Atmosphere* (2014), has amply demonstrated that while their use has allowed the beginning of the exploration of climate change as a social phenomenon, it has also crushed and encrusted the discourse around this rhetoric once it has entered mainstream policy language.

Instead, CV's decision to commission and for me to conduct an "ethnography with a mission" on climate change required the application of a Foucauldian critique that does not seek to resolve, reconcile or smooth over difficulties, but rather to disrupt and undermine a sense of certainty. This critique was fuelled by contact with the humble everyday experiences, opinions and concerns of people (Boni 2012, 216) in some contexts of Ethiopia's rural *kebele*[17].

Through exhausting attempts at mapping, routes and detours, three elements and the relationships between them remained inescapable: farmers, state and climate change, themes

[17] Rural Kebele is defined as "any land outside a municipal corporation or township designated as such by the relevant law", a definition taken from the FDRE's Proclamation No. 456/2005 on Rural Land Administration and Land Use, previously revised by Proclamation No. 252/2017, also retained in Draft Law 2020 still under parliamentary discussion.

that in fact give the entire work its title. Each of these three words refers to a distinct and complex tradition of study. Before explaining how their interaction has shaped the content of my research, I would like to frame them separately, i.e. give a definition, but as the anthropologist Eric Wolf (1966) points out, they are tools of thought, not eternal truths.

1. *The farmers*

The title contains a reference and tribute to Dessalegn Rahmato's important book *The peasant and the state. Studies in Agrarian Change in Ethiopia 1950s-2000s* (2009), in which the sociologist collects some of his studies written in recent years and offered a precious analysis to the debate on agrarian change in the country. Reference is also made to a lesser known, but equally valuable publication by Dessalegn Rahamato, to the paragraph "The Peasant, the State, and the Environment" in his 2001 book *Environmental change and state policy in Ethiopia: Lessons from past experience*. Dessalegn Rahamato, as well as Eva Poluha (2002), René Lefort (2010; 2012), Sabine Planel (2014), believes that even though the configuration of the Ethiopian state the farmers condition has never changed. The state has moved from Imperial with a feudalistic economy, to a Marxist Military regime, and then becoming an Ethnic-based Federal system that advocates decentralisation and multi-ethnic 'market economy', but it has never relinquished, if anything it has increased its control, strengthened its hegemony over the farmers. The latter, although liberated from some of the forces of domination, have remained subordinate to it. «The peasants, although only passive opponents to the system, still strongly resist socialization of the means of production, and the new system has made very little difference for the working classes, as they have merely exchanged one type of oppressive regime for another» (Kebbede 1987,17).

The transition the author is referring to is from the imperial to the socialist phase, but not much has changed in the transition from a socialist to a federal political system.

In this dissertation, the term 'peasant' has been replaced by 'farmers' and used in the plural, not because it has always been controversial or because of its nuances as a pejorative term for small farmers (Robbins 2012,59), as McCann (1995), for example, does. The historian also recognises and historically analyses how, throughout the twentieth century, the growing power of the central state and urban elites made failed decisions that shaped the agricultural field through the state apparatus they controlled, pointing out that his choice to refer to rural producers - men and women - as farmers rather than peasants represents his preference to privilege their role as stewards of the environment over their relationship with the state (McCann 1995, 7).

The concept of the state is rendered by the word *'mengist'*, «the Amharic word that indifferently designated power as such, the ruling party, the state, and all their agents or members, including of course local authorities» (Lefort 2010, 439). Declined as 'it', it simultaneously denotes the authorities as such and the various bodies through which they exercise their power - the government, the ruling party, the *kebele* cabinet, the state apparatus, and as 'they', all its members and officials, and always contrasted with us, *'nja geberewoch*', the farmers' (Poluha 2002, 131). Pronouns mark relationships, grammar as a reflection of thought; of the recognition of a mutual otherness, a different us given by the clothes and objects owned, the place of residence, the location of one's plot of land, which mark distance in proximity and communicate unequal power relations.

However, while acknowledging the role of 'peasants' as producers as agents of history (Robbins 2012, 59), I decided to use 'farmers' out of respect for the stylistic choice, the historical argument, that my translators were making, while not delving into the fascinating topic of peasantry in the twenty-first century, particularly in sub-Saharan Africa.

They used the term 'farmers' in the English transcriptions of the interviews and group discussions because on the contrary, 'peasant' evoked a survival of the imperial past and implied the concept of slavery or a socialist perspective. Grammatically, '*gebar*' can be translated as peasant or farmer, but literally it means one who is subjected to hard labour, first by the lord and then by the *mengist*. But formally, from this point of view, '*gebar*' was no longer a '*gebar*' (Lefort 2010, 448).

Moreover, the adoption of the term 'farmer' was driven by the fact that in the English version of the aforementioned Revised Rural Land Administration and Use Proclamation of 2017, as well as in the Draft Law of 2020, the term 'farmer' replaced 'peasant' and 'peasant-farmer' to refer «any person, whose regular or permanent livelihood is agricultural work, based on this proclamation, including semi-pastoralist»[18]. This is a change that has already taken place in the respective regulation No. 159/2018 of the Amhara region. In the SNNPR, on the other hand, the rural land administration and use regulation No. 66/2017 is the result of the 2005 proclamation, pending the nation proclamation to produce the regional regulation.

In the end, the reason for preferring the concept of 'farmers' lies in the explanation offered by the anthropologist Eric Wolf (1966). He looks at peasants as only agricultural producers, he distinguishes peasants from tenants, as, unlike the tenant[19], the peasant has effective control on

[18] The present research focused exclusively on sedentary farming.

[19] Tenancy was abolished in Ethiopia by Article 4 of Proclamation No. 31/75 of the Derg.

land, and Wolf believes the peasant aims at subsistence, not at reinvestment. The peasant sells cash crops only to get money to buy goods and services that he/she does not produce or have. On the contrary, a farmer looks at agriculture as an enterprise, does not experience his/her relationship with the land as isolated from the complexity of the surrounding world, because he/she produces crops "with an eye to the market". Therefore, if there are fluctuations in the market, the farmer's life is affected. A farmer depends on the market for various production factors, such as seeds, fertilisers, credit, availability of labour during the season, and any market variability has an impact on farmers.

It is precisely this dimension of dependence on the global market and policies that is at the core of my analysis, as it emerged as crucial from the fieldwork. After all, as far back as 1974, John M. Cohen wrote in his work that was already clear in its title *Ethiopia: A Survey on the Existence of a Feudal Peasantry*:

> In recent years, many areas of rural Ethiopia characterised by a feudal peasant society have been penetrated by development ministries. Market opportunities, cash economies and the productive benefits of the green revolution have appeared. After examining these and other alterations in traditional patterns, some analysts are beginning to argue that there is a growing trend in Ethiopia to move away from feudalism towards rudimentary capitalism and its class characteristics». (John M. Cohen 1974, 667).

Talking about farmers in Ethiopia generally means referring to 84% of the country's population, which in total is estimated to have reached 123,379,924 in 2022, according to WB data[20]. This population practises small-scale agriculture, as defined in official documents to distinguish it from commercial agriculture, which is mainly subsistence due to its low productivity, fed by rainfall and based mainly on cereal food crops (maize, wheat and teff being the main ones) and cash crops (such as eucalyptus, coffee) for the local market or the barter system. As in other low-income countries, the agricultural sector remains the backbone of the economy. Agriculture contributes $27.5 billion or 34.1% of GDP and is the main source of raw materials and capital for investment and the market, but more importantly, it employs about 79% of the population and accounts for 79% of foreign earnings (Getachew Diriba 2020, 2).

Hence, it is the general description, the introductory obligatory portrayal that one always finds in the literature and reporting on the subject. «This statement has become almost a cliché for development professionals in Ethiopia. Those who went to school 50 years ago read it and then wrote about it. So did the current generation. [...] As things stand, our children and

[20] Population, total - Ethiopia | Data (worldbank.org)

grandchildren will repeat this refrain for generations to come. Yet the sector has failed to realise its potential and contribute significantly to economic development. How can we change this situation?» (Teshome 2006, 1). With a hint of frustration and a justifiably polemical tone, the researcher wonders how to change the narrative and thus the state of things.

Despite repeated and costly interventions at the rural level, the population has yet to benefit from this high economic growth, with real GDP growth averaging more than 9 per cent per year from 2010 to 2019 (Eriksen 2016, 8), thanks to the expansion of services and major infrastructure such as railways, dams and industrial parks throughout the country and especially in urban areas and the capital Addis Ababa. However, farmers and their living conditions have always been at the centre of the rhetoric and policies of the country's governments.

"If you want to understand a country, look at its money", a WB official pointed out to me in an informal interview in February 2018[21], picking up the worn 10, 50 and da 100 Ethiopian Birr banknotes[22]. The banknotes depicted scenes, symbols of rural life.

There were only two exceptions: the back of the 50 Etb note depicting Gondar's Enqulal Gemb fortress, and the 100 Etb note depicting a man in a laboratory. However, this could somehow be attributed to agriculture, though not exclusively, as the country's expanding biotechnology sector is linked to farming production.

The dominant narrative, when it does not deal with historical analyses of Ethiopian production systems, describes a traditional agriculture, despite government investments since the 1950s aimed at modernisation, i.e. building an economy through agricultural surplus that was supposed to drive industrialisation. Agriculture in Ethiopia is practically considered to be "stuck" in the Neolithic era, an open-air museum (Ayana et al. 2013, 188), according to a definition often used by scholars, as we have seen above, and representatives of institutions or experts at

Figure 4 - Hall of the Overseas Agronomic Institute Museum in the 1980s with an Abyssinian plow in the foreground (photograph by M. Cavallini, IAO Photo Library).

[21] This was an encounter that took place before the PhD research period and during my Civil Service experience in Ethiopia.

[22] In September 2020, new banknotes were introduced and along with them new images representing a greater variety of the country's historical treasures, natural attractions and camel herders. The world of agriculture is showed on the obverse as a tractor and on the reverse as the factory of the 50-euro banknote. The operation «aimed at gathering currency circulating informally and outside of financial institutions, curbing corruption and contraband and supporting financial institutions confront currency shortages» in Ethiopia introduces new currency notes – Welcome to Fana Broadcasting Corporate S.C (fanabc.com).

various level[23] interviewed during my research. Indeed, in the book *L'istituto Agronomico per l'Oltremare. La sua storia* published in 2004 on the occasion of the centenary of its foundation, in the twelfth chapter dedicated to the Museum edited by Daniela Tartaglia, there is a photo (Tartaglia 2004, 329), shown here Figure 4. It shows a room of the museum in the 1980s with an Abyssinian plough in the foreground, which, as can be seen in the photo taken during the research in Amhara, around Doma *kebele* in Enibse *woreda* (Figure 5) is basically the one currently in use by farmers for animal-drawn ploughing activities. The introduction of the plough, *maresha* in Amharic, is reconstructed in the already mentioned very important book, *People of the plow* (1995).

Figure 5 - Farmer with his plow around Doma kebele in Enibse woreda

In the work, historian McCann highlights Ethiopia's peculiarity and technological exceptionality in the African agricultural landscape and the fundamental role of the plow in the country's centuries-old agricultural culture[24].

This technological continuity in agricultural practice, combined with the fact that it is a production system based on human and animal hard labour (Boni 2015), is seen as an expression of a "static" farming, still highly traditional and centred on basic agricultural practices[25].

However, many aspects of the sector are no longer traditional. While mechanisation introduced in the country in the 1960s covers 1 per cent of the land cultivated by smallholders, the use of chemical fertilisers has increased fourfold since the early 1990s', and the Ethiopia extensive extension programme is disseminating modern 'green' technologies, those of the green revolution (Rohne Till 2022, 48). As Latour puts it «[t]he adjective 'modern' designates a new

[23] The 1995 Constitution of Ethiopia was promulgated by the Ethiopian People's Revolutionary Democratic Front (EPRDF), which enshrined a form of ethnically based federalism, consisting of regional states defined by ethno-language and autonomous cities. Currently, following successive reforms, the regions are divided into zones, these into *woreda* and finally into *kebele*.

[24] In fact, it could be argued that the material continuity is only apparent, and that the plow presents an important novelty since it is predominantly constructed from eucalyptus wood *(barzaf* in Amharic), a plant native to Australia introduced to the country by Emperor Menelik at the end of the 19th century, in light of the lack of timber around needed to build the capital Addis Ababa, where previously it was made from *weyra* (olea Africana).

[25] However, there is no shortage of opposing narratives that see in the same 'traditional', «more or less static» characteristics of Ethiopian agriculture as evidence of its modernity. In this regard, and by way of example, the words of Temesgen Gebeyehu Baye according to which «Ethiopian farmers have for centuries practised certain modern farming methods such as the use of the plough, leaving land fallow, crop rotation, terracing and irrigation». (Baye 2017, 421).

regime, an acceleration, a rupture, a revolution in time. When the word ‘modern’, ‘modernization’, or ‘modernity’ appears, we are defining, by contrast, an archaic and stable past» (Latour 1993, 10).

Therefore, “tradition” may be inaccurate and even misleading, considering that the measures and policies that have intervened in agricultural practices have, in the long run, interrupted a very ancient system of production based on sharecropping and fallow land, especially in the highlands, which had managed, albeit with difficulty, to cope with ecological and demographic pressures (McCann 1995; Dessalegn Rahamato 2009).

Contrary to the dominant narrative, which has now been embraced by farmers themselves, it was not the mere increase in population, according to a neo-Malthusian reading, that determined the unsustainability of agricultural practices and upset the balance of agricultural production over the millennia. This has already been demonstrated in the work of the economist Ester Boserup (1965), whose analysis emphasises that demographic pressure is the driving force behind continuous social and technological innovation and not in itself a cause of poverty or collapse.

Indeed, farmers are often at the centre of blaming rhetoric, to the point of a “peasant issue” (Death 2016). They are accused of causing so-called degradation through global environmental management. This refers to the loss of renewable natural resources the removal of the vegetation cover, water depletion, and loss of wildlife, biodiversity and involves soil erosion (Rahmato 2009, 29), a soil lauded for its natural fertility, gifted, but depleted by over-exploitation. It is the farmers who are held responsible for the pressure on the land and its mismanagement, for taking it away from the forests and for the progressive reduction of arable land.

Nevertheless, it must be pointed out that the Ethiopian People’s Revolutionary Democratic Front (EPRDF), the ruling coalition of the Federal Democratic Republic of Ethiopia (FDRE) from 1991 to 2019, did not introduce any changes to the land system of the Military Administrative Council (PMAC), also known as the DERG military regime, which took power in 1974 and ended the feudal system. The socialist-military-inspired regime gave shape to the slogan "land to the tillers" and introduced a radical reform of land policy, declaring all rural land to be the collective property of the Ethiopian people and redistributing it to farmers. Indeed, the 1995 Constitution confirmed this provision of Proclamation No 31/75 in Article 40 (3): «The right of ownership of rural and urban land, as well as of all natural resources, belongs exclusively to the State and the people of Ethiopia. Land is the common property of the Nations,

Nationalities and Peoples of Ethiopia and shall not be subject to sale or other means of exchange».

But beyond the non-ownership, but the holding of land, it represents the primary condition and material and symbolic configuration of being a farmer. But «(l)and in Sub Saharan Africa is a multidimensional mix of relations with power, identity, interests, custom ad value, "(l)and issues are often not about land only" (Lund and Boone 2013,1)» (Poli 2018, 26).

Therefore, the consequences of the progressive decrease of available land as a result of the mechanisms of subdivision and inheritance are serious. This has increased the number of landless peasants, while at the same time depriving them of the alternative of significant off-farm job opportunities.

Indeed, in Ethiopia, as in other African countries (Chinigò 2016), the process of *deagrarianisation* (Bryceson 1996), and *depesantisation* (Bryceson et al. 2000) outlined for the continent, and that the governments themselves promoted through the structural transformation of the economy towards industry in order to diversify it in the long term, has not taken place.

Ethiopian governments have acted in this direction since the five-year plans of the imperial regime (Imperial Restoration 1945-1974), which officially prescribed agricultural modernisation, until the introduction of Agricultural Demand-led Industrialisation (ADLI)[26] in the 1990s. The underlying concept was reaffirmed, albeit with differences, especially in the modalities and roles of the state and the private sector, in the successive five-year development plans conceived by the EPRDF and, more recently, the Prosperity Party.

However, the government, in the person of the current Prime Minister, Dr Abiy, has recently admitted that there have been 'limitations in terms of structural transformation'. In effect, there had been no structural change at all and that Ethiopian agriculture is «dying as it is growing» (Diriba 2020, 34)[27]. Subsequent agricultural policies have failed to the extent that they have not

[26] ADLI is a macro-level development policy that aims to create an agrarian middle class and a national mass market through a package of unimodal agricultural interventions involving land tenure reform, the promotion of small rural industries, and the improvement of infrastructure, including transport and commodity prices.

[27] On the contrary, there are those like the economist Rohne Till (2022, 50) who believe it has happened: «The economic and agricultural growth in the last 20 years has been accompanied by structural change in production but not in employment. The share of agricultural value added to total value added decreased to 41% in 2011 and 34% in 2019, while employment remain high at 73% in 2011 and 66% in 2019». There is always a battle over measurements, in the choice and reading of data in the return of one's analysis. In any case, judging not only from the numerical and statistical data, but also from those who have been working in the field of development cooperation for decades, and as you will see from the words of the farmers, there is no reference to a great improvement in their conditions beyond, if anything a worsening. Besides, as we have seen, Ethiopian agriculture is not only about smallholder agriculture despite the numbers involved, but also about commercial agriculture.

only failed to kick-start production and transform the country, but have even failed to provide a livelihood for the population.

Despite two decades of double-digit GDP growth at 10 per cent and a reduction in income poverty from 45 per cent in 1995 to 23 per cent in 2018, the number of poor and food-insecure people has remained very high, with an estimated 25 million people below the survival line. In particular, the number of people benefiting from safety net programmes, one of the largest in Africa, has steadily increased (Diriba 2020). Not only has the total number of people dependent on social assistance increased, but there has also been a steady expansion of the geographical coverage, which now reaches almost all regional states.

Aid flows have increased, as have the number of landless people, the ecological vulnerability of those who do own land, from smallholders to micro-holders, and the decline in land productivity as measured by land productivity and crop yield (Rahmato 2018). These are the parameters that Dessalegn Rahamato uses to explain his view not simply or only of agricultural decline, but specifically of the involution of Ethiopian farming, echoing the anthropologist Clifford Geertz's work, A*gricultural involution: The processes of ecological change in Indonesia*[28] (1959). He uses it to describe the complex process of change and decline in Javanese rice culture after independence.

It is beyond the scope of this paper to provide a detailed and comprehensive analysis of the reasons why we have gone from Herodotus' hospitable Ethiopia (Parisi 2012, 21) to a country of chronic food insecurity, which are too often labelled and thus dismissed as systemic obstacles to agricultural and rural transformation. It would mean not only looking at Ethiopia's internal history, but also properly situating the country and its agrarian history within a global economic, political and ecological system.

However, the description of such a framework aims to explain that when I refer to the material conditions of the farmers, I am talking about a system that has not been neglected by policy, and indeed has been historically constructed, with repeated interventions by the state and its development partners. For as intimate as the relationship between farmers and the land is, a matter of life and death, it simply cannot exist outside the state. Such a relationship is always mediated by the state through land laws, land policies and the implementation at the local level

[28] Gilman Nils, "Involution and Modernization: The Case of Clifford Geertz" in Cohen, Jeffrey H. and Norbert Dannhaeuser. "Economic development: an anthropological approach." Rowman Altamira Press (2002). Gordon, Alec. The poverty of involution: A critique of Geertz' pseudo-history, Journal of Contemporary Asia, 22:4, (1992): 490-513. McCullough, Colin. "Review of "agricultural involution: the processes of ecological change in Indonesia" by Clifford Geertz." (2019): 1-5.

of the agricultural interventions envisaged in the economic development plans, which regulate not only access to land but also its use through the supply and use of farming inputs. Indeed, on the one hand, these plans and rural policies are seen as a ticket to the world of the farmer (Wassie 2020, 22), the means through which local society meets the state.

On the other hand, they are instruments of the construction of the state itself at the local level, «giving state power its concrete and more local incarnations and giving content to local political fields» (Labzaé and Planel 2021, 82).

As such, farmers are not the survivors of traditional agriculture, but the targets of ineffective national policies, unable to break out of the food insecurity trap on their own and "develop" within an unequal global system. Even earlier, farmers were defined as such through a construction of discourses and practices carried out over the past decades by the disciplinary rural development of the state in Ethiopia, which from this point of view is one of the most exemplary cases on the African continent (Death 2016, 120). And similarly, for the Ethiopian state itself, this relational control is as fundamental as the one over the environment and its resources to establish itself as a green state.

2. *The state*

The analysis of the state has been one of the topics of anthropology since its origins (Licausi 2012), but this is far from being an "anachronistic dinosaur" (Death 2016, 28). Especially in the African context, it has been considered dead on several occasions. Anna Maria Gentili highlights how the nation-state in Africa, seen through the prism of modernisation and dependency theories, has been seen as a weak instrument of domination, scarcely hegemonic, whoever its controllers (modernising elites, radicals, populists, socialists, Marxists, compradors, bureaucrats, patrimonialists, absolutist monarchies and their kleptocracies); defined as a lame, patrimonial, bureaucratic, authoritarian and even vampire-like leviathan, yet incapable of control; an interventionist state, but with no real capacity to intervene due to its non-existent social base, has nevertheless persisted to the present day (Gentili 1999, 394-395).

In Ethiopia, the process of state-building and development has been the subject of various theories and approaches that have become "classics", such as centre-periphery analysis, culturalist analysis, and exceptionalism, but all have shown heuristic limitations (Chinigò 2022). Among many others, Carl Death's analysis of the Ethiopian state and other African countries as green states is particularly noteworthy. It does not generalise; it is based on multiple empirical studies that account for very different cases and it is safe from the risks of solipsism

and exceptionalism and at the same time does not intend to reconstruct the green state in Africa as an ideal type. But the focus of the book and its reconstructions in time and space is how environmental discourses and practices are mobilised and with what sorts of political consequences. First, the concept of 'green' is linked to the dualism between (Western) society and nature, and to the critique of existing society and conventional values- what greens are against- together with beliefs about what future society should be like if it is to be sustainable and environmentally benign-what greens are for (LeMenager and Shewry 2016).

Death's analysis is useful because it clears the field of still active prejudices and stereotypes that see the African state as ontologically natural, whereas in Africa, from time immemorial, not only in the third millennium, nature has also been socially and politically constructed, not unlike other places on the planet, if not oxymoronic. In fact, analyses of 'green' states have mostly focused on states such as Japan, Germany especially for their focus on renewables, thus with a performance-based idea that took shape with the 1987 Brundtland report*, Our common future*. This argued that green sensibility was a status achieved through emancipation from poverty, as a product of 'post-industrial' sensibility. «This mainstream argument goes on to contend that the appreciation of environmental values increases with wealth, as does the commitment to repairing its damage» (Rahmato 2001, 106).

This is the basic view of the green state as a stage of development from welfare to eco-state contained in James Meadowcroft's view of *Greening the state* (2006), then that contained in John Barry and Robyn Eckersly's, *The State and the Global Ecological Crisis* (2005), who believe that a neo-liberal, democratic, rights-based state is necessary for the construction of an ecological and sustainable system.

Ethiopia, for instance, is about as far from a neoliberal state as you can get. Neoliberalism was "the devil" for the EPRDF and its his developmental state[29] (Cellai 2022), and although it is not yet clear what form Abiy's economy will take, he plans to liberalise various sectors of the economy and involve the private sector more (Desta 2019). Carl Death does not at all insist on Ethiopia's uniqueness in relation to the African context, on the fact that it does not have a long history of colonial dependence, or that it suffers from too much government and not too little, unlike the rest of Africa (Cellai 2022, 169), precisely regarding the developmentalist state model.

[29] Inspired by the strong East Asian states, the governments of the EPRDF have adopted a synthesis between the planned economy system inherited from Derg regime and the free-market model, while opposing the dictates of the International Monetary Fund to 'backtrack the state', rather it has always maintained strong control over the economy.

It is precisely from these considerations that Death's analysis seeks to fill what he calls the African gap, situating his project at the intersection of global environmental governance, African political economy and state theory. The scholar uses Foucault's analytical concept of governmentality as it has been used in development studies. Such studies have often used Foucauldian analysis not only as a process of critiquing and unravelling power relations, oppressive internal interventions, projects, etc. that claim to be merely technical or benevolent, but also as a set of institutions, procedures, routines, techniques and ways of thinking around which the exercise of power is articulated.

Therefore, Death defines the state as a social form that «should be studied as an assemblage of practices, technologies and discourses» (Death 2016, 56). According to Death, the creation of such states is not of recent origin, but rather the effect of longstanding, deep-rooted efforts to govern environmental resources. This includes efforts by colonial and post-colonial states to manage natural resources more profitably and efficiently.

As Raymond Bryant and Sinéad Bailey point out: «The historical development of states has been closely intertwined with the management of the local environments on which those states, and the people they govern, have been dependent» (Bryant and Bailey 1997, 50). In relation to this definition, it is as if Death replaces the generic 'local environments' and 'people' with the more administrative concept of 'territory' (Latour and Weibel 2020) and the state-making category (Haraway 2015, 164) of 'population'. In addition, to explore the construction of the green state, Death resorts to two other frames of analysis, that of the green economy and that of international relations, making a total of four.

Death is careful not to make the green state a catch-all solution: all states are green, and all states in the world use environmental discourses and practices to manage territories, populations, economies and international relations. But in the African context, it is the centrality of the environment, the intimacy of the direct dependence of a large part of the population on its resources, that makes "green" not an achievement or a state of development, but an essential component for the survival of the state itself.

In fact, in an attempt to enter into and exploit the heuristic potential of this concept, the specific characteristics of the Ethiopian green state can be reconstructed first of all in relation to population. «Population is recognised as a challenge to the country's development efforts» (Teshome 2006, 13). And this 'problematic' view of its rural component is rooted in a powerful, long-standing mainstream illustration of irrational agriculture, according to which farmers are tradition-bound, inefficient and unable to improve their lot without strong guidance from above.

This is a very common view against which authors such as Hone Mandefro and Logan Cochrane (2022) argue that the literature on Ethiopia has always analysed the government as a powerful, top-down regime that largely dictates public life, laws, policies and services, resorting to heavy-handed practices and projecting itself as the "protector" of the "uneducated" rural population. According to the authors, the use of such a perspective emphasises Ethiopians view of *mengist,* government and state, as we have already seen, as an unchallengeable authority, and depicts citizens as mostly passive, submissive subjects of the state (Mandefro and Cochrane 2022, 269). Death's operation from a biopolitical perspective, specifically using Agrwal's (2005) construction of the subject as an environmental identity, in his study of forests in India during the British empire, does not intend to reduce the population to subjugation, removing the agency of the peasants, and resolutely avoids formulating a top-down theory of the state, focusing on micro-level practices and technologies of governance.

Biopolitics is a form of politics that involves the regulation of human life processes and the social, cultural, ecological, economic and geographical conditions in which people live, reproduce, get sick, stay healthy or become healthy and die (Foucualt 2005). From this perspective, environmental concerns have become a crucial element in the production of states and other transnational actors.

This construction is always subject to new changes and compositions, as has been seen with the formation of two categories of farmers. On the one hand, there are the so-called "limited resource peasants"[30], whose inefficiency and fertility have been portrayed as an environmental threat not only to Ethiopia but to the entire continent in the work of generations of colonial scientists and administrators, post-colonial bureaucrats and humanitarian workers, and recipients of poverty alleviation programmes. On the other hand, there is the "educated farmers entrepreneur", presented as vital in the mechanism of growth-oriented agricultural development, and crucial in the scalar state development project, as defined by Davide Chinigò (2022), which percolates from smallholder to commercial agriculture, and from small business to manufacturing industry.

Indeed, the Educated Entrepreneurial Farmer is not only an example of technical modernisation and agricultural productivity growth, but also of cultural modernity, civic responsibility and social stability as the vanguard of the party. Although the situation on the ground is much more complex and nuanced with respect to this dichotomy, for both categories of farmers the

[30] Carl Death adopts the dichotomy between peasant and farmers.

relationship with the state and its representatives, remains complex and can be summarised in the thought of Dessalegn Rahmato: «The history of state-peasant relations in this country has been a very unhappy one, and one of the factors for this has been the drive on the part of the state to bring under its control the major resources in the rural areas» (Rahmato 2001, 105).

In Carl Death's analysis, it is precisely in the management of resources, in the governance of land and territory, that the impact of the green state in Africa is first and foremost much greater than elsewhere. The centrality of territory in Africa emerged in all its violent significance with the division of the continent at the Berlin Conference and the creation of conservation areas, protected areas, parks, symbolic representations of the European vision of the continent, of its nature (Bini 2020), tangible demonstrations, of the power of the colonial state to control the enforcement of borders, access to land and natural resources and to penetrate the rural level.

But with the end of colonial rule, the quintessential green state in Africa continues to be an authoritarian conservation state, in which vast tracts of land are exclusively territorialised, for the protection of biodiversity, the control of valued wildlife and trees, and the enjoyment of foreign, rich tourists, and secured against local populations. In states such as Tanzania, Botswana and South Africa, conservation policy is deeply rooted in state politics and national identity (Bassett and Crummey 2003), but Ethiopia is no exception in this regard, for example, with the case of the planned resettlement in relation to the Guji-Oromo of the Nech Sar National Park (Berisso 2009). Indeed, the development of green projects, which Brayant and Bailey, analyse not only in Africa but also in other countries of the Global South, which they programmatically define as the Third World, is rarely seen by states as an end in itself, but rather as a means to various political and economic ends (Brayant and Bailey 1997, 61).

In fact, in a complex, changing and locally determined framework, forms of appropriation, especially by the state as the custodian of the country's natural resources, occur precisely in the name of conservation rather than use, thus exercising its state environmentalism in a highly exclusive and exclusionary manner.

And this is clear in the case of Ethiopia, where farmers know from their experience that a natural resource, on which they are highly dependent, «is not a gift of nature given equally to all, on the contrary such a resource will sooner or later be claimed by the powerful and the privileged, that is, by the individuals or groups who at the time in question wield sufficient power, even if his community has an earlier and customary right over it. The natural landscape has thus always been fraught with conflict and opposition» (Rahmato 2001, 74).

But this paradigm also applies to the more widespread practices of soil conservation and ‘protection’ from its erosion, degradation and deforestation, which remain central to the country’s discourse. And alongside these, the Ethiopian green state is carrying out a series of activities to make a universally codifiable, readable, uneven space or landscape in the continent's history, a territory to be precise, through the mechanism of land registration and the distribution of land certificates (Chinigò 2015; 2022). This project began with the Proclamation on Rural Land Administration and Land Use (456/2005), amended in 2007, and while the state was ostensibly decentralising its power, it was actually only increasing its power by making it more pervasive at the local level.

The stated aim of GIS registration and the production of orthophoto certificates was therefore to increase security of tenure, improve productivity and avoid popular expectations of land redistribution and donor pressure for land privatisation. The proclamation provides for farmers to be issued with certificates of occupancy of arable land, which can be inherited or passed on to others, used for access to credit and, in the technocrats’ plans, a valuable element in reducing gender inequality in access to and ownership of land. In practice, however, such a policy has served the Ethiopian state to assert its power and control. This outcome relates precisely to the intrinsic significance of landscape mapping, which, by declaring a mechanical faith in objectivity and representation, allows one not only to see the world, but to recreate it. The geography of the state’s power over the land becomes even more visible with villagisation and resettlement programmes, with land concessions to large foreign and local investors that have given rise to the phenomenon of land grabbing, or with the construction of large hydroelectric projects.

Hydropower construction in Ethiopia is crucial as a driver of the green economy, another element that characterises the green state in Africa. Studies of the green economy have focused on the developed and industrialised countries of the global North, placing them in a framework of ecological modernisation (Hajer 1995), moving towards high-tech industries and renewable energy sources, and implementing the latest green projects in transport and construction. These examples, however, do not exhaust the range of political interventions under the banner of the green economy, in which the global South is also heavily involved in the implementation of natural resource conservation programmes, forestry projects, agricultural and biofuel investments, and payments for ecosystem services within the dynamics of carbon trading. Carbon credits and trading are approved by governments with the aim of gradually reducing overall carbon emissions and mitigating their contribution to climate change.

Death uses another Foucauldian tool to analyse the green economy, the concept of discourse developed by the French philosopher. Discourses are systems of representation that themselves produce meaning, or practices that systematically shape the objects of which they speak (Foucault 2002). Material objects can exist independently of discourses, but it is discourses that give them meaning and significance. In fact, far from being dismissed as an example of mere 'green washing', the green economy is highly performative, and, precisely as a Foucauldian discourse, it constitutes certain ways of thinking, representing and acting about the world, is capable of producing politically meaningful spheres of governable activity, forms of knowledge, regimes of truth and techniques of governance, as well as new actors and subjectivities.

The green economy is an oxymoron that has changed the terms of the ecological debate to the point of becoming, as Carl Death (2015; 2016) and Emanuele Leonardi (2012; 2013) argue, hegemonic. For Leonardi, this triumph has occurred from the perspective of neoliberalism, the commodification of nature, and how it represents not only an attempt to reconcile ecology and economics, but how addressing ecological problems can become the engine of a new wave of dynamic economic growth through the creation of new markets and business models. For Death, the green economy is one of the dimensions that has not been sufficiently taken into account in the global South, or at least has been quickly dismissed as "political maquillage", a gap between rhetoric and practice, but with profound political implications and effects on people's lives.

At the global level, several African countries - South Africa, Mozambique and Ethiopia - are engaged in implementing such plans. In this sense, the case of Ethiopia is again paradigmatic, with its *Climate Resilient Green Economic Strategy* introduced in 2011. It aims to reduce net greenhouse gas emissions to zero by 2030 through energy efficiency in transport, industry and buildings, but above all by cutting GHG emissions from agriculture and livestock, while maintaining the goal of becoming a middle-income country by 2025. To sustain economic development at an annual growth rate of more than 10 per cent, the government will need to expand electricity supply at a rate of more than 14 per cent per year and modernise the agricultural sector to reduce vulnerability to climate-related risks and make the country a leader in the green economy.

Finally, in international relations, the green state is configured as such through an operation of nation branding, which is necessary in a competitive and complex arena such as that of green aid, where resources are allocated on the basis of countries' performance rather than their needs,

but which also generates complex governance. Indeed, Death, who avoids juxtapositions and manichaeism throughout his analysis, highlights precisely how, in African countries, it is possible to find enclaves of civil society activism and environmental awareness within states run by less virtuous elites.

Ethiopia, on the other hand, has not yet succeeded in expressing the kind of strong and resounding grassroots leadership that its leaders have shown, for example, in global fora on climate change.

Moreover, as the African continent is exposed to an increasingly dramatic and unpredictable spiral of climate chaos, «the environmental transformation taking place in recent decades, mainly, but not only, related to climate change, has caused social, economic, racial, gender and other injustices and insecurities to such an extent that questions of how to govern and conduct our environmental policy, and the role of states in this process, have never been more crucial» (Death 2016,43). And it is precisely in the face of increasingly palpable ecological and environmental challenges that Carl Death's warning resonates loud and clear, namely that African green states, which are neither good nor bad in absolute terms, can be dangerous and need to be closely scrutinised as such.

3. *The climate change*

Of the three key words that give the thesis its title, climate change represents the framework, in a sense, the dimension through which the relationship between farmers and the state is to be analysed. This is not an escalation of abstraction, as I have tried to capture them in their material dimension, that is, in their corporeality, physically in their interactions.

Climate change is a complex interaction between physical-mathematical processes and environmental, historical, social, cultural and economic factors. The complexity is such that the risk of oversimplification when handling such a concept is so great that it is almost astonishing how it has become a public issue, given the high technical and scientific content that is reserved for experts. This is because climate is a fundamental part of societies, from their material conditions to the meanings they give to it. As the scientist and anthropologist Elena Bougleux well describes:

> Climate is the result of a co-evolution and mutual modification over time between measured climatic data and ascribed social meanings. Both dimensions must be understood in an evolutionary sense, linked to history and changing over time (Hulme 2009)[31]. The very concept of climate therefore

[31] Hulme M., *Why We Disagree About Climate Change*, Cambridge: Cambridge University Press, 2009.

> requires a continuous and unstable compromise between the recorded quantitative picture and the perceived subjective scenario (Bougleux 2017, 5).

Defining climate change first requires an effort to understand and communicate the already complex climate system, seen as a state of equilibrium, in order to understand the causes that upset the thermal/radioactive balance, defined as the sum of all the energy that enters the Earth system minus all the energy that leaves it. If this balance is in equilibrium, the average temperature of the planet remains constant. Otherwise, if the incoming energy is less than the outgoing energy, there will be a progressive cooling of the Earth system; on the other hand, if the energy is greater, there will be a progressive warming. This is what happens with the concept of global warming, which manifests itself mainly in the rise in temperature. This is the effect of radiative forcing, defined in the IPCC Fifth Assessment Report (2014) as exogenous, also referred to as 'natural' (the use of the quotation marks is mine, as this classification tends to see anthropic/human action as non-natural, as humans are not part of nature). Exogenous radiants are i.e. solar forcing, orbital forcing and asteroid impacts. Endogenous radiants, on the other hand, can be both natural and anthropogenic, i.e. volcanic eruptions, geological processes of continental drift and orogenesis; land use changes, aerosol emissions and condensation trails, and the best known, well-mixed greenhouse gas emissions, i.e. carbon dioxide (CO_2), methane (CH_4), dinitrogen monoxide (N_2O) (Bagliani et al. 2019).

And indeed, when we talk about climate change today, we refer almost exclusively to the effect of these gases, that is, to the contemporary global phenomenon of anthropogenic origin, as opposed to natural climate variability, which is unrelated to human activity.

Such variations in climate parameters occur in addition to, or in spite of, natural climate variability. Hence, this clarification points to a dual nature of climate change, on one side as a phenomenon caused by complex chains of human actions (and natural processes), but also as an agent that could influence far-reaching sets of material and imaginary phenomena (Hulme 2017,1). This is now automatically the anthropic concept, but it is a definition that implicitly includes the fact that this is a species problem, and that the human is not part of nature, or at least is different from it.

This connotation we make for the phenomenon of climate change is the result of a process of construction and definition. The United Nations Framework Convention on Climate Change (UNFCCC), signed in 1992, defined climate change as «a change in climate attributed directly or indirectly to human activity that alters the composition of the atmosphere and adds to the natural climate variability observed over comparable time periods». But the three subsequent

definitions by the Intergovernmental Panel on Climate Change (IPCC) were much less categorical in recognising this human responsibility, at least until the 2007 definition. In fact, the IPCC's fourth synthesis report, which specifically addresses the issues of concern to climate change policymakers, confirms that climate change is occurring now, largely as a result of human activity. As the climatologist Mike Hulme (2017) continues to point out, the conflicting definitions between these scientific and policy uses have led to considerable strategic ambiguity in the public meaning of climate change.

Consequently, climate change (anthropogenic in nature) has become a buzzword with a very high risk of banalisation, a taken-for-granted concept that obscures its complexity. It is precisely because of this complexity that it is not possible to deal with climate change in its entirety, and any analysis of the subject ends up being partial. In these introductory pages, however, I would like to draw attention to some aspects of climate change that will recur, especially when considering the relationship between anthropology and climate change. In fact, climate change, «may retrospectively be seen as a major game changer in intellectual and political life in general, and also in anthropological research» (Eriksen and Mendes 2022, 9). Anthropological studies on the topic are piling up, to the extent that volumes are devoted to the archaeological engagement of cultural and social anthropology with climate change (Crate and Nuttall 2009; 2016; Hoffman and Mendes 2022).

Firstly, climate change has been recognised in parallel with, if not later than, other environmental problems. Think of the problem of desertification, the first UN meeting on which was held in 1979, or the fact that the Convention on Biological Diversity was also adopted at the Earth Summit in 1992. In the end, climate change became «clearly a quintessential environmental issue of the late twentieth century and the twenty-first century» (Okereke and Charlesworth 2014,41).

Undoubtedly, climate change is linked with many other environmental threats to the extent that we speak of environmental change. Climate change plays an intensifying role (Fiske et al. 2014) in relation to these other problems such as acid rain, ocean acidification, loss of wetlands, salinisation of freshwater sources, global drinking water crisis, retreating glaciers, air pollution, deforestation, a general loss of biodiversity through extinctions and also the increased occurrence of extreme weather events (floods, hurricanes and intense rainfall). However, at the level of public debate, climate change has overwhelmed all other problems and has taken on, as a metonymy, the dimension of ecocrisis par excellence, «climate change, the immediate cause of the coining of the neologism Anthropocene» (Eriksen and Mendes. 2022, 9).

The focus of recent anthropological research on climate change is precisely to show the multifaceted nature of its aspects and how its implications go far beyond the environmental sphere. In this regard, P. Rudick-Guard's words are effective «Climate change is an environmental issue, but as anthropologists we must realise, and help others to realise, that it is so many other things besides» (Rudick-Guard 2016,268).

At the same time, he argues that although attempts have been made inside and outside the academy to reconfigure climate change in economic, political, military, cultural, moral, religious and so on, in the Western world the dominant framing of the issue remains "environmental". In his inspiring work for my research on the small island state of the Marshall Islands, which is facing an increasingly imminent and devastating disappearance, he sees scientists, government and activists conceptualizing the issues in terms of climate change, while Marshall Islanders are facing the impacts of climate change through both discourse and the lived experience of local environmental change. Far from being perceived as a disruption of 'nature', this is seen as a social and moral crisis due to the disappearance of tradition, or as a theological issue related to divine purposes.

Nevertheless, it is true that the study of climate change grew out of studies in environmental anthropology. But this origin, "corrupted" by the evolutionist and materialist approach of the anthropologists Leslie White and Marvin Harris, also conditioned the beginning of the study of climate change, leaving anthropology behind the scientific disciplines and destroying the "advantage" it had acquired over other fields of social research precisely in the study of the environment and ecology. However, the backlog in the anthropological study of climate change has been rapidly made up in the last two decades.

Links with the approach of ecological anthropology are evident in the case of adaptation and resilience studies, analytical tools that are very much in vogue in the context of climate change from the perspective of conservation and response to environmental imbalances, and whose application and appropriateness have been questioned by several scholars (Crate and Nuttall 2009, 2016; Oliver Smith 2016).

However, these types of analyses have been very important in the landscape of contributions of climate change anthropology. In fact, in their short and programmatic work, Jessica Barnes and other influential authors (2013) who have worked on climate in the anthropological field, have identified three main directions in which to synthesise the contribution of climate change anthropology.

Jessica Barnes, Michael Dove and all the other co-authors argue that the contribution of the anthropology of climate change is firstly to study the values and social relations that underpin our understanding of climate change and their role in responses to environmental change. Secondly, anthropological analysis can examine the historical context in which climate debates emerge. Finally, the discipline can provide a holistic view for studying the relationships between social and national systems and the weight of social dynamics in the face of climate change (Barnes et al. 2013, 541).

Nevertheless, unlike the chapter by Carla Roncoli, Todd Crane, and Ben Orlove (2016), above mentioned, the most important legacy of that work by Barnes and many other anthropologists (2013), as well as of the prefaces and conclusions of the two handbooks edited by Susan Crate and Mark Nuttall (2009; 2016) and the work of José Antonio Cortés Vázquez (2020) is more than the archaeology of the contributions of the anthropology of climate change. Rather, it is the wisdom of charting a course and the recognition of the diversification of interests, of visions of climate change and the construction of a discussion within the anthropology of climate change even outside of cultural ecology, environmental anthropology and all its declinations constructed over time. And in such a now blooming debate (Crate and Nuttall 2016, 12), an important element that is emerging is its politicisation (Van Aken 2020), regardless of the fact that climate change has entered the political debate producing much discord (Latour and Weibel 2020, 17).

«By the 1980s and 1990s, political ecology came to be the most widely used approach in environmental anthropology (Biersack and Greenberg 2006[32]; Paulson and Gezon 2005[33])» (Townsed 2009, 44).

The progressive politicisation of anthropology is at the heart of José Antonio and Cortés Vázquez's (2020, 3) shaping of the field of climate change anthropology. The authors highlight how, on the one hand, anthropology has focused on analysing the meanings that local communities give to the new climatic phenomena and the adaptation strategies they propose. On the other hand, anthropology has devoted itself to understanding the perception, direct experience and impact of climate change phenomena in different communities (rural, mountain, urban, indigenous) and their relationship with different forms of exploitation, social exclusion and vulnerability. Finally, anthropologists focus on the emergence of new governance

[32] Biersack, Aletta, and James B. Greenberg, eds. 2006. Reimagining Political Ecology. Durham, NC: Duke University Press.

[33] Paulson, Susan, and Lisa L. Gezon, eds. 2005. Political Ecology Across Spaces, Scales, and Social Groups. New Brunswick, NJ: Rutgers University Press.

frameworks aimed primarily at mitigating and adapting to climate change, the underlying logics and systems of expert knowledge production, and the responses and alternatives proposed by various collectives and social movements.

In fact, studies in the anthropology of climate change make it possible to retrieve, first and foremost, the local vision of climate change that prevailed, inter alia, in early climatology, before climate change came to be seen as a global phenomenon, mainly in the institutional sphere.

The centrality of anthropology and the recovery of the locality of climate change in its effects and narrative balance the emergence of the view of the phenomenon as a hyperobject, promoted by Timothy Morton (2013), «massively distributed in time and space relative to humans» and made visible to the latter through mathematics and statistics. The conceptual viscosity of climate change easily makes it a trap, the trap of manipulated data, as NASA climatologist James Hensen calls it, where whatever happens, just invoke climate change, which ends up being a passkey.

With a locally specific but holistic view, anthropology can play a key role in preventing what Hulme (2011) calls "climate reductionism" by demonstrating the difficulty of disentangling climate change from the complex web of social and material relations that mediate people's interactions with their environment. Indeed, we seem to be experiencing the same mechanisms of *depoliticisation* that occurred with the instrument and process of development (Ferguson 1994). In the name of action on climate change, we also seem to be witnessing the same dialogue between James Ferguson and a developer: «One "developer" asked my advice on what his country could do "to help these people". When I suggested that this government might contemplate sanctions against apartheid, he replied, with predictable irritation, "No, No! I mean development!" The only "advice" that is in question here is advice about how to "do development" better. There is a ready ear for criticisms of "bad development projects"». (Ferguson 1994, 284-285).

For anthropologists who regularly travel to non-Western latitudes, it is easy to grasp the massive inequality of climate change in its causes and effects, both within and between states. The countries of the global South are the most affected by the consequences of climate change, and are the living embodiment of the debt incurred by the carbon-rich beneficiaries of industrialisation in the North (Okereke and Charlesworth 2014). And it is in this sense that anthropology cannot limit itself to analysing disasters (Barnes et al. 2013), as if they were photographic exhibits, like "The Hallucinations of Capitalism" and *Troppo caldo* di Gaia

Squarci, but must push itself to understand the causes of the inequalities exacerbated by climate change. In this sense, the critical anthropology of climate change proposed by Hans A. Baer and Merrill Singer is an extraordinary heuristic and operational tool. The two anthropologists start from their common ground of research in the critical anthropology of health (Baer and Singer 2018), a theoretical perspective developed in the 1980s that aims to analyse how disease interacts with poverty, discrimination, exposure to stress and stigma, structural and physical violence, disease interactions in the social context, and inequity in health care. More recently, within the field of environmental studies, critical health anthropology has focused more on environmentally mediated health inequalities, such as the role of polluting industries in causing disease and creating health inequalities between social classes, gender or ethnic populations (Baer and Singer 2018).

Baer and Singer combine this view in their critical anthropology of health with the world systems theory developed by Immanuel Wallerstein (1974), a historical social scientist, who analyses capitalism not only as a simple economic system, but as an unequal, hierarchical one, dedicated to expansion and growth, which through its power structures has exacerbated inequalities between and within parts of the world. Such analysis of capitalism is essential to the investigation of climate change. Indeed, Baer and Singer refer to capitalism as the "elephant in the room" of the climate change debate. Critically, anthropologists reflect on how the dualistic insistence on adaptation and mitigation is by no means decisive, as it remains within the same paradigm, «a treadmill of production and consumption» that is heavily dependent on fossil fuels (Baer 2008), and fails to come to terms with the fact that climate change is ultimately a by-product of global capitalism.

These two models, which for Merrill Singer (2019) must always be based on ethnographically informed anthropology, are joined by the theory and practice of political ecology, with its understanding of the politicised nature of human interaction with the environment.

Political ecology is a multidisciplinary perspective with multiple genealogies and different trajectories. The one to which Singer and Baer refer is the American political ecology that was born at the intersection of several disciplines, primarily anthropologically based cultural ecology, political economy and geography. Historically, this particular tradition of political ecology literature has been concerned with challenging and reframing accepted environmental narratives, particularly those directed through international environmental and development discourses towards resource users in the global South, degradation and soil erosion (Blaikie 1985; Blaikie and Brookfield 1987).

At the heart of the analysis is the role of power in the unequal regulation and distribution of access to the environment based on class, ethnicity, or gender; how this imbalance mostly reinforces social and economic disparities in society; the political consequences of environmental change; and the negative impacts of human activities on the environment. Indeed, as Singer (2019) points out, a political ecology approach critically focuses on how the actions of the most powerful groups within and between societies negatively impact the environment, with consequences that threaten the well-being of less powerful groups.

Having defined this constitutive ontological core -chosen because it is in the genealogy of Baer and Singer's critical anthropology of climate change, and because it has been so important in the construction of my training and research among the various political ecologies-, it is worth clarifying how political ecology should be declined in the plural: genealogies, fields and research agendas. In other words, «political ecology is a riotously diverse field, with origins and trajectories resembling more closely a tangled evolutionary lineage than a neat family tree» (Robbins 2012). However, two elements of continuity can undoubtedly be identified as constants: the political commitment that makes this type of researcher a community of practice (Robbins 2012), and the fact that it is not just about critical knowledge, but focuses on the possibility of building alternatives alongside analysing the causes of socio-environmental change.

The commitment to building alternatives, in the specific case of a critical anthropology of climate change, needs to proceed through the study of the marginalised populations most affected by the local impacts of climate change.

Moreover, following the programmatic call of Susan Crate and Mark Nuttall, one of the dimensions in which the combination of political engagement with critical anthropological research can be realised is the participation of representatives of the discipline in policy-making processes.

However, «it is also crucial to overcome our marginalisation in the study and policy arenas related to global change research in order to study all kinds of relevant 'locales', particularly those that inhabit institutions of power» (Crate and Nuttall 2009, 396). And they write a little later in the conclusion of the first handbook they edited (2009), which remains one of the most relevant aspects in the second edition of 2016, revised and published with new content and a new subtitle:

«Policies will change whether we anthropologists actively engage with them or not. The question is how quickly, with what character and to what degree. [...] anthropologists have a

multitude of key roles to play in the climate change issue, which can help move the policy process forward more quickly and lead to more effective and lasting policy outcomes precisely because they involve the human dimension (Crate and Nuttall 2009, 399).

Therefore, from this very brief and certainly not exhaustive presentation of an analysis of climate change from an anthropological perspective, aimed primarily at clarifying the lens I have chosen and used both in the research and in the analysis of the ethnographic material collected, it is shown how the social study of climate change means coming to terms with a complex world of ramifications. And in this complexity, it should highlight my engagement with the ever-expanding and deepening field of study of the anthropology of climate change, namely how the process of climate change must become a way of reframing and addressing the structural features of local and global inequality. It means taking up Barn and others' (2013) invitation to work on causality rather than tracking catastrophic outcomes.

Therefore, the following pages of this paper aim to explore the challenges posed by the climate crisis in some contexts in Ethiopia.

Ethiopia is one of the lowest greenhouse gas emitting countries in the world, ranking 182 out of 188 countries in terms of per capita emissions1 and contributing 0.27% of global emissions. However, it is highly vulnerable to global climate change and is considered a drought-prone country, a vulnerability based on its geographic exposure to the almost always devastating Niño cycle, a periodic climatic phenomenon that causes the waters of the Pacific Ocean to warm dramatically and has been the subject of several anthropological analyses.

However, any explanation of Ethiopia's socio-environmental conditions must also take into account decades of unfair socio-economic policies, the consequences of which are accelerated and enhanced in their intensity and frequency by climate change.

Finally, taking up anthropology's call for responsibility towards climate change, the dissertation goes to the heart of its structure by analysing the consequences of climate change for Ethiopia's rural population through the experiences and opinions of farmers encountered in rural *kebele*, and whether and how the Ethiopian state's policies support the population in this complex challenge.

4. *Methodology*

«If [...] anthropologists tend to learn a lot about a few rather than a little about many» (Eriksen and Mendes 2022, 5), then unfortunately my research does not qualify as such. And if, on the other hand, the field is by definition «characterised by critical situations that create a

climate of unpredictability and uncertainty - wars, famines, disasters, humanitarian emergencies, pandemics» (Benadusi 2022, 16), then mine is a perfect example of this. Under the conditions described in the pages of the preface, the events that occurred during the research shaped the geography and timing of the journeys and stays, and consequently the choice of research method. Nevertheless, the material that emerged to construct a critical research on climate change is interesting because, despite the limitations, it was created within a plurality of elements, voices and encounters.

4.1 A matter of time and space

I conducted three, unfortunately non-continuous, periods of fieldwork, totalling eight months[34] of ethnographic research.

The first period was spent from February to May 2021 in all four *woreda* in East Gojjam where CVM is working with the WASH-UP project, namely Enibse, Shebel Berenta, Goncha, Enarji staying in the town of Debrewerq where the NGO office is located. And the second between the end of September and the end of November 2021 in four *woreda* in SNNPR, Demba Gofa, Geze Gofa in Gofa Zone, in SemenAri in the South Omo Zone and in Basketo, based now in the town of Sawla, now in the town of Laska, and finally in Addis Ababa.

The plan was to adopt the observation, participation and camp-building activities already identified in Amhara. On the one hand, the NGO needed to "keep an eye" on both project implementation regions in my research, and on the other hand, Amhara was already off-limits in the autumn 2021 due to the escalating conflict between the Ethiopian central government and Eritrean forces against the regional state of Tigray, which was spreading across the border area. Therefore, the second camp not only started late due to visa restrictions[35], but I only stayed in

[34] The fieldwork time to me seemed to have been insufficient. Instead, the director of the Commercial Bank, Laska Brunch came to CVM's office at the beginning of my third week, even though I had never been to the bank or ATM, since it had never happened that they had seen a *farenji* roaming the streets of Laska for so long continuously, to ask me if I wanted to open an account at his branch and deposit dollars given the scarcity of foreign currency in the country. Beyond the proposal, which I obviously refused, it is interesting to note the different expectations generated even among strangers by the presence of an outsider.

[35] There had been indications from the CVM's Italy office based in Porto San Giorgio (FM) that it would be better to avoid being in the country during at least the first phase of the regional and House of Peoples' Representatives elections, which took place from 21 June to 30 September 2021, in order to be able to carry out the voting operations in all the woreda of the federal state, decreeing the victory of the Prosperity Party. In this regard, it was interesting in May 2021 to witness the mobilisation in the form of distributing caps and T-shirts, setting up voter registration stalls, or attempting to recruit the organisation's social facilitator for his connections among the institutions and farmers.

the project *kebele* for a month before being forced to return home for security reasons before the exit visa deadline.

I spent the first research period as an initiation into complexity, not just identifying the right questions to ask the range of interlocutors and differentiating among them, but trying to build an interaction with all the participants in my camp. I followed the NGO staff in their daily activities, trying not to burden them, considering that first Covid-19 and later the war had accumulated requests for variants and extensions to the donors. I had to get to know the environment, leave the main road for the bumpy and dusty track, and understand the NGO's activities in their construction of relationships and dynamics, not only material but also social and symbolic, with the communities on the one hand and the institutions on the other, represented by the contact persons of the Agriculture and Water Office, the assigned Development Agents (DAs) and the *kebele* leaders.

Travelling with the NGO staff, in their cars, the Longbase, the first social space of my research, where we discussed how our respective days had flown, if they had been productive, if we had encountered any difficulties, and planned our movements for the next day amidst the sounds of the road, the bumps, the wind coming in through the windows, the stones bouncing against them. Moving around and penetrating the countryside with the NGO inevitably made clear my position in the field and how my data collection was designed to set up future, potential CVM development cooperation projects.

In this sense, my research placed me among the plethora of scholars and researchers who had already been there. As well described in the words of a farmer quoted by historian James C. McCann: «Yes, researchers did come from the university with a letter requesting cooperation. They asked all sorts of questions including what we ate and drank. They stayed here for eight days. They usually produced letters bidding our cooperation, etc. Once there were researchers who came to this area to conduct a soil survey. Different researchers came to our area at different times. Sometimes foreigners who did not know the languages of the area came and could not get help or cooperation» (McCann 1995, 232).

It is about becoming aware of how many other researchers before me have gone there or to other got, for other plots to ask those same questions animated by the same exciting enthusiasm and heuristic spasm. This generates discouragement about the real dimension of the concept of applied research, fuelled by the sight of posters sponsoring different types of projects and interventions by UNICEF, GIZAID, USAID, committed to the fight against the spread of HIV, agriculture and child protection, faded, crumpled, but always there to remind us of a presence

and who knows what survival. It is this feeling of guilt and anger at the same time that Ernesto De Martino describes so well in *Intorno a storia del mondo popolare subalterno* (1949), talking about the inhabitants of the La Rabata district in Tricarico. His anthropology starts from the awareness of not being an external object, but part of the forces and forms of oppression; the declaration of not belonging to the system that oppresses the various expressions of social marginality becomes the foundation of De Martino's intellectual and political action.

It is a feeling that Dessalegn Rahmato also programmatically declares: «As a citizen and sympathiser of peasant aspiration, who has seen hopes dashed, expectations frustrated, and opportunities missed, I feel outraged at the continuing suffering and hardship of the people» (Rahamato 2009,23).

During the fieldwork, my basic knowledge of Amharic, acquired during my previous two years from January 2018 to September 2019, was extremely useful. It allowed me to live independently in the town of Debrewerq, in Sawla and Basketo, at least for daily activities, to partially grasp the key words that gave me the figure of the interlocutor's response, a knowledge that has since become more and more profound.

From the very first phase, after the first interviews, I built up an agricultural vocabulary of the most important and recurring lexemes, the Julian calendar, the main crops, units of measurement, primarily *timad*, the system of measure used by farmers from North to South, equivalent to 0.25 hectares for every 20 bustrofedic ox's plowing movements.

The first two fieldworks were characterised by both in-depth interviews (IDI) and focus group discussions (FGD), conducted in a semi-structured manner, as each new encounter opened up spaces and interstices to be explored. The first took place in the surroundings of the farms, or near a spring, or in the houses of the farmers involved in the mobilisation processes of CVM activities, or simply because they were there. In this way, I witnessed Ato Asinke's harvest storage and solar cell in Mojen *kebele* in Shebel Berenta *woreda***,** as well as other daily activities, such as baking bread, drinking coffee or tea.

At these stages, a 'natural' distinction was made between the times when I interviewed women and when I interviewed men. In the former case, the farmers were being trained by CVM to set up women's horticultural cooperatives, or the Health Extension Workers (HEWs), semi-professionals involved in disseminating the hygiene and health concepts and practices central to the WASH projects. Men were mainly present around the construction for maintenance or discussion. Unless it was in a more private setting, such as the home, the interview began with one person, depending on their time and availability, but it soon became a polyphonic

experience, with other people from the *got* (village, the smaller unit into which the *kebele* is divided) joining in.

At first I was concerned about the difficulty of maintaining the "integrity" of the IDI and reconstructing the origins of all the voices. Then I began to focus more on the positive aspects of this spontaneous exchange, i.e. how it was also possible to witness occasions when men and women interacted and there was no need to protect the sound of the latter's voices. And therefore, I tested the possibility of FGDs (Ronzon 2008, 89-96).

During the first fieldwork in 2021, I developed a strict discipline regarding the transcription of notes, mainly because I was concerned that it would be difficult to obtain a transcription of the notes, firstly because the translators, who were sometimes difficult to find due to study or work commitments, were often not available and CVM staff acted as translators. Then I was anxious that it would be too complicated to transcribe these busy conversations in time, so I transcribed them immediately in the evening, using the footnotes as an equivalent margin to record my impressions and sensorial perceptions.

In addition, since the 2021 fieldwork, I have also met the *kebele* chiefs and enjoyed the abundance of data hanging on the walls of the *kebele* office, unfortunately inaccessible to me, but meticulously photographed and then translated with assistance. I was in the towns of each *woreda*, meeting the experts, the officials of the various offices and departments. In fact, from the beginning I designed the research to be bifocal: meeting authorities at different levels, as well as prosecutors and farmers.

The aim was to establish a dialogue from different perspectives, to understand the various perceptions of the farmers and the institutions, in a sense the mainstream view of the different departments under selected *Woreda* offices, Zone and the Region Bureaus, of the crisis that was occurring, whether there was any internal critical reflection of this perspective, and what activities were undertaken to tackle climate change.

I was very conscious that «[F]ieldwork is not limited to the observation of specific moments, nor does it end in dialogue with specific subjects. These aspects, while certainly important, assume their full meaning only within a continuous flow of constant attention - at times distracted or fluctuating - to what surrounds us and happens around us, and which allows us to truly penetrate the experience» (Schirripa 2019, 9-10).

But I was obsessed with the flow of time, the uncertainty left by the spread of Covid, as well as the instability of the country with elections in the summer of 2021 and frequent clashes between

Amhara and Oromo on the regions' borders, as well as the escalating conflict between the government and Tigray forces, predicted alarming outcomes, which then tragically came true. Subsequently, the declaration of a state of emergency (SoE) on 4 November 2021 prevented me from leaving the capital city until I was ordered to exit the country for security reasons, twenty days before my exit visa expired. But in the inherently accidental and unsystematic serendipity of research, the month spent in Addis Ababa was enlightening, whereby serendipity I do not mean random discovery *tout court*, but the possibility of shaping and redefining the ethnographic process (Rivoal 2013[36], 178 in Piztalis 2023, 2). Indeed, this period allowed me to make contact with a group of national NGOs gathered in the Consortium for Climate Change in Ethiopia (CCC-E), and gave me the chance to build a network with academics from different backgrounds.

Besides, during my time in Addis Ababa, I also joined the Forum for Social Studies (FSS), a non-governmental, non-profit organisation committed to conducting and sponsoring policy-oriented research and promoting informed public debate on a wide range of development issues. It was as close as I could get to old-fashioned library research, still inaccessible in Italy because of the pandemic. In any case, the FSS also had much of its material in electronic form, thanks to the digitisation of monographs, academic articles, reports of study days held in the country, of extraordinary heuristic value for research directions. For example, many of the publications authored or edited by Dessalegn Rahamato were funded by the FSS itself. The Forum covers topical issues with in-depth ethnographic research by Ethiopian scholars, really valuable heuristic tools that could be used by NGOs, for example, to build their own context studies alongside grey literature and official documents.

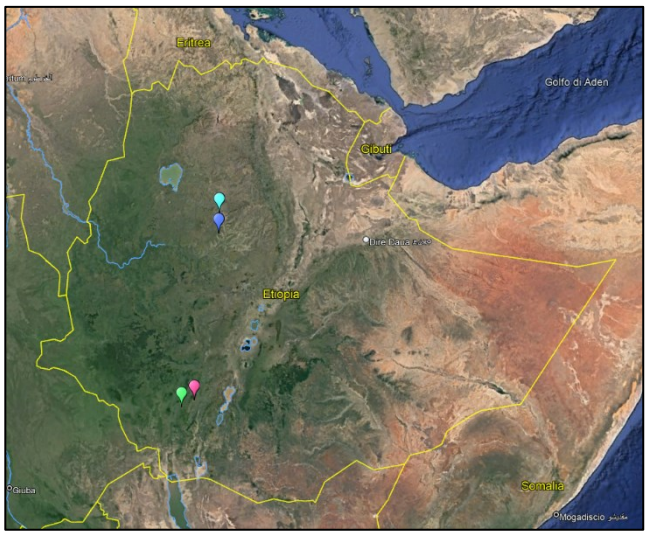

Figure 6 - Four Woreda of research in Ethiopia between Amhara and SNNPR.

Lastly, when I returned to Ethiopia in March 2022, I divided my time between

[36] Rivoal, Salazar N.B., 2013, 'Contemporary Ethnographic Practice and the Value of Serendipity', in Social Anthropology, XXI, II: 178-185.

two *woreda*, Demba Gofa[37] and Basketo[38], in SNNPR (March and April) and two in East Gojjam, Shebel Berenta[39] and Enibse[40], (May).

I selected the eleven research *kebele,* based on the geography and timing of WASH UP's plan of activities (POA). As difficult and complex as the planning was, given the problems of fuel shortage and security, especially in Amhara, I had to adjust my priorities according to the movements of the office car. Previous fieldwork had demonstrated to me how FGDs can be moments and spaces for gathering a lot of information that other techniques cannot, such as clustering perspectives, feelings, experiences and reactions to the topics under discussion, and observing what emerges from the interaction between the farmers themselves. In terms of methodological rigour and the reliability of the translations, they represent the heart of this research from the point of view of shaping horizons of meaning.

I moved between two regions that were often not perceived as drought priorities by many of the development actors I spoke to in Addis Ababa.

I moved between two regions that were in many cases perceived as non-priorities by many of the development actors I spoke to in Addis Ababa and their perspectives on dealing with the climate change emergency compared to the drought emergency in the Borena area of Oromia, the situation in the semi-desert areas of Somali and Afar.

However, the *woreda* of East Gojjam, have historically been defined as drought-prone areas. It is a perception that is well captured in the definition of «naked landscape», shared by Dr. Feleke Woldeyes, Deputy Director General of the Ethiopian Biodiversity Study (EBI), when we discussed this at our meeting in Addis Ababa in November 2022. During the two field trips to East Gojjam, which took place a year apart, the landscape was devoid of vegetation and trees due to the general predominance of cultivated land in the zone. And I got to see, experience and study it as it was, uncovered, exposed, actually ploughed, prepared, ready for planting, waiting

[37] Demba Gofa is bordered on the south by Uba Debretsehay and Oyda, on the west by Geze Gofa, on the northwest by Melokoza, on the north by the Dawro Zone, on the east by Kucha, and on the southeast by Zala Sawla. The administrative center is Sawla.

[38] Basketo Special *woreda* is bordered with Mello *woreda* in the north, Semen Aarri *woreda* in the south, Selamago *woreda* in west and Geze Goffa *woreda* in the east. The administrative center is Laska.

[39] Shebel Berenta is named after two older districts which occupy the area this *woreda* currently covers: *Berenta* which is north of the Mecha river, and *Shebel* which is south of that stream. Part of the Misraq Gojjam Zone, Shebel Berenta is bordered on the southwest by Dejen, on the northwest by Enemay, on the north by Enarj Enawga, and on the east by the Abay River which separates it from the Oromia Region. The major town in Shebel Berenta is Yed Wuha. The administrative center is Yed Wuha. It is reported that Shebel Berenta has been judged one of the four *woreda* in the Amhara region to be chronically food insecure for about twenty years, since the 2000s.

[40] Enbise Sar Midir is bordered on the south by Enarj Enawga, on the west by Goncha Siso Enese, and on the north and east by Abay River which separates it from the Debub Gondar Zone and Debub Wollo Zone. The administrative center of this *woreda* is Mertule Mariam.

for rain and fertiliser, during the fieldwork in February-May 2021 and March 2022. This was undoubtedly another limitation to my perception, I did not see East Gojjam, the colours of its landscape, its crops and trees at different times of the year, knowing that the rainy season would make it more difficult to move around the countryside.

But it certainly had an impact on my ability to understand the interactions of people with their environment.

These are areas of high food insecurity, but they are most commonly known as the "teff and wheat basket of Ethiopia". «The Amhara is the teff basket of Ethiopia, if there is no food here, there is no food in the whole nation», as it was stated during the FGD[41], May 2022, Mergech, Shebel Berenta.

«In the current vulgate, the Amhara are the farmers who practice plough farming (ploughmen), they are free and proud men, they are the highland Christians. The genealogy of the word 'Amhara' would lead to the 'Hebrew am' (people) and 'ahara' (mountain)» (Calchi Novati 2010, 141). Indeed, in the eight-zone classification by Arthur Hugh Bunting entitled *A plan for agricultural research and specialist services in Ethiopia* (1963), cited in Westphal and Stevels (1975, 81) which takes the highlands as a reference, East Gojjam is in the central part of the Ethiopian highlands. It is an area known for the variety of major crops teff (*Eragrostis tef*)[42], barley (*Hordeum vulgare*), wheat (*Triticum spp*.), sorghum (*Sorghum bicolor* and other spp.), millet (*Eleusine coracana*), chickpea (*Cicer arietinum*), lentil (*Lens culinaris*), pea (*Pisum sativum*), broad bean (*Vicia faba*), grass (*Lathyrus sativus*) and maize.

Instead, the Demba Gofa and Basketo *woreda* are located in the south-eastern part of the Ethiopian highlands, lush green subsistence areas dominated by *enset*, a perennial banana-like tree, and other valuable tuber crops such as yam, taro, Galla potato *(Coleus edulis*), anchovy (*Coccinia abyssinica*) and potato (*Solanum tuberosum*); among cereals, barley is widely cultivated, followed by wheat and teff. Particularly Basketo has for generations been a land where valuable cash crops such as coffee and *kororima* (cinnamon) and moringa (*Moringa stapedial*) produced as food and for medical treatment.

It is precisely this resilient system based on tuber crops that has created a narrative of these areas as pleasant places to live. In reality, beyond the myth, these *woreda* are also an

[41] To avoid repetition, FGDs are named with the period in which they occurred, and in order the kebele and *woreda*.
[42] Teff (*Eragrostis tef*) enset (*Ensete ventricosum*), and coffee (*Coffea arabica*) are the three endemic species of Ethiopia.

increasingly drought-prone and vulnerable reality due to the outbreak and spread of the food crisis and the resulting green famine.

In 2011, CNN broke the news: *Green drought hides famine in Ethiopia*[43]. Studies show that green famines have been occurring since the 1980s, but have long been ignored in media coverage and interventions. According to Negussie Zeray and Ashebir Demie (2015), the Gofa area suffered the worst drought conditions in the 1990s, long before Enibse and Shebel *woreda*, like others in eastern Gojjam, were declared food insecure. In any case, the crises of 2003, 2008 (Mulugeta 2014, 209) and 2015 had disastrous impacts in both regions.

The fact that some droughts have been neglected in the country could be explained by a dominant paradigm in the centre-periphery framework - a widely used perspective in the analysis of the Ethiopia's history and the construction of some of its most crucial social and political processes-, but in fact the area of the *enset cultivation complex* in the South, where *enset* growing has been dominant for millennia, has sustained population growth and resisted cyclical droughts (Dessalegn 2009).

Enset is grown at altitudes ranging from 1,100m to over 3,000m. It is said to perform best between 2,000 and 2,750 m. Indeed, the tree was also endemic in the Northern part of the country, but is now very rare: of the farmers I interviewed in East Gojjam, only one had an *enset* tree in her garden. *Enset* supplies many other non-food products: provides fibre, packaging material, bedding mats and medicines. The tree itself is eaten, either sliced and boiled or crushed and ground into flour. The use of its leaves as cattle fodder during the dry seasons is a common practice in *enset* producing areas.

The point is that the repeated crises and the sharp rise in temperatures are now also challenging the resilience of *enset*, which is well known as the tree of hunger and, therefore, the object of potential economic speculation a few years ago about the possibility of making it GMO[44].

The fact that *enset* is an evergreen and a suitable fodder when other feeds are scarce has recently become an issue. Indeed, according to the farmers of Demba Gofa, the high temperatures cause a certain fermentation of the *enset* leaves, which makes the animals sick; the dynamics of this, based on the observations of the people, have not yet been adequately answered and confirmed or denied by the "experts". As a result, while more and more people see *enset* as a drought and famine resistant plant, current conditions are altering the ancient adaptive capacity of farmers. Thus, the presence of *enset* in the home garden has improved the adaptability of households to

[43] 'Green drought' hides hunger in Ethiopia - CNN.com

[44] Introducing GMO enset: some issues of concern - Ethiopia Observer

climatic shocks, but new research needs to be conducted that considers these changed conditions and the new scenarios that are looming on the horizon, with an undeniable rise in global temperatures that we have not been able to keep within 1.5 degrees Celsius.

Therefore, it is clear that in general terms, the four *woreda* belong to two different Ethiopian landscapes. Approaches and categorisations have followed one another over time in an attempt to bring order to the country's agro-ecological plurality, identifying different profiles.

Among the many such approaches developed by both Ethiopian researchers and international institutions, the agro-ecological description of Enibse Ser Midir, Shebel Berenta *woreda* in East Gojjam, in Amhara Region and Demba Gofa in Gofa Zone and Basketo special *woreda* in SNNPR where the research was conducted and the specific eleven *kebele*, I chose to adopt the emic categories shared by all the research actors, based on traditional peasant climatology (Rahmato 1991,45). According to this classification, there are six agro-ecological zones: *bereha* (hot lowlands, less than 500 m.a.s.l.); *kolla* (lowlands, 500 - 1,500); *weyna dega* (midlands, 1,500 - 2,500); *dega* (highlands 2,500 - 3,200); *wurch* (highlands, 3200-3700) and *kur* (highlands, above 3700).

All the study *kebele* fall into three agro-ecological zones: lowland, midland and highland. Their topography is made up of steep mountains, river valleys and scattered plains, separated by deep gorges and slopes, which determine such a large variation in climate between lowland and highland areas within a distance of only twenty kilometres. In SNNPR in Basketo special *woreda*, Awrasosta and Sassa are predominantly in midland, while Bunobasa is entirely in lowlands. Lote Zata and Ubabarè of Demba Gofa *woreda* are also in lowlands. On the other hand, in Amhara, the *kebele* Mergech, Mojen and Wonije of Shebel Berenta *woreda* are all in midlands, as are Tenta and Yeguch of the Enibse ser Midir *woreda*, with the exception of Doma 08 which is predominantly highland, but also has some steeper slopes.

Hence, the lowland-highland dichotomy that runs through Ethiopia's history, an important factor in political decision-making, crosses not only the country but every microcosm. It is inscribed in the morphology of the land, which begins in the highlands and suddenly plunges into the escarpment, with the exception of the *kebele* in Demba Gofa in case of my research.

Indeed, as the farmers' words and the geo-formological description of their plots revealed, even within the same *kebele* there are agro-ecological differences that imply the choice of different crops. In this sense, the phenomenon of land fragmentation, whereby several plots belong to one household, even if they are not contiguous, is not always and necessarily a negative element, as is suggested in so much literature, as an obstacle to productivity gains. On the

contrary, it can become a guarantee of production diversity, as the farmers' description and the study by Mark Paul et Mwangi wa Gīthīnji (2018) make clear, particularly useful in the face of increasing climatic variability that turns into chaos.

Once altitude has been analysed, the other aspect to be considered in the agro-ecological profile is rainfall, on which the working schedules of households to carry out their agricultural activities depend (Merid et al. 2017, 571).

Enibse and Shebel are characterised by a single rainy season, unimodal rainfall pattern technically; almost 90 per cent of the total annual rainfall received in both *woreda* occurs only in summer. However, farmers describe two distinct rainy seasons, from June to September. There is little rainfall in May (it is better to say it starts between April and May, as the farmers pointed out) and in October, at the beginning and end of the rainy season. There is a high concentration of rainfall in July and August. The amount of rain varies with altitude. The plateau and the cold part of the area generally receive rainfall of up to 1200-1400 mm, while the warm lowland areas receive annual rainfall of between 900-1000 mm, in both cases Enibse has an average annual temperature of 15-20 ˚C. In Shebel Berenta we find the same characteristics in the temperatures, the warmest and coldest months of the year occur in May and January having the maximum and minimum temperature records of 29.8 ºC and 9.4 ºC respectively, and in the rainfall patterns. They occur with annual average ranges from 4000 mm to 1000 mm.

On the other hand, Demba Gofa in SNNPR has much higher temperatures with a maximum of 38ºC and a minimum of 22ºC (according to data recorded over the last three years and provided to me by the woreda offices), with a peak between January and February, especially in the lowlands, and lower temperatures between July and August, at the climax of the rainy season. The *woreda* is one of the low average annual rainfall areas in the region and, like Basketo, has a bimodal regime. These areas have two distinct rainy seasons separated by a dry season of varying duration, a summer rainy season from May to September and a winter rainy season from October to April.

Therefore, it is not easy to categorise Ethiopia with the slogan "the country of thirteen months of sunshine" and two rainy seasons, one of small rains (*balg*) and one of big rains (*kermat*). On the issue of agriculture and climate change, it shows how the country's agro-ecological diversity is extremely complex, due to altitude, which is the main determinant of livelihoods because it sets the limits of what can be cultivated or farmed, and rainfall, which defines the productivity of different livelihood zones.

In addition to the morphological and agrarian diversity, there is also a historical difference between the two regions and, consequently, the way they have been administratively framed. On one side, there is the Amhara region, inhabited mainly but not exclusively by the Amhara (Abbink 2006), which together with Tigray and Abyssinia represents the Christian Ethiopia of Semitic origin (Calchi Novati 2010, 137), whose borders with the regions of Benishangul, Oromia and Tigray are increasingly fiery.

Instead, the SNNPR is a region with approximately 45 ethno-linguistic groups, and in fact two different languages, Basketigna and Goffigna, are spoken in the two *woreda* of Basketo and Demba Gofa. Basketo was also given the status of a special *woreda* in 1993, because of its cultural specificity, meaning that it does not belong to any region (Doffana 2010, 9).

In fact, the hodgepodge of peoples gathered in the SNNPR has recently been subjected to several separations under the government of Prime Minister Abiy Ahmed according to a constitutionally mandated mechanism, which represents a change from past EPRDF politics (Fantini 2008).

First, there was the division of the Gamo-Gofa area into two zones, Gamo with an administrative centre in Arbaminch and Gofa with an administrative centre in Sawla (although the offices were built in the middle, halfway between Sawla and the town of Bulki, in an area still lacking the necessary logistical support[45]).

The separation followed violent clashes since 2019, which led to attacks on *woreda* offices and the loss of thousands of documents, according to what representatives of the Demba Gofa Agricultural Bureau told me during our meetings. And then there were three *referenda* in the SNNPR region that led to the creation of three more regions between 2019 and 2023, born out of the disintegration of the SNNPRs themselves.

4.2 A matter of interlocutors

Before presenting the interlocutors of my research in detail, some preliminary clarifications are necessary. The first is that the following account is not intended to interrupt the discourse whenever, in the reconstruction organised in this work of ethnographic research, an interview or an FGD is quoted with long passages or notes clarifying the context and the interlocutor. The

[45] At the time of my visit in April 2022, the compound with the offices of the Agricultural Bureu Zone was still under construction.

second is that the presentation of my interlocutors is not supposed to be a state of the art, but is already the result of the analysis of what emerged in the field.
The third is that the interlocutors in my research are presented in groups. However, this division is in no way intended to perpetuate old approaches or to reproduce the homogeneity of these interlocutors' thoughts and actions by categories. It is merely a tool, a practical guide to the presentation of the different interview traces used, which were then brought into dialogue with each other in a constant back and forth. Finally, the most important element to emphasise is the strong sense of responsibility that accompanied me during the interactions with all the interlocutors. «Responsibility for our words, our gestures, the choices, not only methodological, made on a daily basis in research contexts, the relationships we establish, the expectations we generate, the evaluations we make and the possible ways in which they can be interpreted, [...]Responsibility for the emotions we feel, the resonances they may have in the hearts of others» (Biscaldi 2016, 30). It is through these encounters, this learning in small steps, seeking confirmation or denial, that my research has taken shape, during which I have followed in the path of those who «have situated themselves as Critical Participants and/or Observers in Sustainable Development and have participated, observed, and analysed to varying degrees, in distinct ways, with different actors, and under very different terms» (Rocheleau 2008, 718).

Translators and co-constructors of the research. Adane Mengist, Lecturer at Debre Markos University, Department of Civic and Ethical Studies (MA in Governance and Development Management at Debre Marcos or Bahar Dar) was my translator from Amharic to English during my stay in East Gojjam. Embiaylew Mihiret, MA in Climate Change and Development at the University of Hawassa and employed at the time of the research at the Agriculture Office in Laska in the Department of Development Association of Basketo, translated me from Basketigna to English, and finally the CVM social animator in Demba Gofa, Zelalen Adagn, translated me from Goffigna. During the fieldwork, it was particularly essential to work with Adane and Embyalo, given their backgrounds, to co-construct a well-structured yet flexible interview template and to share the research objectives with them. As well as understanding the tight timeframe of the research and the need to work hard in a synergetic way. It was a source of great joy to observe the development of the hypotheses and then the research results together. It was useful to discuss with them the study material, the theories, the research framework, to shed light on some socio-historical aspects that emerged from the interviews (from the East Gojjam Birokrasi phenomenon to the Bunobasa investors) that I was not aware of before the

camp, and to open up new fields and perspectives. In any case, the lack of autonomy and mastery of language, or rather languages, is really paralysing in research, especially when dealing with such a complex subject or living in a 'hot' period between conflicts and elections, the cross-reference to the political in everyday life is constant, as is the almost childish dependence on accurate translations by translators.

The actors of development. These acted as translators in the initial stages and sometimes in emergency situations, especially Baye Ashenafi, the social facilitator in East Gojjam, a trained cultural anthropologist. They are what the literature and practitioners refer to as 'local' staff (Crewe et al. 1998), to distinguish them from staff working at NGO headquarters or expatriate staff working in offices in the host/recipient country. In turn, local staff refer to the communities in which they operate as local communities, adopting the vocabulary of the developer world.
However, not only local developers but also representatives of local institutions often refer to the rural population as locals. While in the case of the VCM staff this can be explained by the fact that they do not necessarily come from the project areas, the behaviour of the institutions as urbanised elites shows a distance from the inhabitants of the rural kebeles, who, as already seen, are essentially farmers. And the difference between the developers (governmental or non-governmental) and the farmers is material. It ranges from the possession of a mobile phone, which is not “normal” but smart, to the possession of shoes compared to many barefoot rural people, or the fact that the former's shoes are of better quality, clean and without holes. In general, clothing is a clear indicator of status and provenance. This could be summarised as “western” for developers and institutions and “traditional” for the latter, especially in eastern Gojjam where men and women are wrapped in *gabi*, a traditional Ethiopian handmade cotton cloth worn over the shoulders and upper body.
The presence of NGOs in Africa and Ethiopia is very large, to the point that there is talk of an NGO-isation of the continent, given the backwardness of the state in the provision of social services (Bellucci 2010) under the framework, the diktat, of the Washington Consensus. In Ethiopia, where, as we have seen, the state, first as a socialist and then as an example of a developmental state, has never been backward, but has not renounced the opportunity to «subcontract the provision of services to NGOs» (Crewe and Harrison 1998,6). Valerio Bini in his contribution *Ecologia politica dell’Africa a Sud del Sahara: un’introduzione teorica* underlines how it is precisely in the area of access to water that a very large number of small and large NGOs have created hydraulic micro-infrastructures (wells, pumps, canals) that have overlapped and partly replaced those of the state (Bini 2020, 17).

In fact, Tensay Alemayehu, Basketo's Social Facilitator, told me: «During a meeting to present the regional water authority's WASH activities for the entire region, the officer on duty, without much ado or embarrassment, showed the POA and explained how the region would build one spring on site for 2021-2022, just one. They know that so much more construction will be done by Farenji, by China, by NGOs, by the World Bank, by donors, by whoever» (Laska, 2 October 2021).

Sub-contracting does not prevent *mengist*, as the state and government at all levels, from exercising its control over the presence of nonprofit organisations in the country through a system of approval of projects implemented by foreign and international NGOs, of needing to involve first and foremost institutions, channels and government personnel in the activities.

Sub-contracting does not prevent *mengist*, state and government at all levels, as we have already seen, from exercising its control over the presence of non-governmental organisations in the country through a system of approval of projects implemented by foreign and international NGOs, of need to involve mainly institutions, channels, and government staff in the activities. Therefore, institutions take precedence over cooperation with other NGOs and other Ethiopian civil society entities.

«The totality of these practices reveals the tenacious determination with which the EPRDF aims to control the entire aid annuity stake, justifying it on the basis of technical principles of effectiveness, but with the entirely political objective of avoiding the emergence of alternative 'development brokers', who would represent a potential competitor in the search for consensus and control of the population» (Fantini 2008, 134).

The situation has not changed significantly since Emanuele Fantini's analysis. On March 12, 2019, the government of Ethiopia enacted a new law on civil society organisations (CSOs), the Organisation of Civil Societies Proclamation No. 1113/2019 (CSO Proclamation). It replaces the Proclamation of Charities and Societies No. 621/2009 (2009 Proclamation), and, according to experts shows positive signs of openness compared to the previous law, which Amnesty International described as draconian[46].

Lulseghed Erkihun, a senior member of CVM's staff who, given his experience of the charity's bureaucratic processes, was in charge of filling in all the paperwork for the NGO, also believed this to be the case. According to Lulseghed, civil society organisations (CSOs) - any non-governmental, non-partisan, non-profit organisation that is legally established and registered -

[46] Amnesty International Publications 2008, Ethiopia: Comments on the Draft Charities and Societies Proclamation.

are now allowed to engage in the promotion of human rights, the defence of equality between nations and nationalities, and conflict resolution, without any special restrictions on the ownership and management of CSOs or on the nature of funds.

Instead, the percentage of administrative costs will be reduced from 30 per cent to 20 per cent, with the possibility of charging up to 80 per cent of project operating costs. The outbreak of war has undoubtedly slowed down the implementation of the new law, which is still a long way from being implemented. Therefore, having made these clarifications, it is clear that we must never lose sight of how the achievement of the goals of the SDGs, or the motives of solidarity and Christian charity, the purest and noblest of action for the poorest, which inspire CVM itself, pass through the politics of the country, its interests and those of the elites, and its agenda.

While legitimisation by local institutions is absolutely necessary to access and work in the field, it also requires a constant sense of awareness and consideration of how one is perceived by beneficiaries and all social actors[47].

In the field, "local" staff are fully aware of this. In fact, Kassaye Tessema, the project coordinator in the Laska office at the time of my fieldwork, used to say: «It is written CVM, but everyone reads government. In rural areas everything is politics, water is politics, agriculture is politics». It was precisely due to the implications of our actions, our reputation in the outside community, that we had refused to attend a Prosperity Party meeting in Debrewerq in April 2021, when we were approached on the pretext of wanting to include a *farenji* (me) among the most prominent people in the town. It was an important research opportunity, but one that had to be sacrificed in order to preserve CVM's non-governmental constitutionality that was beyond me and my presence on the ground. But I was already aware of this from my previous experience with the NGO, when I went on trips accompanying consultants on monitoring and evaluation missions. They were always warned by the local staff not to give money unnecessarily to the "locals", or even to overdo it in a trade transition where bananas, mangoes or oranges were already being offered at a higher price due to the high presence of white people. In fact, the local staff feared that the next time the CVM's car passed through, people would expect the same treatment, even if it was only the local staff who were travelling, automatically assuming that they were richer because they were doing business with *farenjes*.

[47] It is worth noting that in August 2023, as tensions escalate and the 'civil' conflict in Amhara has shifted since late 2022, pitting federal forces against Amhara FANO militiamen, former allies in the war against Tigray, now opponents who have become uncomfortably influential in the region and refuse to disband or join the federal army, CVM vehicles were also attacked and looted in DebreMarcos. Here, as in Debrewerq, the NGO has its office in the federal police station (Attilio Ascani, The Elusive Peace in Ethiopia - CVM - Community Volunteers for the World. 30 August 2023) CVM website, link!

Finally, the need for constant vigilance should be exercised not only outside the organisation but also within it. My experience as a white Italian serving an NGO led by Italians, both as a volunteer, as a facilitator and now as a researcher, had made me aware of certain of *wax and gold*[48] dynamics, of delicate balances to be managed with wisdom. My responsibility was to ensure that there were no repercussions on my work or theirs, even if my most direct interlocutors in the organisation were new recruits for whom I could be a *djoro*, or 'ear' in Amharic, there in their midst, ready to report back to the office in Italy what was happening. In any case, it was my duty to defend the methodological integrity of the research as much as possible and, on the other hand, not to overburden them with their daily activities, to adapt, to plan little deviations by car, or to be left with the translator in the *kebele* of the meeting with the farmers, only to be picked up again in the late afternoon when the car with the staff returned to the town of Debrewerq, Laska or Sawla.

Farmers (interviewed): As expected, the construction and restitution of the material collected during the research is represented by the eleven semi-structured FGDs I conducted during my third fieldwork, the most emotionally engaging part of the entire research. I conducted three in the three *kebele* of the Enibse *woreda*: Yeguch, Tenta and Doma, three in the three *kebele* of Shebel Berenta: Woniye, Mojen and Mergech, three in the three *kebele* of Basketo: Awra Sosta, Sassa and Bunobasa, and finally two in two *kebele* of Demba Gofa: Ubabarè and Lote Zata. The choice of locations was the result of the contingent geography of CVM's activities, and therefore of the movements of the car during my presence in the field.
The choice of places was the result of the contingent geography of CVM's activities, and thus the movements of the car during my presence in the field. However, farmers were not always the direct beneficiaries of some CVM project activities, as in the case of members of agro-nursery cooperatives. Instead, in most cases, the construction of water systems, local springs or gravity, was about to start or was still underway, or perhaps would not have involved the entire *kebele* and would have reached the *got*, as in the case of localised interventions such as the construction of latrines in schools.

[48] The tradition of wax and gold is a cryptic poetic and literary mode of communication, a philosophical foundation of Ethiopian hermeneutics, with important social and political implications at the centre of Donald L.'analysis in *Wax and Gold: Tradition and Innovation in Ethiopian Culture*, 1965, University of Chicago Press. *Sem* (wax) represents the obvious and apparent meaning, that which is immediately visible. The *woriq* (gold), on the other hand, represents the hidden message, the most precious and the key to understanding the message being conveyed.

I tried to make the most of the opportunities for training or community discussion, and also the spontaneous nature of some of the encounters. Only in the case of Woniye and Mojen *kebele* in Shebel Berenta, due to the distance and time required to reach them, we had to ensure through the CVM social animator that some farmers would attend the FGDs in advance and that there was a room available indoors to host them, given the unusually hot weather in the area at that time in May 2022.

The management of the FGDs themselves, fearing that the brief simultaneous translation necessary for me to follow the discussion would lengthen the time, was well organised and required a minimum number of participants, namely six.

The reduced number also allowed for better time management and ensured that everyone could speak. A total of sixty-six farmers participated in the FGDs, thirty-three women and thirty-three men. First, there had to be an understanding between me and the interpreters, who translated and then transcribed from Amharic into the *kebele* of Gojjam East, from Goffigna for those of Demba Gofa and from Basketigna for those of Basketo directly into English. A key selection criteria for the participants was, even before the numerical equality between men and women, their voluntariness. It was explained to them the intent of the research, that the FGD would be long, to the point that it would sometimes take more than one round, and that we would take a break with water and *kolo*[49], as it was not possible to have access to tea or coffee. Of course, prior consent was sought from FGDs participants to take photographs and record audio.

I decided to use the heuristic potential of FGDs for this important part of the research on farmers' descriptions of climate change because I had conducted exploratory FGDs in the previous two fieldwork projects (Ronzon 2008). These had proved very valuable from the outset, both thematically, in terms of generating key insights for the research based on the arguments that emerged from the discussion, and methodologically, in terms of seeing if I could keep women and men together in the same FGD. After all, given the "quick and dirty" (Severi 2019) nature of my research, this choice of FGD became mandatory. It required a great deal of care on my part and that of the translator to ensure that no pre-eminent or authoritarian voices were imposed during the FGDs.

The research *woreda* are characterised by being food-poor areas, as opposed to food-surplus ones, according to the operational classification used by the Ministry of Agriculture, which divides rural Ethiopia into two categories for its large-scale projects: productive and non-

[49] It is a common Ethiopian snack made from a combination of roasted grains such as barley, chickpeas, sunflower seeds and sesame seeds.

productive *woreda*. The latter are characterised by the implementation of the Productive Safety Net Programme (PSNP), a programme of food security, climate adaptation and social protection, the execution of which, in the perception of both, farmers and institutions, is linked to their chronic situation of food insecurity. The PSNP does not cover the entire population, which is divided into households as the unit of analysis. In Demba Gofa, Enibse and Shebel, the PSNP has been operational since its inception in 2005, while in Basketo, assessments by regional and federal experts for the selection of the future project phase were underway in the spring of 2022.

The choice to focus on these realities is, on the one hand, in line with CVM's vocation to support the most 'vulnerable' and, on the other hand, it is recommended by the Agenda 2030's admonition that "no one [should be] left behind". And finally, it is in some way guided by the indications of the woreda officials, who prefer to assign the *kebele* furthest from the centre to the NGOs. They can count on greater resources, while they are in a difficult condition of lack of budget, fuel and cars, preferring to travel by motorbike, which is impractical and unsuitable for travelling to the most remote *kebele*. Once the *woreda* has been identified, the choice of *kebele* in which to carry out activities also makes a difference. In Shebel Berenta, for example, the *kebele* where CVM works are those where farmers have complained during our discussions that they do not receive support from any type of project, given that funds of various kinds are concentrated in the lowland *kebele* near the Nile (*Abay* in Amharic), leaving them in the hinterland feeling abandoned.

Regarding the choice of beneficiaries, I opted for internal differentiation as well as gender equality, that is, between PSNP beneficiaries and non-beneficiaries (with the exception of the three *kebele* in Basketo). This decision was motivated by the complex discrepancies in the views of farmers and institutions on the correct placement of the former, which have emerged in the literature on categorisation (Lefort 2010; 2012), and the difficulty of following the criteria and internal mechanisms of segmentation in eleven different *kebele*.

The division of Ethiopian smallholder farmers into two sub-groups between model farmers (a category not only of census but also a political one) and food insecure farmers, represented by all others, was not applicable in these contexts. In fact, during my first data collection in 2021, I was told by the woreda offices in East Gojjam that no farmer could be considered a "model farmer" because no household met the necessary criteria, a consideration later confirmed to me by the farmers themselves and also found in the South. For example, on the basis of strictly economic criteria, Rohne Till (2022, 47-48), following John W. Mellor's (2017) categorisation,

does not speak of model farmers but of small commercial farmers (SCFs). They are those who own relatively large plots of land, typically have access to farms of 0.75-5 hectares to generate enough income to exceed the poverty line of $1.90 per day, and are located in areas with more favourable agro-ecological conditions and/or market linkages. Additionally, the three-group subdivisions of farm households used for training have also shown their limitations in the literature (Lefort 2010; 2012). Furthermore, the analyses of Lefort (2010) and Chinigò (2022) show that the creation of this population group also represents a political category, i.e. it is characterised by being a party vanguard.

Moreover, even the division between beneficiaries and non-beneficiaries of the PSNP was not so clear-cut and objective, not because of the status, but because of the reasons behind that benefit, as clearly emerged during the FGDs, with accusations of favouritism and corruption against those responsible for the selection. Moreover, even the division between beneficiaries and non-beneficiaries of the PSNP was not so clear and objective, not because of the status, but because of the reasons for this benefit, as was made clear during the FGDs, with accusations of favouritism and corruption against those responsible for the selection. Finally, if the peasants I interviewed presented themselves as «we are poor», they also stated that there were farmers who were even poorer than them, and that they were not necessarily the landless or just net food buyers, those whom Lefort calls kulaks and proletarians (2010, 450). By «poorer than us», they were referring to a condition expressed in the fact that these families owned land but were unable to buy fertiliser and improved seeds, according to three FGDs conducted in 2022, one in Demba Gofa and two in the other two *woreda* of East Gojjam. In other words, the most extreme poverty, as perceived in economic terms, went beyond mere land ownership. This makes the categorisations extremely complex, as are the perceptions of them, aspects which I was unfortunately unable to fully grasp or even explore in their various aspects and contradictions. Internal stratification, even in the case of a subsistence economy, is complex and has been used both as a study of resilience in past droughts and now to measure adaptation to climate change.

The FGD began with my introduction as a researcher and an explanation of my data collection work, which was aimed at understanding their needs with a view to possible future CVM interventions in agriculture, forestry or access to water. It was a presentation that left a lot of room for collection, as I have often heard in the development world, “the list of presents from Santa Claus”, but in a way I knew that the outcome would be determined by the type of questions we would ask them. After my presentation, I asked each person to introduce

themselves by name[50]; age[51]; which *got* they lived in[52]; the number of family member; whether they had any children at school age; religion; access to electricity, or if they use solar cells; and thus, to goods such as radio and mobile phones[53]. We did not ask any questions about ethnicity[54].

These questions were followed by questions about the size and number of plots owned, their characteristics and location by agro-ecological zone, and also about the choice of crops grown. These questions were followed by those on the size and number of plots owned, their characteristics and location by agro-ecological zone, and the choice of crops grown. I always followed these statements with the classification scheme contained on page 84 of Westphal's book and reproduced in figure number 6. It was useful for me to understand if there were any significant deviations from this pattern or if there were any changes attributable to the effects of climate change. The answer to this question was that some people were landless, owned only their house, or practised sharecropping, i.e. they shared the harvest equally between the landowner and the farmers who worked the land, who sometimes also paid a cash share.

[50] In Ethiopia, the anthroponym of each person consists of the person's proper name and the name of the person's father, hence the patronymic not the surname. In the text, as agreed with the interlocutors, they and the officials are referred to exclusively by their first name and in their capacity/role in the context of the research. Instead, the lecturers met are referred to by their full name, also in the light of their bibliographic production. Finally, in the bibliography I have attributed the Ethiopian authors with their father';s name as their surname.

[51] We tried to select representatives from different groups, from young men and women who already had families of their own to older people. Although the question about age was one of the required components in the biographical profiling, and I was cowardly glad that ventriloquism shielded me from a certain kind of embarrassment (much more so in the case of questions about education), the answers of both male and female farmers were in many cases blatantly untruthful, as is also very common in urban contexts, sometimes triggering hilarity.

[52] For the purposes of a greater differentiation of perceptions and needs I encouraged the selection of people from different *got,* inside the same *kebele*.

[53] They were crucial for understanding whether they had access to weather information, which the farmers admitted was unreliable. In any case the latter more often than the former.

[54] Since there were high tensions in the country, not knowing what consequences that question of mine might have, I thought that maybe something would emerge from the discussion, but it never did. This shows how it was not an easy time to be there 'asking questions' and touching on some hot topics, precisely because of the consequences this could have in speaking, remembering, possibly omitting or concealing one's ethnic appearance in a group, according to dynamics I had already observed. In fact, I report how in April 2021 a bricklayer from CVM, of Oromo ethnicity, a long-standing member of the Basketo staff, was moved to work on WASH UP activities in East Gojjam because of his experience and skills in guiding other workers. There were a few instances of slight 'tension', in which his not being Amhara was pointed out, intuited, I was told, by his less than perfect Amharic and somatic features. In addition, I intend to use the material gathered in the presentations for a mapping exercise, which has been postponed at the moment because it is considered of secondary importance.

Table 2. Altitudinal range of some crops.

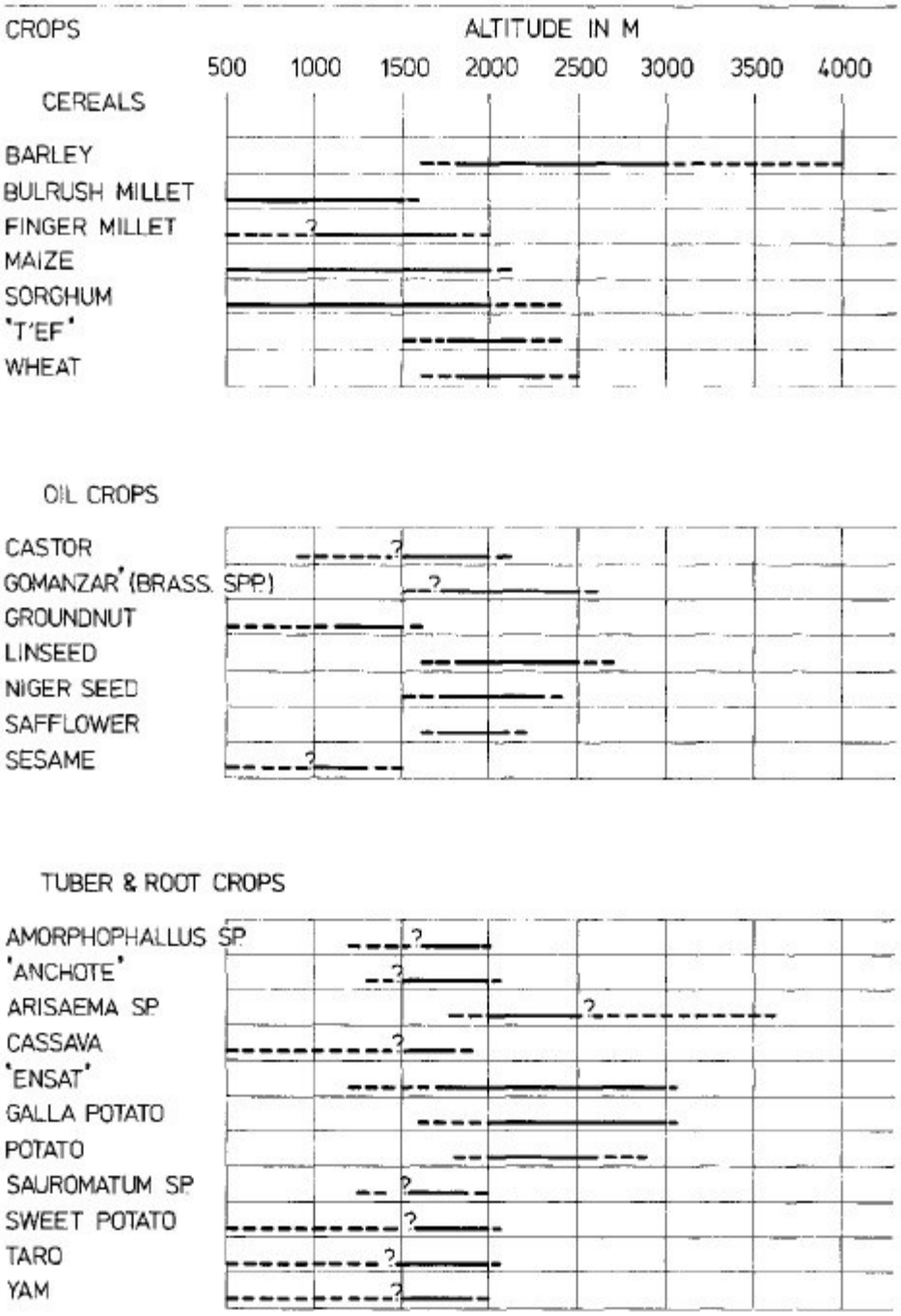

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Figure 7 - Page 84 of the book by Westphal and Stevels (1975), containing tables with the altitudinal ranges of major Ethiopian crops, used during interviews and FGDs.

The next step was to ask each of them whether they defined themselves as farmers or did other work. In all cases, they defined themselves as farmers, even if their only source of income was the preparation of *talla*, coffee and tea in the case of women, or if they did not own the land, they worked as daily labourers, in the case of men.

I asked whether they also had a garden, although I was not anticipated by the women in the Basketo and Demba Gofa *woreda* (Peveri 2012), and in one case by a man in the Lotte kebele because he grew chat (*Chata edulis Fork*), a psycho-active plant in his garden.

Another important question concerned the property of livestock, a fundamental component of agricultural activities in the Ethiopian context. At this point I had noticed in previous and exploratory FGDs that when it came to livestock, the cyclical and familiar theme of drought and its own "change" emerged as animals became weaker, less productive. Animal health is in fact the indicator of wider environmental conditions. At this point, in most cases, we began to analyse the issue of change in more detail, i.e. whether they were deviating from the past in terms of the type and timing of crops to be sown, the change in the soil (*afarù in Amharic*), the change in the environment (*akababi*), which we asked them to define.

Hence the discussion began, ranging from the state of plant health to the rainfall regime, temperature trends, and the issue of fertilisers being delayed.

The FGDs then turned to comparisons with the past, i.e. whether they could think of any droughts they had experienced and how many they could remember, and whether the current conditions they had described so far worried them. If the word climate change had not been explicitly mentioned in Amahric during the FGDs, we asked them if they were familiar with the concept, if they had heard about it from others, e.g. DAs, how they had explained it, or what they thought were the causes of these changes. At this point we asked them if they were taking any specific actions as a family and as a community at the got and kebele levels, and if they had noticed any change in the actions of the *Mengist* in the face of the changes that were taking place. Therefore, we asked if they had taken any specific actions since 2019 in relation to the Green Legacy replanting campaign in the country, which was specifically undertaken by Prime Minister Abiy Ahmed. Finally, we asked if Covid-19 had had any impact on their lives. And, if it had not already come up, we talked about the aftermath of the war and how they saw the future. After all, as Susan Crate and Mark Nuttall point out about their studies of Arctic peoples, «climate change is a lived experience, and anthropological research seeks to understand not

only how people live with such change, but also how they reflect on past changes in order to negotiate current circumstances and anticipate future ones»(Crate and Nuttall 2016, 17-18).
Discussions were generally very dynamic and participatory, very often someone would join the FGDs. It was indeed difficult to maintain a certain order, but I did not want to interrupt the lively debate that sometimes ensued, partly because letting them talk raised some interesting topics. From the research on how farmers experienced climate change, we ended up talking about health insurance as a service that demanded higher costs but then never gave guarantees, always finding excuses not to provide services. It was a phenomenon that the farmers did not link to climate change at all, but which had to be taken into account because of new diseases and ailments that were increasing in the area and leading to new hospitalisations.
And while I still wonder today, following the analysis of the data collected, what other deeper "digging" questions I would like to ask the farmers, some issues turn out to be central, inescapable for understanding their condition, such as the issue of rampant inflation. The farmers suggested that I should not waste time finding out the costs of livestock at the market or other small industrial products such as soap, because they would change in a month's time.
Another crucial issue, related to the delayed start of the rains, was the equally, if not more serious, shortage in the country and the soil's thirst for fertiliser. Therefore, in the development of my work, the analysis of the supply system of agricultural inputs, fertilisers, and seeds, took on an extraordinary importance, considering how strongly it was considered by the farmers to be their main concern. It was not, in fact, a question of tenure insecurity and the fear of being deprived of land, but of not even having control over the inputs needed to cultivate it. And the feeling of tenure insecurity, at least in the SNNPR, in Demba Gofa and Basketo, was not due to the possession of the new second level land certificates (georeferenced system using orthophotos), but rather to resignation to poverty[55]. Their most common comments were «We are still farmers, we are still poor» (FGD, April 2022, Lotte *kebele*, Demba Gofa); or «What more do they have to take from us? We already have only 1/4 hectare, what do they do with it? » (FGD, April 2022 Awrasosta Basketo).
On this issue, however, the perceptions and concerns gathered during the fieldwork in East Gojam had changed. Here, the problem was not at all related to the presence or absence of orthophotos and georeferenced land certificates. In fact, in Enibse the distribution had taken

[55] At the national level, formulas are being developed to produce certificates for pastoralists. This is a process with important consequences, as they have always been a problematic presence in the country and in state building projects.

place sometime earlier, while Shebel Berenta remained one of only two *woreda* in all of Amhara that had not received any certificates. Rather, in East Gojjam in the spring of 2022, the possibility of the TPLF's return to power by winning the conflict against the federal forces reawakened the spectre of the 1997 land redistribution under the EPRDF, which had decreed an end to the privileges of the *birokrasi*, a minority of farmers but conspicuous and powerful in these *woreda*. «The words derive from bureaucracy, due to the local functions this group had assumed under the Derg regime, and which had led them to obtain, much more land than the regime had promised them egalitarianism» (Lefort 2010, 439).

However, although they did not emerge in any particular order, the grammar of describing concerns about the changes taking place was common, even in the face of an internal stratification of resources. One difference in terms of greater economic security was the possession of animals, from oxen to cows, sheep and chickens, also useful in maintaining a cycle of buying, selling and paying off debts; the possession of the kitchen garden, where potatoes, sweet potatoes in the south, and cabbage could be grown; or the number of eucalyptus sticks, multipurpose trees, important cash crops. From Eastern Gojjam to the two *woreda* of the SNNPR, an important element of economic stratification was proximity or remoteness from the centre, from the city, where they could access a larger market that physically took place every week, from health services for themselves and veterinary services for their animals, from a possible labour market for daily work given the expansion of the city, and finally from a shop (*sukr*) where they could recharge their small mobile phones, often called "carcasa" in Amharic, indicating its difficult and slow operation. This was particularly evident in the links between the peri-urban *kebele* of Sassa, one of the closest to Laska town, and that of Doma 08, the closest of the three to Mertule Mariam town in Enibse *woreda*.

Some of the farmers I interviewed cultivated plots as small as one or two *timad*, or a quarter or half a hectare, and only four had plots as large as two hectares. None of them even described themselves as "model farmers", including the kebele chairman of Doma 08, who also had day labourers working the land for him. Young Basketo, from Lotte kebele in Demba Gofa *woreda*, preferred to define herself as a 'trader', involved in the business of trading coffee and nuts, where she recognised her husband as a farmer. Another young woman, Agnale, the wife of a primary school teacher in Sassa *kebele* of Basketo *woreda*, described herself as an 'owner' of one and a half hectares of land - an interesting perception in a country where land ownership does not exist - and employed other farmers on her plot as day labourers. She was also the only one to own a hybrid cow, i.e. one that had been inseminated with semen from a non-local

animal. Then there are two cases of landless women, one widow from Tenta *kebele* in Enibse, Etianech, who has already transferred land ownership to her son and now lives on her work as a coffee, *talla* and *arake* maker, respectively a local beer and liqueur,and the PSNP contribution, as well as another widow. Her name was Butuita, who is tied to her husband in a traditional marriage, i.e. polygamous[56], and since she is not the first wife, she received nothing, nor did her son, and therefore lives on the PSNP, the *gabi* production.

It was Butuita who answered my question about the future with these words: «Bring me with you. I am tired of this file, my son, I know, is tired to share his small money with me. Bring me with you where I will not suffer anymore the struggles of life». The fragment of Butuita story is one of the most striking testimonies of how much I missed without conducting individual interviews or collecting life stories. Other segments emerged, depending on each person's capacity or willingness to better situate and explain their own answers, such as that of the soldier Bereket «I lived through the horrors of the famine of '84 as a soldier and we paid for that, we soldiers used to leave a contribution, a part of the pay, now that I am old I have to pay for another war». I would have liked to construct this research as *Storie climatiche. Testimonianze dal mondo dei cambiamenti climatici* (Ediciclo, 2020), by Roberto Barbiero, climatologist, and Valentina Musmeci, journalist and photographer. Or being able to conceive this thesis between farmers' memoirs and historical, political and scientific arguments as in Andri Snær Magnason's *Il tempo e l'acqua* (2020). In the end, I tried to weave the polyphony of the problems, which unfortunately loses the depth of the lives and experiences that gave rise to the ideas, but also the strength, the criticality of the structural problems, such as the difficulty of finding the production inputs to work the land, fertilisers, amidst the anger of some farmers or the resignation of others and their utter confusion. During the 2022 fieldwork, fertiliser supply was in crisis, a crisis worse than that caused by the pandemic the previous year, and which had already emerged during the 2021 meetings and interviews. And it was a key element in identifying and building the unsustainability of smallholder farmers and the entire agricultural supply system, which, despite all these contradictions, was in line with the national economic plans and the Ethiopian state's strategy for a green economy and climate resilience.

[56] Such forms of marriage have remained unregulated, the draft proclamation of 2020 plans to regulate such a union with an article Registration of Rural Estates of Couples in a Polygamous Marriage which states: «Without prejudice to the prohibition of polygamy under the Criminal and Family Codes, when a person has two or more wives, the landed property shall be registered so as to protect the rights of all wives in the polygamous marriage. The details will be provided by regional laws». The draft of the law was provided to me by an employee of the Ministry of Agriculture reached by snowballing.

Representatives of the institutions (and DAs): While the information I requested from the *kebele* chairman was useful in providing me with the *kebele* profile, challenges and PSNP beneficiaries, to give me an overview of the context and to better understand what aspects to focus on during the FGDs with farmers, based on *kebele* topography, crop types, etc., the core of the institutions I met with were the representatives of the *woreda* and various departments' Agriculture Offices. But meetings with representatives of the respective departments at zone and regional level were also very relevant. To a lesser extent, the Zones and Regions that I visited briefly to understand the priorities, the interventions, whether they had specific echoes, were all meetings aimed at finding out what the projects were, how they were presented and contextualised in terms of tackling climate change, what areas they considered to be priorities. In essence, they were describing their actions by including them in the economic development plans. But still, in 2022, no one had told me about the ten-year economic plan of Abiy's government, even though it was already available in Amharic from 2021, and in English there were only twenty pages of slides.

I was interested in the officials' perceptions of climate change and, in particular, what strategies they had put in place to deal with it, whether they were undertaking specific, cross-cutting activities that could be part of the climate-resilient green economy I mentioned earlier. I soon realised that this was the prerogative of the Forestry Department, the Environment Department, which had to carry out the monitoring and evaluation of the other departments, but especially at urban level. When talking to the institutions about the current situation of their work, two elements emerged repeatedly. The first can be summarised as follows: «Ethiopia is a country with many problems. Drought, poverty, floods, war, underdevelopment. And now we have climate change» (Food Security Department official, Demba Gofa *woreda*, April 2022).

And the analysis that the problems in agriculture are due to the lack of investment, technology, mechanisation and, of course, the bad attitude of the farmers: «They use traditional methods, they say yes, but for them yes means no. Something has changed in their behaviour, now they are starting to understand. It is difficult; we cannot solve the problem of Ethiopian agriculture alone» (Natural Resource Management Department official, Enibse woreda, May 2022).

And very often, the responses were a recapitulation of the literature on agriculture in Ethiopia and the farmer issue (Death 2016).

There was a constant risk of rhetorical interviews (Renzon 2007), where officials responded to me more like printed reports. Over time, my senses were trained to understand the rhetorical mechanisms contained in their answers and the narrative of agriculture in Ethiopia and the

unravelling of the unsustainability of an agricultural system whose distortions were mainly attributed to farmers, between paternalism and blame, and to which climate change was not an addition but a way of bringing all the contradictions further to the surface. I do not want to create a dichotomy between the representatives of the institutions and the peasants because, as in the case of the farmers, apart from Embyalo, who acted as my translator, I did not get to know any of them in depth.

Civil society: At that time, they were following closely, through meetings and workshops, the preparations for Conference of Parties (COP) 26 in Glasgow, in which a very small delegation of them, unlike the numbers of civil society in other African countries. They were small, and rather than activists tout court, they were people working for environmental NGOs. They themselves complained that they had little visibility, which translated into a lack of sponsors to cover the expenses of attending COP26, unlike in other African countries, Kenya, Uganda, a small country compared to Ethiopia, but which could count on a larger representation. Moreover, the fact that the events of the civil war had made the participation of the institutions, in particular the Ethiopian Environmental Commissioner, doubtful, was particularly significant. In fact, I would probably never have gone this far in analysing climate governance, other than the need to understand its mechanisms and technicalities following these meetings, having always dismissed them as red carpets and the famous *blablabala* pronounced at Greta Thunberg's PRE-COP in Milan in 2021.

The world of activism is still soundless and active, one meets in hotels, one has meetings with a style recognisable even to that of the institutions. The real, strongly critical voice is that of Million Belay, which will be discussed at length in chapter three. It is also a world of academic experts, first and foremost Prof. Takele Asefa Merid, cultural anthropologist and Director of the Institute of Ethiopian Studies, who agreed to be my co-supervisor. By virtue of their academic positions they were also approachable as politicians, though like Teshome Soromessa, who was familiar with the context of Delba Gofa having done research on coffee plants, Professor of Environmental Sciences, and also institutional experts such as, Prof. Fekadu Beyene, former Commissioner of the Environment Forestry Climate Change Commission (EFCC); and Feleke Woldeyes (PhD), Deputy Director General of the Ethiopian Biodiversity Study (EBI), an expert on Basketo woreda.

Finally, it was also interesting to discuss with the Health Extension Workers, semi-professional health workers in Ethiopia with whom CVM, in light of the WASH projects, works. It was

interesting to gather their perceptions of the effects of climate change on animals, since the farmers were mostly focused on the effects on plants and cattle.

5. Research questions and thesis structure

The thesis is structured in a way that reverses the presentation already seen in the introduction, whose four chapters attempt to reconstruct the answer to the research questions. The first question concerns what climate change means to the farmers met in CVM's WASH-UP project *kebele*; how they narrate and experience it; and what challenges it poses to their daily lives, given their subsistence farming and dependence on rainfall. The second question concerns the policies and politics of the Ethiopian state in the face of the challenges of climate change, given the role it has assumed in African and global climate leadership through the actions of its leaders.

Hence, the first chapter aims to reconstruct the narrative, governance and governmentality of climate change and its historical roots. The former is identified with the Anthropocene, whose narrative is inescapable when addressing climate change. Climate governance is analysed in its approaches to mitigation and adaptation, stemming from the paradigm of techno-managerialism and ecological modernisation outlined in the 1970s and established in the following decade. Finally, the governmentality of climate change has developed within the global system of a division between North and South, polluters and innocent countries, according to the performance dichotomy of development and underdevelopment.

The second chapter analyses the role of Ethiopia as a green state, as defined by Carl Death (2016), in this global system. The Ethiopian state not only uses these climate sensitivities (many policies, plans, commitments) to extrovert them and prove themselves virtuous, but also uses them to legitimise its vision of growth through hydroelectricity production through dams and intensive agriculture in the country through the green economy, for example, and to strengthen its own power, as seen in Abiy's Green Legacy initiative.

In the second chapter, the role of Ethiopia as a green state, as defined by Carl Death (2016), is analysed in this global system. The Ethiopian state not only uses these climate sensitivities (many policies, plans, commitments) to extrovert them, proving to be virtuous, but also uses them to legitimise in the country through the green economy, for example, its own vision of growth through electricity and intensive agriculture as well as to reinforce its own power as evident in Abiy's green legacy initiative.

In the third chapter, we move on to reconstruct the perceptions and descriptions of climate change by the farmers living in the eleven kebeles selected for research. In the very grammar of the crisis they used, it was evident how past droughts and famines provided a benchmark in terms of semantics, aetiology, and response. And while the current crises were occurring faster and more violently, their problem went beyond the lack of rainfall, but was related to the shortage of fertilisers. From North to South in all their capillarity, independent of agro-ecological differences, the stories and mechanisms of an agriculture that, however much it has avoided talking about the green revolution, is within it, opposed by the agro-ecological practices of the EBI and MELCA.

Finally, the fourth chapter intends to close in the name of the catcalling with which this thesis opens, by showing how Resilient Landscape and Livelihood Project (RLLP) and Productive Safety Net Program (PSNP), two state-led mitigation and adaptation projects, actually reintroduce old practices of environmental management, of strengthening state control over resources, now in the name of climate change.

Chapter 1. Unpacking the construction of climatic gattopardism

As I climb onto your back,
I will promise not to sting
I will, tell you what you want to hear
and not mean anything
Then I, treat you like a dog,
as I shoot my venom in
You pretend you didn't know,
that I am a scorpion, oh

My self, I'm centered in
There's nothing else, there's never been
And I dream, to be left alone
With the sadness, the madness of my own
Look deep, into my soul
It's black as coal, like a bullet hole
Fear not, get off your knees
There's no defense,
you'll do what I please, oh-oh! […]

My lies, to reach the shore
I aggrandize, and nothing more
My hopes, to steal away
All that you love, I'll soon betray
Look deep, into my past
The pain I feel, is unsurpassed
I'm not, a lowly scorpion
I'm so much worse; I'm the fall of man.

Megadeth, The Scorpion

The aim of this chapter is to analyse how the narrative, governmentality and governance of climate change have been constituted in full continuity with the management of environmental and social problems on a global scale. And therefore, they have not represented a break, a transformation capable of coping with the critical situation of our time, which, metaphorically speaking, is not in front of us, but in which we are immersed. In the first place, the narrative *par excellence* of anthropogenic climate change is represented by the Anthropocene, with which it shares the explicit reference to the responsible impact of the actions of the human species, which thereby presents itself as an environmental and geological force. In the second place, governance refers to the process of negotiation between national governments to reach international agreements to combat climate change (Bagliani et al. 2019, 176). Finally, by climate governmentality, I mean a governmental apparatus (*dispositif*) in the Foucauldian sense, a nexus of expert knowledge, veridiction procedures,

institutional arrangements and political strategies that allow for governing behaviours in a particular way. The three concepts are inextricably linked, it is not possible to treat them separately and more and more scholars are analysing the relationships between them, even arriving at different positions. If for Luigi Pellizzoni the Anthropocene narrative is epiphenomenal (Pellizzoni 2022, 50), in Arun Agrawal's analysis, governmentality is not epiphenomenal with respect to governance. According to him, «governmentality is a useful lens through which to examine political fault and governance programmes» (Agrawal 2005, 222). Moreover, it allows us to analyse the mechanisms that have contributed to the material-semiotic configuration of governance, while introducing unique new angles in the study of human-environment interaction (Ting-jieh Wang 2015, 329). Thereby, after having cleaned out the toolbox, albeit in a very cursory manner, I intend to analyse how climate change entered global politics in the 1990s of the 21st century, how it was received by the United Nations system, and finally how in thirty years it was constructed as a global regime. Most importantly, following the approach of political ecology, I intend to illustrate the political and historical dimensions of environmental narratives, deconstructing them and exposing the governmental devices that harness humans and non-humans in an invisible web aimed at maintaining the *status quo*.

Over the past three decades, a growing interest of political ecology has been how the management and governance of first the environment and then the climate have become normal and widely accepted within communities and individuals themselves. The best-known example is market mechanisms, such as carbon trading, which internalise all the negative externalities associated with environmental damage and climate change, as well as the insistence on the importance of resilience and adaptation to climate change by individuals and societies. This process has been described in Foucault's terminology as governmentality. For Foucault, the logical extension to the notion of power/knowledge is that some logics come to pervade a network of power relations so that people, groups, and institutions within that web come to naturalise and accept these logics as their own.

In this sense, in author such as Robbins (2012), the concept of governmentality resembles those of ideology and hegemony of Antonio Gramsci. People do not make up their mind about what is right, good, proper, and appropriate and then act it out, but internalisation of these norms is a product of daily action, interaction activity, and work. «Instead, they act out their social and political interactions in the world and these come to govern their selves. In other words, what people do precede who they are and what they think; practice precedes self; the body becomes the site of politics. The implications for political ecology are startling and significant» (Robbins 2012, 75-76). It is from this consideration and the need to unpack such a system that the concept of climate change *gattopardism* takes its cue.

It is a term taken from semiotics and also used in literary, political and managerial language to indicate the conservative strategy of changing form in order to maintain the old state of affairs under the guise of novelty (La Fauci 1994). Obviously, the concept contains a clear reference to the novel *Il Gattopardo* by Giuseppe Tommasi di Lampedusa (1958) and the famous quote pronounced by Tancredi Falconeri, nephew of Don Fabrizio Corbera, Prince of Salina, known as Gattopardo: «Se non ci siamo anche noi, quelli ti combinano la repubblica in quattro e quattr'otto. Se vogliamo che tutto rimanga com'è, bisogna che tutto cambi»[57].

It is precisely the fact that climate change has been revealed in all its dangerousness, scientifically founded and empirically proven, that makes it necessary to ensure that the abundant scientific production of recent decades, both from the hard and social sciences, leads to a change in policy (Crate and Nuttall 2009).

Therefore, before seeing on the ground, in the next chapters, the consequences of implementing business-as-usual practices, it is necessary to realise and grasp the non-transformative approach (Barca 2020, 7) related to the 'management' of the climate change 'problem' that has institutionalised itself in discourses and practices that are far from being innovative.

To grasp and analyse the elements of climate change *gattopardism*, we take up the suggestion that Mary Pettenger places in the pages of her edited volume *The social construction of climate change* (2007). The author argues that «it is analytically easier to describe the underlying normative discourses and debates than to understand how the dominant discourse emerged or to explain why a norm achieves political salience and a competing norm does not». The review in these pages seeks to make this critical contribution, drawing on how climate change *gattopardism* has become more easily identifiable and intelligible precisely in the now mainstream concept of the Anthropocene.

1. *Anthropocene: too many anthopoi?*

Fom the ancient Greek words *anthropos* meaning 'human being' and *kainos* meaning 'recent, new', the Anthropocene identifies the epoch in which «the human imprint on the global environment has now become so large and active that it rivals some of the great forces of Nature in its impact on the functioning of the Earth system». The term was coined by Nobel laureate in chemistry in 1995

[57]With precisely this exception, 'gattopardism' was also used in reference to the Brundtland Report's concept of sustainable development by Gilbert Rist (1997, 185) in Le Développement. Histoire d'une croyance occidentale (Lo sviluppo: storia di una credenza occidentale (1997), Bollati Boringhieri).

Paul J. Crutzen and Eric Stomer in 2000, appearing in the article entitled *Anthropocene* in the "Global Change Newspaper". But Crutzen and Stomer's neologism was not really a new concept: the idea that human power, for better or worse, had caused physical transformations had already emerged in geology in the previous century, from which various genealogies can be traced. In any case, traces of the power of *Anthropos*, which refers to humanity as a species, to ascribe value to nature in terms of its usefulness to humans, go back to the culture of the Western Enlightenment and the moral tradition of the Abrahamic religions, which proclaimed the moral dominance of humans over other species and the material world (Brightman and Lewis 2017, 14; Strang 2017).

However, it was not until August 2016 that an official panel of experts at the International Geological Conference recommended a formal declaration that the Earth had entered the Anthropocene.

This concept, which refers to a daunting transformation of the Earth's biogeochemical cycles and resources by industrial activity, is undoubtedly broader than climate change (Conversi 2022, 34-35). Nevertheless, the hyperobject nature of the climate change (Morton 2013) and the metonymic relationship between climate crisis and the Anthropocene are undeniable and are two ways of framing the same ongoing transformation in a narrow and broad sense (Whitington 2016, 10). And so it is that the climate change crisis finds its powerful, «although not entirely unproblematic» narrative in the Anthropocene (Bergthaller et al. 2021, 302).

After all, it is precisely the increase in atmospheric emissions that links the periodisation of the Anthropocene, or rather its various periodisations, to the phenomenon of climate change. For example, Crutzen, but also Andres Malm and Alf Hornborg believe that it was the invention of the steam engine at the end of the 18th century and thus the energy-industrial revolution that marked the beginning of the new epoch. John McNeill, on the other hand, believes that the origin is to be found in the Great Acceleration that occurred after the Second World War with the establishment of a neo-liberal and Fordist economic and production model. Agriculture itself is seen as a determining agent of climate change. From the beginning of its development, even before the gas emissions caused by the industrial revolution, those from agricultural activities caused the global temperature to rise by 0.6-0.7 °C and increased greenhouse gas concentrations rapidly above their natural levels. Thus, already several thousand years ago, humans took over from nature in commanding the climate, having a modest but growing impact, and this first influence is precisely related to agricultural activities (Ruddiman 2015).

In any case, the Anthropocene narrative puts humanity back at the centre of the discourse, it is a «surprising reversal of the Copernican revolution» (Aït-Touati and Latour 2017, 233), perhaps in an overly Eurocentric way. For Bruno Latour (2017), the Anthropocene is a gift to anthropologists

because, with natural scientists now having to account for stratigraphically detectable human activity, a breach is opened in the traditional division between the natural and social sciences that has long challenged the discipline of anthropology. With the recognition of human impact on nature, it is now clear to all that nature (the object of science) is not really separate from culture. On this aspect, from anthropologist Roy Rappaport's *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People* (1968), to Philippe Descola's programmatically titled book *Beyond Nature and Culture* (2005), to Tim Ingold's *The perception of the environment: essays on livelihood, dwelling and skill* (2001), have long criticised the treatment of ecology or the environment as something external, separate from human culture and society, insisting rather that the environment not only surrounds human societies but is the product of social practices of setting (Bergthaller et al. 2021,37).

On the contrary, in 2013, as quoted in the *Routledge Handbook of Environmental Anthropology* edited by Helen Kopnina and Eleanor Shoreman-Ouimet (2017), Clive Hamilton[58] argued that the dramatic impacts of climate change could spell the end of the social sciences and that the, for him, Kantian dualism between humans and the environment «can no longer be sustained, that the natural and the human are intermingled and their influences cannot be sharply distinguished» The advent of the Anthropocene, Hamilton warns, shatters the self-sufficient world of social analysis that is the terrain of modern social science, and explains why the intellectuals who are part of it are unable to analyse the politics, sociology or philosophy of climate change in a way that is faithful to science, and end up «floundering in the old categories, unable to see that something epochal has happened, a rupture on the scale of the Industrial Revolution or the emergence of civilisation itself» (Kopnina and Shoreman-Ouimet 2017, 5). Even more consistent is the first of Dipesh Chakrabarty's four theses, which in *The Climate of History: four theses* (2021) goes so far as to argue, among other things, for the end of the separation between natural and human history. Or, more poetically, in *Climate and capital: on conjoined histories*, he argues that «the climate crisis reveals the sudden reshuffling - the enjambment, if you like - of the normally separate syntactic orders of recorded history and the deep history of humanity, of species history and earth history, highlighting the broad connections through which the carbon cycle and the life of the planet interact» (Chakrabarty 2021, 116).

Instead, for Donna Harawey, the concept of anthropocene is more 'a thing', then a gift: «I use "thing" in two senses that rub against each other: 1) the collection of entities brought together in the Parliament of Things that Bruno Latour called our attention to, and 2) something hard to classify, unsortable, and probably with a bad smell» (Harawey 2016, 69, footnotes 35).

[58] Hamilton, C. 2013. Climate change signals the end of social sciences. *The Conversation* posted 25 January. http://theconversation.com/climate-change-signals-the-end-of-the-social-sciences-11722

It is likely that the bad smell emanates from the fact that the anthropocene narrative contains an old, antiquarian approach. Indeed, as we have seen, human beings discover themselves to be part of nature and end up reasserting their exceptionalism (Del Gobbo and Leonardi 2019).. As Jason Moore (2017) and Eileen Crist (2016) argue, this is an extremely dangerous practice, especially when it comes to humanity, a veritable abstraction with a long history of racial, colonial and gender-based violence. «Are we that short of imagination?», Eileen Crist (2016, 27) asks rhetorically. «Such is the poverty of our nomenclature that we once again bow before the tedious display of man. To offer a name that has no added substantive content, no specific empirical or ethical nuance, no higher vision contained within it - beyond the simple Anthropos that defines a geological epoch. If a new name were needed, then why not have a discussion or debate about what it should be, instead of being forced (for a long time, I might add) to choose the Age of Man as 'obvious'?» (Crist 2016, 27). The point is not to come up with new labels, which is what lies behind the work of cataloguing in the *neologismcene* (Hallé and Milon 2020, 44-45).

In its nomenclature, which is more graphic than discursive, one finds, alongside lesser-known concepts, a series of definitions and interpretations of our time, such as *Negrocene*[59], *Wasteocene*[60], *Chthulucene* [61], *Plantatiocene* [62], *Capitalocene*[63], based on fascinating studies that are much more than a "querelle".

> «No wonder the word Anthropocene has metastasised to the point that Clémence Hallé and Anne-Sophie Milon can talk about *The Infinite Anthropocene: A (Hi)story with a Thousand Names*. The news is so confusing that every discipline, every interest group offers an alternative term, insisting on this or that variable to cope with the maelstrom. This is precisely the beauty of this new geological label: it has spread everywhere and yet it is impossible to establish with certainty the historical period it designates. Indeed, one of the characteristics of the present is that this disorientation can be observed in many different sites and at very different scales […]» (Latour and Weibel 2020, **xxxx).**

But the denomination chosen to mark these troubled times is not a matter of secondary importance, given that the authors programmatically link the use of a new word in opposition to the mainstream idea contained in the "Anthropocene", a clear need for politicisation, and an urgency of understanding and appeasement that the concept clearly does not offer.

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[59] Ferdinand, Malcom. *Decolonial ecology: Thinking from the Caribbean world*. John Wiley & Sons, 2021

[60] Armiero, Marco. *Wasteocene: stories from the global dump*. Cambridge University Press, 2021.

[61] Haraway, Donna. Staying With The Trouble: Anthropocene, Capitalocene, Chthulucene. W: JW Moore (red.), Anthropocene or capitalocene?: Nature, History, and The Crisis of Capitalism (s. 34–76)." (2016).

[62] Haraway, Donna. "Anthropocene, capitalocene, plantationocene, chthulucene: Making kin." *Environmental humanities* (2015): 159-165. And Mitman Gregg "Reflections on the Plantationocene: A Conversation with Donna Haraway and Anna Tsing", Edge Effects Magazine-the Center for Culture, History, and Environment in the Nelson Institute at the University of Wisconsin-Madison (2019)

[63] Moore, Jason. *Antropocene o Capitalocene? Scenari di ecologia-mondo nella crisi planetaria*. (2017) Ombre Corte.

However, if we continue to follow Eileen Crist's line of reasoning, we can argue that the themes of the aAnthropocene are intertwined: the intertwined 'rope' is its discourse. Indeed, while the author moves within the framework of climate materialism, she does not abandon the definition of the anthropocene as a discourse. And for Crist (2016, 15), two main themes are woven into this rope: the theme of the human population, which will continue to grow until it stabilises at nine or ten billion; and the theme of economic growth and consumer culture, which will remain the main social models. Although Jason Moore (2017) himself believes that the anthropocene does not contain a neo-Malthusian element, I suggest that the narrative rather contains a clear obsession with population growth. This phenomenon is well illustrated by a "Horwellian" world population clock updated to the minute. Moreover, the theme of world population growth continues to feature in these terms in some of the inspirers of the concept, namely James Lavelock, author of Gaia, and its defenders such as Chakrabarthy. The latter speaks precisely of a population "problem" (Chakrabarthy 2021, 116 in *Climate and capital: on conjoined histories*) due to pressure on non-renewable resources, especially fossil fuels, impact on other species and migration. There we also find Latour's constant references to the work of the Club of Rome in 1972, when the question of limits was first raised and will be analysed in the following pages.

This is a central element "in the Club of the Anthropocene", which Isabelle Stengers (2021, 69) captures well:

> We know the old refrain of "there are too many of us on this planet, that's the problem", usually rehashed by well-fed experts used to travelling by plane [...]. But if we listen to Lovelock, who has now become a prophet of disaster, it would be necessary to reduce the human population to around 500 million in order to pacify Gaia and live reasonably well in harmony with her. The apparently rational calculations that lead to the conclusion that the only solution would be to eliminate most of humanity by the end of the century can hardly disguise the delirium of a deadly and obscene abstraction. Gaia is not asking for such an elimination. She simply demands nothing (Stengers 2021, 69).

And it is precisely these two constitutive, but certainly not exclusive, elements of the anthropocene discourse - the problem of population and the management of limited resources, and the fear of losing a way of life based on their systematic exploitation - that are by no means recent and did not emerge with the climate crisis.

On the contrary, they go back to the ecological concerns of the 1960s and 1970s. The concept of population itself takes us back to the origins of Foucault's concept of governmentality. In the French philosopher's own conception, the term focused on the relationship between the population and the territory in which it lived (and was specifically linked to the emergence of the liberal state), on the one hand, and its use in the analysis of human impact at the planetary level, from air pollution to the

accumulation of pesticides in the soil, which since the 1970s have been considered interdependent (Pellizzoni 2023, 60), and in this sense, land in the analysis of climate change.

First of all, it should be noted that Foucault never directly addressed the environment, and certainly not the climate. The concept of governmentality emerged during the Fourth and Fifth lectures he gave at the College de France in Paris in 1978, as professor of a specially created chair in the History of Systems of Thought. The books *Security, Territory and Population* and *The Birth of Biopolitics* took their titles from the lectures. Foucault was interested in government as an activity or practice and as a way of knowing how this activity can be carried out. This concept returns precisely in the definition of governmentality, the set of institutions, procedures, routines, techniques, and ways of thinking around which the exercise of power is articulated.

As Johanne Stripple and Harriet Bulkeley (2014) argue, the focus on governmentality allows for the investigation of the "how of government", a broad definition, applied non-systematically, that can be used as a lens of analysis for other contexts and other historical periods, even different and distant from those taken as reference by Foucault in his discussions.

In Foucault's investigation, governmentality emerged in 18th century Europe and concerned the regulation and administration of life at the level of populations (Foucault 2005), focusing on health, criminality, education, sexuality. Indeed, the philosopher had already begun to develop his view of the links between microphysics and macrophysics of power in the final chapter of *History of Sexuality* Volume 1 (1976). Here he had introduced the term 'biopower', to designate the forms of power exercised over people specifically as they are thought of as living beings: a politics that concerns subjects as members of a population, in which questions of individual sexual and reproductive conduct are interconnected with questions of national politics and power. Foucault reintroduced the theme of biopower in his 1978 lectures in a way that links it intimately to his approach to the subject of government.

The population is seen as a complex of individuals essentially and biologically linked to the materiality in which they exist, i.e. the environment, which is thus seen by Foucault both in its natural spatiality as a complex of geographical, climatic and hydrographic elements, and as an artificial context resulting from urbanisation processes, as external to the human multiplicities to be governed (Marzocca 2006; Leonardi 2012).

Foucualt's analysis allows us to conceive of the population no longer subordinated to a naturalistic and territorial function, but called upon to perform a governing function itself, as the object of the biopolitical project, that is, of the policies of regulation of the body-species and of individualisation through the application of disciplines to the body-organism (Marzocca 2006; Leonardi 2012).

Population, both in biological and statistical-economic terms, becomes penetrable with the art of government, which is no longer external, but becomes intrinsic, and unlocks the possibility of governing the environment (Foucault 2005 [2004], 216).

However, in those years Foucault's interest in population was common or was probably the result of a socio-cultural climate that viewed population and in particular its growth with peculiar apprehension. In the United States and in Western "ecocracies" such as the Club of Rome, the idea was spreading thanks to the most popular writings in the environmental debate that centred on the notion of the Earth's carrying capacity, the population-resource relationship (as hypothesised by Thomas Robert Malthus), the idea that population was an agent of transformation (as hypothesised by George Perkins Marsh). From the combination of these two different discourses, it thus emerged that population growth and the consequent reality of overpopulation were the main factor in environmental decline.

It is common to describe these interpretations of ecological crises since the 1960s and 1970s, often used by academics, politicians and the media to explain environmental problems, as neo-Malthusian. However, this is not simply a revival of Malthus and his apocalyptic visions, but the situation was more complex, the mechanisms had become more sophisticated, and it should be noted that the English reverend in his 1793 population analysis did not raise the environmental problem at all, unlike George Perkins Marsh, an American scholar and diplomat. It was the publication of the latter's *Man and Nature* in 1864 that, according to Clarence Glacken, marked the arrival of a modern perspective on the relationship between man and nature, and to which David Worster traces the first systematic documentation of ecological crises to demonstrate the danger to man and nature posed by rapid changes in the global environment (Rutherford 1999, 51).

Marsh's focus on the environment and transformative dynamics impressed Paul Robbins, who regarded him as a forerunner of political ecology, although he reported in a footnote how the nineteenth-century American scholar blamed farmers who «burn and destroy forests to gain possession of the land they cover» (Robbin 2012, 32 - p. 373 footnote), without making any effort to place these actions in a political or economic context. Thomas Robert Malthus, on the other hand, as mentioned above, was not concerned with the environment at all.

«Contrary to modern writers' attempts to claim him as a kind of pioneer of ecology, Malthus had no interest in protecting the environment from human overpopulation» (Angus and Butler 2011, 206).

The view of Malthus as an ecologist has been filtered through some commentators who have helped to misinterpret his work and associate his name with predictions of overpopulation crises.

For the purposes of my reconstruction, I intend to analyse only one aspect of his thought: the two *Essays on the Principle of Population*, published in 1798 and 1803. First, when he argued that agricultural production tends to increase in arithmetic proportion, while population tends to increase in geometric proportion, he was not simply referring to the constant pressure of population, but to the pressure of the poor. He was not the first to attribute poverty to population growth, with precedents in Italy and France (Roncaglia 2006,160), but he was certainly the most influential political statement of the 19th century and destined for great success. And by the end of the 19th century, the number of poor people in England was increasing as the ideas of the French Revolution threatened to take hold in the country, not least after the failure of the cross-Channel expedition to restore the monarchy. By 1978, when the first edition of *An Essay on the Principle of Population* was published, England had lost its 13 American colonies and Egypt, and there were fears about India and the economic consequences of these defeats. Meanwhile, ideas were spreading that were dangerous in the eyes of the Reverend, who wanted to maintain the moral and political order by restraining the pressure for change in economic and social institutions, seen as a prelude to global democratic change, radical reforms aimed at improving the condition of the working class, ending poverty and inequality forever. These ideas had been promoted by William Godwin and Nicolas de Condorcet, both authors of popular books arguing that society could be improved, that everyone could live in prosperity, that an egalitarian society was possible. Malthus addressed them directly in his pamphlet entitled *Essay on the Principle of Population, as It Affects the Future Improvement of Society, with Remarks on the Speculations of Mr. Godwin, M. Condorcet, and Other Writers*[64].

Against the hope of a better life built by improving the standard of living of workers, Malthus countered the argument of moral restraint and 'preventive controls' as the only way to ward off the spectre of poverty with a vision in which he and the English ruling class attributed responsibility for poverty to the moral failings of the poor[65], inaugurating a reading that was to have profound consequences and influence on public opinion. The intent of Malthus's writing is made clear by Ian Angus and Simon Butler's analysis, which aims to undermine some of his environmentalist concerns, as well as population growth *tout court*. «His goal was very different: to prove that most people will always be poor and that no social or political change could ever alter that. Nearly two hundred years

[64] In later editions of his book, Malthus replaced the criticisms of Condorcet and Godwin with attacks on the radical democrat Tom Paine and on the utopian socialist Robert Owen.

[65] "in such a conceptualization, the crisis for the poor lay not in the larger economy or ecology of their subsistence, but instead in and amongst the poor themselves: "In searching for objects of accusation, [the poor man] never adverts to the quarter from which all his misfortunes originate. The last person he would think of accusing is himself, on whom, in fact, the whole blame lies".

before Margaret Thatcher[66] declared that there is no alternative to capitalism, Malthus won the British ruling class to that very idea» (Angus and Butler 2011, 206). It was undoubtedly a powerful assessment that allows us to trace the stages in the construction of this hegemonic and environmental governmentality. In fact, the results of these statements can have serious political consequences, as David Harvey warned in his *Population, Resources and the Ideology of Science* from repression at home to neo-colonial policies abroad aimed at preserving the position of the ruling elite (Harvey 1974, 276).

As Allan Findlay well summarises in a brief review of moments of world population growth, «concern about population growth, however, has been intermittent and seems to have occurred at times of major economic and political restructuring. Specific demographic or environmental events were often implicated in the debate, but the discussion was fundamentally influenced by the geopolitical context» (Findlay 1995, 160).

Indeed, in the 1960s, the ~~'fifth~~ wave of concern about population growth' was linked, on the one hand, to elite concerns about resource scarcity following Organization of the Petroleum Exporting Countries (OPEC)'s manipulation of oil prices and supplies in 1973, a shock that was not only economic but also cultural (Adams 2001, 46), with economic growth in the industrialised countries giving way to recession and inflation. On the other hand, it coincided with the peak of population growth in the least developed countries, which raised fears of the spread of communism, as the influence of the Union of Soviet Socialist Republics (USSR) had spread to China and the United States (US) had experienced a disastrous failure in Vietnam.

In this context, the problem of population growth, which had already appeared in so many works since the time of Malthus, was framed in a parallel and closely related debate with economic growth and the 'catastrophist' environmentalist concern about pollution. This bundle of issues was consecrated in the US at the turn of the 1960s and 1970s with the publication of a series of works destined to have worldwide relevance: *The Tragedy of the commons*[67] by Garrett James Hardin and

[66] The mention is of the TINA doctrine: *There is no alternative*, subtext to capitalism. The critique of this view is contained in the pages of Mark Fihser's book.

[67] It should be noted that Garret Hardin was also previously the author of a well-known article at the time entitled "Interstellar migration and the population problem", *Journal of Heredity*, Volume 50, Issue 2, March-April 1959, Pages 68–70): «What if the fantastic problems of reaching and colonizing the other planets of the solar system, such as Jupiter and Uranus, can be solved? It would take only about 200 years to fill them "Earth-full". So we could perhaps gain 250 years of time for population growth in the solar system after we had reached ·an absolute limit on Earth. What then? We can't ship our surplus to the stars». Indeed, this clarification allows us to continue joining the threads of discourse and consider, for example, Christopher Nolan's well-known 2014 movie *Interstellar* of the same name, considered by many not just a sci-film, but to be a *cli-film*, i.e. a film about a climate catastrophe to which a solution is sought precisely by hypothesising and attempting journeys among the stars of the human population. The elements of continuity do not stop there, between the filmography of the English director and the cultural temperament of the second half of the 20th century that we are analysing. In fact, the film Oppenheimer of 2023 itself is a film transposition of the book American

The Population Bomb by Paul Ehrlich in 1968, and later *The Limits to Growth* by Meadows*, a member of the Club of Rome, in 1972.

Particularly for the purposes of my analysis, it is interesting to point out some aspects of the book *The Population Bomb*, often the least considered of the three, because it did not even try to have a scientific framework but was essentially a bestseller. «Too many cars, too many factories, too much detergent, too much pesticide, multiplying contrails, inadequate sewage treatment plants, too little water, too much carbon dioxide-all can be traced easily to too many people» (Ehrlich 1968, 66-67).

Two elements of *The Population Bomb* deserve to be highlighted because they make it a synthesis of its time, but also because they continue to be reiterated in climate governance and governmentality: the danger of the destruction of nature by human beings *tout court* and its apocalyptic tone, and the dichotomous view of the world. The former stems from the nuclear fears that were very strong in the midst of the Cold War.

Luigi Pellizzoni and Giorgio Osti (2008 [2003], 56) rightly say: «After Hiroshima and Nagasaki, nothing will be the same».

> We are facing a period when society must make decisions on a planetary scale. Tremendous tankers traverse the seas, supersonic transport aircraft traverse the skies, and nuclear explosions reverberate around the world (both physically and in our consciousness). Whereas in the recent past, a whole continent could have been submerged, decimated by plague, or ravaged by eartquakes and the rest of the world remain untouched and unnoticing, today's natural catastrophes and environmental interventions affect the whole of human society - interconnected as it is in reality though not yet politically capable of acting in concert (Kellogg and Mead 1980, xix).

The performative and programmatic division of the world into developed and underdeveloped, which President Truman made in his speech on 20 January 1949, the inauguration day of his second mandate, in which he mentioned the underdeveloped areas for the first time.

> That day suddenly two billion people became underdeveloped. From that moment on, development acquired a further meaning-objective: to get out of the undignified condition defined as underdeveloped as soon as possible. The worldview was radically transformed: until then, North/South relations were largely organised according to the coloniser/colonised opposition. The new dichotomy 'developed/underdeveloped' proposed a different relationship, in accordance with the new Universal Declaration of Human Rights (Rist 1997 [1996], 77).

And it is particularly important because it contains within itself that dichotomous view between the North and the South of the world, i.e. Asia, Africa, Latin America in which the demographic situation was a disaster:

Prometheus: The Triumph and Tragedy of J. Robert Oppenheimer, written by Kai Bird, Martin J. Sherwin (2006), which tells the story of the so-called father of the atomic bomb, who is also the father of the geological Anthropocene. According to many, the radiation produced by the Trinity Nuclar Test left traces, officially detectable on the entire surface of the planet, on every soil, every rock, every metal (Magnason 2020).

> «In fact, countries divide rather sharply into two groups: those with rapid growth rates and those with relatively slow growth rates. The first group, which makes up about two thirds of the world's population, coincides closely with the so-called 'underdeveloped countries' (UDCs). UDCs are not industrialised, tend to have inefficient agriculture, very small gross national products, high illiteracy rates and related problems. That is what UDCs technically are, but a short definition of underdevelopment is 'hungry'. Most countries in Latin America, Africa and Asia fall into this category. The second group are the 'overdeveloped countries' (ODCs). ODCs are modern, industrialised nations, such as the United States, Canada, most European countries, Israel, the USSR, Japan and Australia. They consume a disproportionate amount of the world's resources and are major polluters» (Ehrlich 1970, 6-7). 1968, 6-7!!!

The same bestseller content of *The Population Bomb* was covered in a scientific approach based on models and graphs in the equally well-known work *The Limits to Growth* of the Club of Rome, described by Pellietier as 'an oligarchy' (Pellietier 2021 [2015], 131-132), among which no social scientist stands out. The Club relied on computer simulations to prove its Malthusian prediction, but all of the short- and medium-term forecasts in the 1972 report proved to be fallacious and erroneous. The same concepts are reaffirmed in their second report *Survival Strategies* (1974), which asserts «The world has a cancer, and this cancer is man», echoing the cancer metaphor used in 1968 by Ehrlich: «A cancer is an uncontrolled multiplication of cells; the population explosion is an uncontrolled multiplication of people ... We must shift our efforts from treating the symptoms to eliminating the cancer. The operation will require many seemingly brutal and heartless decisions. The pain may be intense. But the disease is so advanced that only with radical surgery does the patient stand a chance of survival» (Ehrlich 1968, 166-67).

But in spite of the evidence and the many criticisms, the authors of the Club of Rome persisted in their ideas, and this basic message reappeared in 1992 under the title *Beyond the Limits*, testifying to the durability of these Malthusian thoughts and the apocalyptic predictions revolving around the purely numerical impact of the human population on resources.

Paul Elrich also worked on a re-edition of his work years later, by which time "the population bomb" had literally exploded, as his 1990 re-publication, *Population Explosion*, was titled.

A process of conscientization and mobilisation had exploded, involving both the elites and the more extreme ecological movements, the impact of which was immediately apparent. From the very beginning, however, criticism and opposition to this discourse and rhetoric proved to be very strong, first by the American biologist Barry Commoner, who vehemently disagreed with the demographic bombshell and published *The Closing Circle* (1971).

This book became one of the holy texts of ecological thought, like Carson's *Silent Spring*, because it used a powerful metaphor. Commoner's significance lies in the fact that he did not attribute environmental degradation to mankind as it was written in *The limits to growth (A report for the Club of Rome's project on the predicament of mankind)* subtitle, *tout court*, but rather to the modern

economic system, which he argued had broken the circle of life by transforming its endless cycles into linear human events, threatening for the first time in human history the ability to reproduce the resources essential to life on the planet.

However, as much as reflections like Commoner's added new elements to the debate, and as much as in the late 1970s and early 1980s American political ecology would begin to critically reflect on precisely the relationship between environment and power, the neo-Malthusian discourse, the problem of ecoscarcity, and the pollution and degradation footprint of humanity as a whole became institutionalised and took shape in global governance.

2. Development vs environment: from opposition to conciliation

Since the 1970s, the environment, once out of the strictly scientific or activist discourse, has been conceived within a process of environmental governance. The two issues were linked as pressing issues of development, understood both as economic growth and as the global partnership through which rich, developed countries finance developing countries.

Environment and development became the subject of various international conventions and policies, since until then both the demographic and economic growth of humanity had caused damage to the environment, which in Western and hegemonic discourse was considered an alterity of the former. These occasions, spaces for the production of knowledge and political action, aim to stop the pollution caused by capital-intensive production in the industrialised countries of the North, and the degradation of renewable resources in the countries of the South, according to the *topoi* that colonial discourse had perpetrated for decades. Indeed, while in the rest of the world, and in Africa in particular, it was the degraded, mismanaged, eroded, stressed environment of people and animals that was at the centre of the colonisers' observations, when they did not emphasise its wildness and bountiful wealth, in the Western world it was the appeals and denunciations of environmentalists that awakened consciences and informed them of the ongoing ecological crisis.

At the international level, these two worlds, the environment and development, and their concepts, began to be debated in a series of meetings. First, in 1964, with the establishment of the International Biological Programme (IBP) to consider the biological basis of human well-being and, in 1969, of the Scientific Committee on Problems of the Environment (SCOPE) within the International Council of Scientific Unions. Second, with the conservation discourse and activities under the notion of a global conservation strategy that could draw on the forces of the Ecosystem Conservation Group chaired by UNESCO**,** FAO and then, since 1975, UNEP. UNESCO sponsorship was sought as early as 1959 for a review of natural resources in Africa, while some documents were published in 1968

and 1973, linking ecology, conservation and economic development and anticipating the World Conservation Strategy prepared by the International Union for Conservation of Nature and Natural Resources (IUCN) in 1980. In addition, a specific focus on the atmosphere as a 'great international commons' was beginning to emerge (Van Aken 2020, 132), though not yet global warming or climate change, but rather smoke and smog pollution as an issue on the scientific rather than the political and social agenda (Eriksen and Mendes 2022, 7).

Indeed, it was in this context that the Man and Biosphere (MAB) programme was launched by UNESCO in 1971, following the 1968 Paris Intergovernmental Conference of Experts on a Scientific Basis for the Rational Use and Conservation of the Biosphere. It focused for the first time on the growing commitment of First World conservationists and environmentalists to the development process in the Third World. It was precisely the unhealthy conditions of these latter realities that were discussed as a global problem.

However, it was not until the early 1970s, after the celebration of the Year of the Earth in 1970, that the United Nations Conference on the Human Environment (UNCHE), also known as the Stockholm Conference because it was held in the Swedish capital in the presence of representatives from 113 countries and four hundred governmental and non-governmental organisations, marked the first major international summit on the environment in 1972. The Stockholm Conference was one of the first times that environmental issues were discussed at the highest international level, but mainly within the United Nations, which represented the existing model of global governance and whose programmatic intentions did not include the resolution of such problems.

And it was for this reason that the discursive framing of environmental debates was established, reflecting the division between developed and developing countries, narratively re-proposed in the pages of *The Population Bomb*, and now really taking shape at the institutional level. The former wanted to raise environmental standards and protect 'nature', while the latter insisted that economic development and poverty reduction were fundamental goals that could not be compromised for environmental reasons, suffering not the pollution of industrialisation but that of poverty (Death 2014). For the first time, the environment is configured as an element of global governance, with the aim of identifying and understanding the range of actors involved in decision-making. «State agencies, scientists and advocacy groups are crucial in producing discourses and 'visibility' that identify environmental problems and solutions at national and international levels» (Ting-jieh Wang 2015, 324).

But UNCHE is also the origin of the way in which environmental problems, and then climate problems in particularly, have been addressed globally.

The 1972 conference did not deal with the issue of the relationship between poverty and the environment, which was the focus of the Cocoyoc meeting in Mexico in October 1974. In fact, the Cocoyoc Declaration «emphasised the problem of the poor distribution of resources and the internal limits of human needs and the external limits of resource depletion. It indicated *basic needs* and called for a redefinition of global development goals and lifestyles» (Adams 1995,359, italics mine)

Another important consequence of the Stockholm Conference was the creation of the United Nations Environment Programme (UNEP) in 1973. Although UNEP is not a 'direct agency' like FAO, for example, but rather a co-ordinating body for environmental policy across all UN agencies, it was in principle ideally placed to oversee the development of a coherent and integrated UN environmental policy. The fact that this agency is headquartered in a Third World country, Kenya, suggests, if only symbolically, that Third World interests and concerns can be given priority in the United Nations system (Bryant and Bailey 1997, 96-97), although in reality, as we shall see in the next sections of this chapter, with the greening of the lead agencies in the 1990s, it was emptied of meaning and its actions led to disappointment and frustration.

In any case, important initiatives were promoted since 1972, among which the UNCHE Action Plan contained one of the first references to climate change in an internationally negotiated document, namely the recommendation to governments to «be alert to activities where there is an appreciable risk of climate effects». The relationship between development and the environment, however, remained firm on the idea that development should not be compromised by the protection of the environment (Principle 11) and that indeed development was necessary to improve the environment (Principle 8) (Adams 1995, 358).

But the key aspect is that with the Stockholm Conference we witness the establishment of the process of global management of environmental problems, which is necessary given the nature of the problems that go far beyond the boundaries of states, but which Kay Milton quoting David Ehrenfeld 1978,12[68] describes as «the arrogance of humanism, a supreme faith in the capacity of human reason to overcome all difficulties and solve all problems», and the anthropologist continues, also definitively an iconic displacement of the earth, of the Blue Marble, no longer as a symbol of its fragility, but of the possibility of becoming an object of planning and polities (Milton 1996, 186-187).

There are many authors who have analysed the relationship between ecology and astronomy. But for the purposes of my intended research, the reflection proposed by Stefania Barca is undoubtedly illuminating. The historian and political ecologist examines in detail in her *Forces of reproduction:*

[68] Ehrenfeld, David. The Arrogance of Humanism, Oxford University Press (1978).

Notes for a counter-hegemonic Anthropocene (2020) the video "Welcome to Anthropocene" presented at the opening plenary of the Rio+Earth Summit in 2012 in Jonnesburg.

It was an avowedly educational three-minute documentary that sought to propose, through the last 250 years of the history of "mankind"[69], or rather of its threatening but hegemonic Western component, from the beginning of the Industrial Revolution to the present day. The video was meant to be a scientific and consensual narrative that would make sense of the current crisis of the Earth system and frame the political choices to be made at the top (Barca 2020, 7). In this view, «industrial growth is seen as the most relevant characteristic of modernity – what marks discontinuity with pre-industrial (reputedly pre-modern) economies, where production was largely based on solar and living energy» (Barca 2020, 9). In this sense, «while officially sanctioning a new understanding of global environmental change as largely anthropogenic, the video Welcome to the Anthropocene does not represent a fundamentally new narrative. Rather, it could be seen as the latest chapter in an old mainstream narrative, that of modern economic growth», punctuated by the growth of GDP in the global political economy. It reintroduces the Promethean narrative of humanity's capacity to make the giant leap forward, of its technological endeavour to push energy consumption and material production beyond the biophysical limits of renewable resources, overcoming what economic historians call the 'Malthusian trap' of the population/resource ratio (Barca 2020, 9), which, however, as we have seen, cyclically returns to preoccupy the elites in power.

3. *The concept of sustainable development: the first of many oxymorons*

Despite its limitations already highlighted, Stockholm had sanctioned the transition from the naive and emotional environmentalism of the 1960s to the rational environmentalism of the 1970s: «attentive to the global and political aspects of problems and institutional lobbying strategies» (Pellizzoni and Osti 2008 [2003],60). Above all, with its global outlook, UNCHE had made possible the appointment ten years later, in 1983, to the establishment of the World Commission on Environemnt and Development (WCED), also known as the Brundtland Commission by the name of its chairmanship, the former Norwegian Prime Minister, Gro Harlem Brundtland. Established by the United Nations General Assembly to examine global environmental trends, their implications for

[69] Another important aspect that Stefania Barca reflects on in the pages of her book is the normalisation and universalisation of not only the Western narrative in relation to the rest of the world, but also that of the white man, the master, over the white woman and other women, as well as other species. This demographic explosion is usually narrated as a result of scientific discoveries and the introduction of new technologies; the master narrative makes no mention of the crucial role of women's care work or the social protection at the workplace that has saved and prolonged the lives of a large part of the population. In this sense, Barca proposes «a radical anti-mastery rethinking of the discourse itself» (Barca 2020, 18).

development and possible ways forward, WCED concluded its work in 1987 with the publication of its final report entitled Our Common Future. The Report's founding thesis stated that environmental and development problems are inextricably linked.

> [T]he environment does not exist as a sphere separate from human actions, ambitions, and needs, and attempts to define it in isolation from human concerns have given the very word 'environment' a connotation of naivete in some political circles [...] but the 'environment' is where we all live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable (WCED 1987, IX).

The close relationship between these two concepts had led to the coining/introduction of the notion of sustainable development, meaning «development that meets the needs of the present without compromising the ability of future generations to meet their own needs» (WCED 1987,8). From then on, sustainability took on this exception, making it an important dimension of development thinking, which itself is one of the most ambiguous and nuanced in the entire field of social sciences, with a complex history and etymology (Bagliani and Dansero 2011, 168).

Sustainable development" has had the merit not only of breaking down the distance between two opposite poles, two enemies (Escobar 1995), two worlds and concepts such as environment and development, if not in opposition, then in a difficult and itchy coexistence, but also of opening the doors separating disciplines and reducing the barriers between academic knowledge and action. This is partly due to the fact that the concept of sustainable development is superficially simple, but capable of taking on a wide range of signifiers (Adams 1995, 355).

It is a semantic vagueness that can represent the complexity, the holism and the interdependence of policy making. It is a conception that seems to bring everyone, or almost everyone, together: environmental organisations, international agencies, states and corporations, civil society. The idea of "sustainable development" dialectically overcomes the conflict within it, or so it seems from a rhetorical point of view, and delegates its concrete realisation to the cooperation of the actors involved. However, it is precisely this indeterminacy that gives rise to many discourses on sustainability, reflecting the interests of many different groups, «what is to be sustained, by whom, for whom, and what is the most desirable means of achieving this goal», and supporting sometimes divergent interpretations (Adams 1995,355).

And the idea that sustainable development "can be good for everyone", overcoming the dichotomy between the objective of development and the environment - understood primarily as a target for conservation measures and therefore still at the margins of economic discourse - which had been the obstacle dividing North and South at the 1972 Stockholm Conference. By pointing to a way forward, sustainable development was also the recipe to be followed by those who did not yet have access to

"decent" living conditions and who were damaging the environment for reasons opposite to those of the industrialised countries, because they were overwhelmed by the demands of the present.

Although the adjective 'sustainable' has "lightened" the concept of development by refocusing the power/knowledge nexus, rebalancing the emphasis on economic development that has hitherto dominated the equation, and highlighting the environment at the interface with development, the antinomy is far from being resolved, indeed it is deceptive and obscures the complexities. In this sense, sustainable development is a perfect example of an oxymoron (Sachs 1992). It is evocative of the rhetorical figure that relates two opposites, allowing the unspeakable to be said by evoking the concordance of opposites, and at the same time «constituting a form of legitimising camouflage» (Rist 1997, 287, footnote 7).

In Arturo Escobar's words: «The epistemological and political reconciliation of economy and ecology proposed by sustainable development is intended to create the impression that only minor adjustments to the market system are needed to launch an era of environmentally sound development, hiding the fact that the economic framework itself cannot hope to accommodate environmental considerations without substantial reform» (Escobar 1995, 197). Thus, 'sustainable development' is far from ushering in a new model.

Some controversial aspects of the relationship with words themselves are worth considering.

> In the middle of the 20th century, we saw our planet from space for the first time. Historians may eventually find that this vision had a greater impact on thought than did the Copernican revolution of the 16th century, which upset the human self-image by revealing that the earth is not the center of the universe. From space, we saw a small and fragile ball dominated not by human activity and edifice, but by a pattern of clouds, oceans, greenery, and soils. Humanity's inability to fit its doings into that pattern is changing planetary systems, fundamentally. Many such changes are accompanied by life-threatening hazards. This new reality, from which there is no escape, must be recognized—and managed. (WCED 1987, 1) […].

> The concept of sustainable development does imply limits - not absolute limits but limitations imposed by the present state of technology and social organisation on environmental resources and by the ability of the biosphere to absorb the effects of human activities ...technology and social organisation can be both managed and improved to make way for a new era of economic growth. (WCED 1987, 8).

From the words used in the report, the idea of the finiteness and fragility of the Earth emerges clearly, over which human beings have no power to dominate, and are indeed exposed to the risks of nature. But humanity has the Promethean and Renaissance capacity to understand and manage, in a word, to "adapt". This capability knows no limits. It is expressed in the dominance of scientific rationality, the strong belief in technological innovation as an agent of progress, the tendency to see nature in a non-reciprocal relationship, but as an available, exploitable external resource from which value can be extracted. This is what the model of ecological modernisation envisages: overcoming contingent, technological and social limits through research, investment and efforts to install environmental

governance 'compatible' with the absence of limits to growth. However, this remains the goal: «As the Brundtland Report bluntly put it, it is a matter of finding the means to produce more with less» (Escobar 1995,196), not changing and not rethinking the entire established capitalist system.

Consequently, far from inaugurating a new system, there was a profound continuity from 1972 to 1987, from the discourse of "limits to growth" to the discourse of "limits of growth", definitively sanctioned by *Our Common Future*. In fact, this remains a pusillanimous report (Gilbert Rist 1997, 188), prescribing prescriptions that are incapable of really challenging the unsustainable lifestyles of the Global North. These, more than the bustling, poor realities of the Global South, are the cause of the global environmental crisis, and by extension the climate crisis.

But at the same time, *Our Common Future*, more than the Stockholm Conference, marked the transition from "classical" Western (Rob Nixon 2011, xiii) environmentalism of the 1970s to the regime of global environmental governance and global sustainability. Viewing the promotion of sustainable development as a global project par excellence, the UN-sponsored Brundtland Report defined an international policy agenda for the promotion of sustainable development based on the establishment of effective international cooperation to manage environmental and economic interdependencies. Brundtland called for both new international institutions for global environmental governance and modification to existing international agencies dealing with development, trade rules and agriculture. The internationalisation of environmental governance is mainly based on negotiations and agreements between states, but non-state actors, including environmental NGOs and economic actors, are playing an increasingly important role. This collective activity, referred to as global environmental governance, can be defined as the establishment and operation of 'a set of rules of conduct', *governamentality*, according to Foucault's grammar of thought (CIATAZIONE DAL FRANCESE), that define practices, assign roles and guide interaction so that state and non-state actors can address collective environmental problems within and across state boundaries (Stokke 1997, 28[70] in Baker 2014, 102-3). In addition, it is important to consider how governance can be a tool for promoting democratic pluralism, i.e. providing structures and mechanisms for accommodating the divergent preferences of different social, economic and political actors and for translating these preferences into coordinated action (Kemp et al. 2005, 17). And it is this last aspect that, amidst the contradictions and emptiness of the prescribed commitments, leaves open possibilities for the future from within the system itself.

[70]Stokke, Olav (1997) 'Regimes as governance systems', in Oran Young (ed.) *Global Governance: Drawing Insights from the Environmental Experience,* Cambridge, MA: MIT Press, 27 63 in Baker Susan "Governance" in Death, Carl, ed. *Critical environmental politics*, pp. 110-110. Routledge, 2014.

However, many voices have been raised against the mutilated operationalisation and ontological and epistemological short-circuiting of the concept of sustainable development, a form of capitalisation of nature (O'Connor 1993). For activists and academics, the concept of sustainability has not led existing institutions, national environmental policy makers and international organisations such as UNEP, OECD and the World Bank to reconsider the normative and cultural assumptions and premises underpinning their operational practices. On the contrary, it led to the perpetuation of the techno-industrial arrangements of modernity, Western-style socio-cultural relations with the environment, and the adaptation of institutions, eliminating the discourse of civic and grassroots environmentalism. Environmentalism, as far as it has been analysed in the production of Rachel Caron and Berry Commoner, but for which we refer to valuable compendia, included the critique and counter-cultural contestation of the arrangements that caused pollution and environmental damage. But this is conveniently silenced by 'sustainable development' in favour of the need for revitalisation.

Sustainable development served mainly as a vehicle for a form of eco-managerialism, whereby the environment and its complexities could be objectified and managed, and growth could be directed rather than actually stopped or slowed.

The Eighties saw the emergence of a new paradigm in environmental policy called ecological modernisation. As a new global policy-oriented discourse, ecological modernisation is not conceived as a unified set of ideas, but has a complexity within it, many twists and turns over the years, and comes to mean many different things to different actors in different places. Nevertheless, ecological modernisation has come to dominate the conceptualisation of environmental problems, solutions and social strategies for achieving normative outcomes.

Ecological modernisation is based on the acceptance of the existence of a global environmental problem. Indeed, *Our Common Future* takes up a number of problems that were already on the agenda of various environmental movements in the 1970s and analyses them in the form of figures and tables: deforestation, land degradation, the greenhouse effect, the growing hole in the ozone layer, demography, the food chain, water supply, energy, urbanisation, the extinction of animal species and the protection of the oceans (Rist 1997, 183). However, it presupposes that existing political, economic and social institutions can internalise environmental concerns and an essentially efficiency-oriented approach to the environment.

The Brundtland Report definitively inaugurated a form of wise management of the environmental resource, which was already embryonic in *The Limits to Growth* (1972), based on the importance of 'integrating' environmental concerns into other policies, especially economic plans. This approach replaced the component method, which relied on specialist knowledge to define routine solutions for

each sub-category, and which had defined the environment in terms of air, water, soil and noise, and which had proved unsuccessful. The project aimed to replace the predominantly 'react and treat' strategy, while the more innovative 'anticipate and prevent' formula gained credibility.

The reasons for the success of the ecological modernisation paradigm are to be found in the convergence of intentions, in the non-coercive appeal, in the fact that it does not imply a real transformation, but a *gattopardic* device.

The particular success of this approach was not rooted in the fact that it became the flagship of global technocratic institutions or nation-states that operated according to the traditional image of a Leviathan, a police and repressive state (Luke 1999, 124). Its power rested much more on its capacity to provide generative narratives that appealed to many environmental actors'. Ecological modernisation should be seen as the product of a few distinct social forces that all agreed at some point, organisations such as the OECD, UNEP and the intellectual work of moderate environmental NGOs such as IUCN and WWF. It was a coalition of forces in which the individual actors all had their own specific interests and orientations but found themselves sharing a common vocabulary and a common way of framing environmental issues. This suggests that the emergence of the political discourse of ecological modernisation cannot be attributed to the success or power of any one group. Ecological modernisation is the unlikely product of argumentative interaction between different groups. It quickly established itself as a dogma, the result of an argumentative interaction between different social forces which, in the mid-1970s, still had radically different understandings of the nature of the environmental problem.

The paradigm of ecological modernisation is the unlikely product of an argumentative interaction between different social forces that, in the mid-1970s, still showed radically converging ideas about the nature of the environmental problem. In this way, this discourse, which became widespread in the second half of the 1980s, allowed for "green talk" as an organising principle for the innovation of institutional procedures in the early 1990s. It is affirmed precisely because, among other things, it does not require any structural transformation, i.e.: existing political, economic and social institutions can internalise care for the environment, which becomes a management issue without renouncing economic growth.

The doctrine seems to rely on the same institutional arrangements that led to the ecological crisis: it depends heavily on expert-led processes of change, efficiency, technological innovation and techno-scientific management.

Ecological modernisation is a discourse that seeks to avoid addressing fundamental social contradictions by failing to engage with the systemic features of capitalism that make the system

inherently wasteful and unmanageable. The leapfrogging movement of capitalist innovation, which periodically wipes out generations of production facilities, geographical areas and generations of workers, is not addressed by ecological modernisation (Hajer 1995). Its conceptual framework quickly conquered the discursive space of the environmental sector and came to be seen as the most legitimate way of conceptualising the environment as a political problem. From then on, public concern, government action and policy-making interacted to produce a new consensus on how to conceptualise the environmental problem, its roots and solutions, symbolised first by the global endorsement of the *Our Common Future* report in the late 1980s and then by the Rio Earth Summit in 1992.

The embrace of the environmental NGO world, which has been criticised for accepting the device of sustainable development, is less surprising than the fact that the concept has become the totem of international donor and policy discourses, which produce, reproduce and transform it through their practices.

It is precisely the World Bank's appropriation of the 'progressive' discourse of sustainable development that leads Michael Goldman (2001) to reflect in Foucauldian terms on the implications of what he and others call eco-governmentality, given that the WB is the largest international development agency and the "knowledge bank of the world", as the institution itself proclaims in the World Development Report 1998-1999.

Using the case of the building and evaluation of a dam project in Laos, Goldman analyses the construction of legitimacy through eco-knowledge, which, like colonial knowledge, has transnational roots and effects. Eco-knowledge has become hegemonic, and its methods, objectives, project models, and theoretical and methodological foundations are the reference points for all emerging countries and development planners in rich countries. Raymond Bayart and Sinead Bailey, in their *Third World of Political Ecology* (1997, 97), also argue that these multilateral institutions, such as the World Bank and the IMF, are closely linked to, if not completely dependent on, the major First World states. These institutions have, not surprisingly, tended to adopt the interests and mores of these states, but in doing so have almost inevitably alienated themselves from the grassroots poor actors in the Third World that many multilateral institutions, at least in theory, seek to help. As intermediaries or midwives of development, the major multilateral institutions have also promoted these development policies because they share the assumption, traceable to the speech of US President Truman quoted above, that development is a process worth pursuing above all else, and that the social and environmental problems of the Third World ultimately can be reduced to a lack of development.

In the case of the WB, the evaluation and monitoring mechanism is essential, through which they train thousands of people, experts. These experts are men and women torch-bearers of sustainable development, from both the North and the South, employed both by these large international institutions and at a lower level, promoting green discourses, authoritative and dominant, where they also penetrate thanks to the framing device of nation-states and the rhetoric of non-governmental organisations, through which both the official authorities and all development actors are empowered to act. In the case of the WB, the evaluation and monitoring mechanism is essential, through which they train thousands of people, experts. These experts are men and women 'torch-bearers' of sustainable development, from both the North and the South, employed both by these large international institutions and at a lower level, promoting green discourses, authoritative and dominant, where they also penetrate thanks to the framing device of nation-states and the rhetoric of non-governmental organisations, through which both the official authorities and all development actors are empowered to act.

Goldman (2011) refers to these as green development knowledge, authoritative forms of power and disciplinary mechanisms. Huge amounts of money (relative to GDP) are channelled into borrowing countries to restructure and modernise state agencies and institutions. The concept echoes Luke's (1999) explanation of Foucault's theory of governmentality as a way of showing how the environment is embedded in a set of power/knowledge relations that are not amenable to standard reformist strategies of the kind advocated by leading sustainable development theorists.

The mechanism is described by several studies in political ecology, most notably the analysis of Philip Anthony Stott and Sian Sullivan.

> '[N]orthern' environmentalist worldview, informed by concerns of pending ecological collapse [...] exported by an international development community via various UN summits and conventions and donated projects on environment and development, introducing very real constraints to developing economies of 'south' who have to demonstrate adherence to 'green' values and policies in order to qualify for support [...]. Global-local interconnections thus amount to the creation of what Escobar (1996: 50)[71] calls an 'ecocracy' in which the North maintains dominance through managerial ethics justified by a normalising discourse of 'sustainable development' (Stott and Sullivan 2000, 33).

However strong and widespread such criticisms may have been, from the anti-development critics of Escobar (1995) and Sachs (1992), from Marxist writers applying a Foucauldian reading based on governmentality (Luke 1999; Darier 1999; Rutherford 1999), they did not affect the bright path of the concept of sustainable development. While most political and social scientists studying

[71] Escobar, A. 1996: Constructing nature: elements for a poststructural political ecology. In Peet, R. and Watts, M. (eds), *Liberation ecologies: environment, development, social movements.* London: Routledge, 46-68, quoted in Stott, Philip Anthony, and Sian Sullivan. "Political ecology: science, myth and power." (2000).

environmental issues were primarily concerned with solving environmental problems, either through technical and institutional means or through more radical diagnoses of the structural production of environmental damage, the concept of eco-governmentality, as environmental governmentality, was used to critically interrogate the political risks and dangers of new forms of governance.

These critiques did not affect the institutionalisation of the concept of sustainable development, which was globally endorsed at the Earth Summit in Rio in 1992. The name of the summit was not chosen at random, but was clearly intended to be more inclusive in the presence of 128 Heads of State and 178 Heads of Government, and a further 17,000 participants in the parallel forum of non-governmental organisations, in which women played a leading role for the first time. A crucial factor was the context in which the Rio Summit took place: the end of the Cold War, the emergence of a new world order, the apparent triumph of liberal democracy, and a much-heralded new era of global governance and multilateralism (Death 2016,248).

This global green policy also received a strong impetus from the United States, under the leadership of President Bill Clinton and especially Vice President Al Gore, the more motivated of the two to pursue a new environmental Marshall Plan. They defined a green agenda, built a brand of environmentalism and produced policies, funding, tools and data for applied global environmental science. They have defined a green agenda, built a brand of environmentalism, and produced policies, funding, tools and data for applied global environmental science.

Timothy Luke critically analyses a number of historical conjunctures that have come together: the end of the Cold War, the rise of sustainability discourses, a renewed US foreign policy, and green capitalism, to explain what green governance represents (Luke 1999, 123). Indeed, the mechanisms for the construction and operation of many intriguingly green forms of geopolitics were already clearly emerging in Rio in 1992, with Clinton and Al Gore as the undisputed leaders.

Indeed, the scholar asks rhetorically: «Now that the Cold War is over, does the environment, as Clinton-Gore's green geopolitics suggests, simply replace communism as the source and locus of strategic disputes, justifying the intervention of rich/powerful/industrial states in poor/weak/agricultural regions to serve the interests of outsiders seeking to control the use of forests, rivers, farms or wildlife?»(Luke 1999, 142).

And yet, despite laudable rhetorical efforts, as early as 1997, at the Rio+5 conference in New York, known as Earth Summit II, sustainable development showed all its practical limitations because no progress had been made in controlling so-called externalisation, i.e. the pollution and environmental degradation that continued to occur. The explanation given was that as economic growth increased, so did levels of polluting activity. And it soon became clear to most critics that responsibility could

not simply be attributed to a lack of political will (Fisher and Hajer 1999). However, the instrument of environmental governance was indeed reaffirmed at the 2002 United Nations World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa. The event attracted a great deal of media attention, an enthusiasm that often accompanies this kind of reality, and produced a voluminous 170-paragraph Plan of Implementation and a 37-point Johannesburg Declaration, but no significant new international agreements.

Then, in 2012, when the international community gathered in Rio de Janeiro for the United Nations Conference on Sustainable Development (UNCSD) Rio+20, it set out to chart a new course for the sustainable development project. Negotiations on the text - entitled *The Future We Want* - which reaffirmed the concept of sharing, belonging and the future, focused on two issues: the institutional architecture for sustainable development and the green economy, which will be discussed in detail in the next chapter.

In any case, *The Future We Want* was a 'watered-down text for key diplomats to agree to'. Little visible progress was made, but it ensured that sustainable development did not exhaust its symbolic effectiveness by launching the 17 Sustainable Development Goals (SDGs) in 2015, replacing the Millennium Development Goals, which would last until 2030, hence the name Agenda 2030.

However, when it seemed impossible to imagine a world in which the realities of capitalism, powerful governments, institutionalised science and high technology could come to dominate the world even more than they already do in the name of sustainability, climate discourse and governmentality prevailed. As Death points out, «the focus has begun to shift from sustainable development to climate change negotiations» (Death 2014, 248).

But climate change, not unlike sustainability, is becoming a good tool for communicating institutional and epistemic frameworks based on new forms of intervention and development, less so for acting and planning on behalf of the poorest, those most exposed to the consequences of prolonged droughts or floods.

4. *Under the sign of continuity: climate governance and governmentality*

Climate change emerged as a concept in the 1980s and 1990s, replacing the notion of global warming because it was more elusive and shared a certain vagueness and semantic viscosity with the concept of sustainability. In the words of Tom Bristow and Thomas H. Ford, «Climate change was code for no change, for business as usual. In doing so, it can help articulate some of the complexity and multiplicity of what it names. It more easily accommodates discussions of related phenomena, such as ocean acidification» (Bristow and Ford 2016,4).

Discussions about the atmosphere were the first cult topics to mobilise international scientists, international organisations and interest groups. Indeed, since 1957, the International Geophysical Year (IGY) has been dedicated to collecting, processing, modelling and sharing climate data and improving global weather forecasting, with UN support since the 1960s.

In 1979, the First World Climate Conference was held in Geneva that produced the Geneva Convention (CLRTAP). Then the road to recognition of the climate issue was marked by the Villach Climate Meeting in 1985 as a "turning point", which emphasised not only the need for more research on climate change but also the need for political action. Conference participants produced an influential declaration predicting an unprecedented rise in global average temperatures in the first half of the 21st century and calling on states to ensure regular assessments of climate change and to consider the need for a global climate convention. One practical outcome of the Villach conference was the creation of an expert body, the Advisory Group on Greenhouse Gases (AGGG) - a precursor to the Intergovernmental Panel on Climate Change (IPCC) - to review studies on the effects of rising greenhouse gas levels and their policy implications.

As evidence of the link between sustainable development and climate, it should be noted that in September 1987, the year of the famous Brundtland Report, the Montreal Protocol to reduce emissions of ozone-depleting gases was signed. This was the greatest success of the global deal strategy and a benchmark for climate governance: the first existing agreement on climate change mitigation, which in fact served as a model for the Kyoto Protocol.

In 1988, at the Toronto Conference on Atmospheric Change, the scientific community began to agree on definitions of greenhouse gas emissions or climate pollution, on the need to address rising global temperatures, and to set emission targets and concentration limits, as a social and political dimension increasingly emerged. For its part, the UN adopted Resolution 43/53 on global climate change for the benefit of present and future generations of humankind: it recognised that climate change is a matter of concern for all humanity, since climate is one of the essential conditions for life on the planet, and declared the need for timely and concerted global action based on cooperation with intergovernmental and non-governmental institutions and the scientific community. For this reason, UNEP created the Intergovernmental Panel on Climate Change (IPCC), a kind of transnational scientific network that also acts as a public advocacy group, with the mandate to provide internationally coordinated scientific assessments of the magnitude, timing and potential environmental and socio-economic impacts of climate change and realistic response strategies (UN General Assembly 1988, Art. 5***).

Nevertheless, far from being a definitive and standard voice in the communication of climate science because it is vested with the authority to do so, the IPCC has sometimes been at the centre of criticism and tension.

Indeed, the controversies have concerned not only conclusive scientific statements on sensitive issues, since the IPCC reviews the vast body of evidence published in five-year cycles, but also its findings and recommendations contained in Synthesis Reports or Summaries for Policy Makers (SPMs). According to some critical scientists, the wording of SPMs is determined by politicians rather than scientists (Okereke and Charlesworth 2014). Julia Kreienkamp (2019, 4) outlines how the establishment of the IPCC has been seen as a strategy by governments, particularly the United States, to reassert control over the increasingly politicised climate change agenda, and even as an attempt to set up a complex and lengthy study process to curb any move towards concrete action to limit emissions.

The IPCC produced the first of its six reports in April 1990, the last of which was published in March 2023 and included several anthropologists (Fiske et al. 2014, 17), arguing that it could not be said with certainty that climate change was anthropogenic.

Undoubtedly, an significant driver for the institutionalisation of the climate issue in terms of how it is being debated and mainstreamed was the 1992 UNCED. The core components of the sustainable development project were the so-called Agenda 21, the Rio Declaration on Environment and Development - containing 27 principles that continue to inform international negotiations on environmental treaties - and two legally binding conventions, the Convention on Biological Diversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCCC).

The main objective of the latter was to stabilise the concentration of greenhouse gases in the atmosphere at a level that would avoid adverse effects and to recognise the principle of common but differentiated responsibilities between developed and developing countries in relation to global warming. This argument, and the consequent need for financial support for developing countries, which dominated the subsequent round of climate negotiations, first emerged in 1989 at the Noordwijk Declaration on Air Pollution and Climate Change. Here, in the presence of only 70 states, the Global Framework Convention on Climate Change and the growing division between industrialised and developing countries took shape, following a pattern enshrined, as we have seen, at the Stockholm Conference.

The static division was decided in the UN Convention at the end of a lengthy negotiation between Annex and Non-Annex countries, which sanctioned the division, as we have just outlined, according

to the Rio principle of common but differentiated responsibilities, i.e. between developed/polluting countries and developing/suffering countries (Altavater 1998, 34).

The almost ontological Shakespearean division "to be or not to be", the use of capital and small letters is not accidental, is reminiscent of that between the West and the rest of the world explained by Edward Said in his *Orientalism* (1978). This label also contains a reference to the residual character of the definition of the Third World. This term was coined in 1952 by the geographer Alfred Sauvy in a dichotomous view of the world, divided into capitalist countries, the First World, and communist countries, the Second World, the Third World being all the others, the so-called non-aligned.

Since COP-1 in Berlin in the spring of 1995, the year after the ratification of the UNFCCC, the signatory countries (originally 189, now 196) have met annually in Conferences of Parties (COPs) to exchange views and make progress on global climate policy.

But it was the third COP that marked an important milestone. It was held in Kyoto in 1997, at the end of which the member countries signed a protocol to the UNFCCC, known as the Kyoto Protocol (KP), which took a very long time to implement and did not enter into force until 2005. Although Julia Kreienkamp (2019), in her detailed and meticulous reconstruction of the history of the global climate change regime, places the implementation of the Kyoto Protocol at the culmination of a fourth phase, it is not possible here to recapitulate the constructed climate governance (Brocchieri 2022; Bagliani et al. 2019; Butti and Nespor 2022). In any case, it is necessary to underline some major steps in order to understand the *gattopardism* of the whole climate regime.

In Tokyo, the strong legacy of environmental governance outlined so far is carried into the future, where it is decided to tackle climate change by introducing the polluter pays principle, cost-benefit analysis, risk analysis, the precautionary principle, tradable pollution rights and the imposition of taxes on polluting activities.

In other words, it defines the mitigation mechanism that takes the process of economicisation and commodification of nature to its highest degree within the production and environmental system of capitalism. This approach is based on the modelling of limits, which implies the invalidation of the geopolitics of emissions, of the power relations between the countries of the global South and North, which are at the same time so well defined and crystallised, and the removal of the subjective difference between their "subsistence emissions" as opposed to real *our*[72] "luxury emissions".

[72] I use italics to emphasise 'our' by virtue of my clear positioning in the course of research not only in the field, and also in a critical sense with respect to the personal pronoun or first person plural adjective 'Our/we' in the titles, as we have seen, of the 1987 Brundtland Report and of the 1992 UNCSD, up to the unspecified 'We' subject of the 2012 video *Welcome to Anthropocene* «having improved the lives of billions of humans, has become a phenomenal global force of earth-system change, threatening the continuation of life on earth» (Barca 2020, 8).

The dynamic is well explained by Anna Tsing: «The Kyoto Protocol goes far in converting environmental values into business values. The Protocol allows countries to lower their emissions through business rather than environmental accounting: They can trade in emission reductions by buying figures showing reduced rates from other countries ("international emissions trade") or by supporting emissions reductions wherever they are cheapest ("joint implementation")» (Tsing 2005, 283-284). The limit modelling established by the 1972 Club of Rome report, *The limit of growth*, which explained Malthus in computational language (Angus and Butler 2011), reappears in an increasingly sophisticated form in the general atmospheric circulation models (GCMs) of the 1990s. The new wave of global climate change models also recaptures the sense of imminent catastrophe that has permeated ecological visions since the 1960s. The new climate apocalypses take the place of the old ones, but after the shock there is a shift to problematising and managing the risks and dangers through descriptions, calculations and commitments that are made to govern, to manage the problems posed by climate change in specific ways, and that represent governmentality and create new forms of power.

Tokyo's greatest inheritance is not the recognition of the importance and need to set the goal of keeping the climate system within 2°C of the pre-industrial average temperature, which has obviously been disregarded, but the completion of the process begun at the UNCHE in 1972 through the proliferation of institutions, organisations, principles, norms and decision-making procedures - what is conventionally referred to as the 'international environmental regime' (Watts et al. 2011, 6-7).

Another important inheritance is the paradigm of emergency and apocalypse, consecrated in the climate arena by the Kyoto Protocol, whose origins go back much further. This paradigm is the opium of the people and serves to divert attention from the structural causes of climate change, which remain unresolved (Swyngedouw 2010). This sentiment allows «economic and political elites to transform the ecological and social catastrophe around us into a manageable ecological and social crisis, not by solving the problems but by shifting them into the future or to other places» (Kenis and Lievens 2015, XI).

The analysis of the device of governmentality in the analysis of the climate question places the study at a distance from much of the literature that is more oriented towards the 'solution' of problems, either through technical, technical-technological and institutional measures, or through more radical diagnoses of the structural production of environmental damage.

Like the concept of eco-governmentality in all of the declinations we have seen, climate change governmentality is useful for critically interrogating the political risks and dangers of new forms of governance and the discourses produced about the climate crisis. Intergovernmental summit

negotiations, the Clean Development Mechanism (CDM) and personal carbon offsetting are all examples where analyses of governmentality have actively sought to destabilise the accepted wisdom within climate governance circles. Typically, discourses within this kind of vision either conclude that many more such mechanisms are needed, and on a much larger scale, or, on the contrary, they are dismissed altogether because they are out of touch with reality and because nothing new and concrete is expected from their implementation (Stripple and Bulkeley 2014).

The critical perspective sees climate change as a negative externality of the global capitalist system and the acceleration of its neoliberal phase, considered by most critics as 'inevitable', but which ultimately resolves itself in a further wave of commodification of nature, seeking to internalise environmental costs and make accumulation narratively sustainable once again (Del Gobbo and Leonardi 2019). The phenomena of climate change and its heavy, stressful and devastating consequences cut across issues of the environment, "development", economic growth and the quality of life of the rich and the poor. In other words, climate change and its consequences can be seen as a metaphor for the failure of development and the slow implementation of a sustainable development agenda over the last 30 years (Salih 2009, 3).

However, despite the evidence, efforts to mitigate climate change continued, even though it was too late and not even close to reducing, or even stabilising, greenhouse gases as they continued to increase.

After the disaster of COP15 in Copenhagen in 2009, which will be discussed in more detail in the next chapter, the famous COP21 in Paris in 2015, where the Paris Agreement was signed, was seen as a diplomatic success, but in reality, it was «a fraud, a deception.... It's just nonsense!» in the words of renowned climatologist James Hansen (Angus 2019 [2016], 123). In Paris, the commitment to keep the global average temperature increase well below the 2°C threshold compared to pre-industrial levels and to limit it to 1.5°C was reaffirmed. And from 2015 onwards, in a cadence more like a marathon than a sprint, to which the COPs have accustomed us, as Harvard economist Rob Stavins famously defined it, there have been decisive steps and moments of stalemate. One important step was the emphasis on the adaptation paradigm.

Adaptation takes the form of a set of actions aimed at responding to the impacts of climate change and is seen as complementary to mitigation. Its weight in international climate change debates has increased after a long period of neglect, starting with the IPCC reports of 1994 and 1995. Adaptation practices remained ignored at the institutional level until the early 2000s, especially in light of the significant failure of mitigation practices. In 2002, there was COP-8 in New Delhi, held shortly after

the WSSD in Johannesburg, which called for urgent adaptation measures for developing countries, but always within a dichotomous framework that continued to divide the world into North and South. Another reason for delaying the debate on adaptation was the fear that adaptation could mask the desire to take substantive action on the root causes of climate change, i.e. the global socio-economic organisation centred on the continuous growth of production to also satisfy inexorably increasing consumption (Bagliani et al. 2019, 248). Reflections on adaptation have varied over time. There has been a shift from 'first generation' adaptation, which mainly referred to structural, technical, managerial and procedural interventions, leaving socio-cultural ones in the background, to the so-called 'second generation' adaptation. This view recognised the procedural, continuous and dynamic nature of adaptation, as well as the role of vulnerability and its interaction with climate change, in order to envisage response models that take into account local complexities. But in any case, although they envisage actions that embrace change and mitigate its most destructive manifestations, they do not allow for a radical critique and transformation of current economic paradigms, and this in fact also makes the adaptation paradigm non-transformative and thus another expression of climate policy *gattopardism*. Moreover, it is significant to note how the concept originated within anthropology and was dismissed following the politicisation of cultural ecology, widely contested in the 1970s and 1980s as evolutionarily compromised, it returns to hegemonic discourse and global governance practices, accompanied by a renewed conceptual vocabulary: security, risk, vulnerability, exposure, resilience, adaptive management and governance. The point, however, is that such a sense of *déjà vu* (Taylor M. 2015) is highly problematic, given that the adaptation paradigm is emerging to support, indeed is being invoked by, developing countries themselves in relation to the urgency of their needs. It has become another expression of the preservation of reality, but it is no less problematic because it provides a response mechanism that is incapable of addressing the structural causes of people's vulnerability. Indeed, as political ecologist Michael Watts (2015) asks, «We need to ask whether this is old wine in a new bottle. How and in what ways does ‘adaptation 2.0’ address the weaknesses of ‘adaptation 1.0’?» (Watts 2015, 19).

Compared to the dichotomous and complementary separation of negotiations and action on mitigation and adaptation that continues to dictate the global agenda, the Loss and Damage mechanism represents, in the jargon, “the third leg of climate finance”, as a compensation fund for the ecological and climate debt caused by rich countries to the detriment of the “rest of the world”, which has no historical responsibility in this regard.

The issue was raised most forcefully at COP19 in Warsaw in 2013 by delegations from Small Island Developing States (SIDS), whose livelihoods are already severely compromised. Broadly speaking,

loss and damage refers to efforts to «avert, minimise and address loss and damage associated with climate change impacts, especially in developing countries that are particularly vulnerable to the adverse effects of climate change» (UNFCCC Decision 3/CP.18*).

Generally, the terms 'avert' and 'minimise' are used to refer to mitigation and adaptation respectively, while the term 'address' refers to measures to deal with the impacts of climate change that have not been or cannot be avoided. After long silences and postponements by the Parties, the further debate on Loss and Damage finance culminated in the establishment of the Glasgow Dialogue on Loss and Damage Finance at COP26 in 2021, not yet as a political mechanism, but as a space for discussion and negotiation that should begin to establish jurisdiction, definitions and financial arrangements. The establishment of such a fund, which is a priority for developing countries, would be of extraordinary historical value, as it would allow issues of fairness and equity to be addressed and historical responsibility for climate change to be demonstrated in climate negotiations. In practice, however, even this issue requires attention, because beyond the lack of an explicit reference to 'compensation' in the title, there is a danger of an emergency approach that lacks a systemic vision, focusing on disasters, on paroxysmal elements, extremes events, on outcomes rather than on the triggers and responsibility for such factors, and once again postponing the need for structural change through a transformation strategy.

In short, as we have attempted to show in these pages, climate *gattopardism*, with its deep historical roots, is a stratification of business-as-usual practices in both mitigation and adaptation. These have enabled the self-preservation of the *anciens régimes* of global capitalism (Latour and Weibel 2020).

By carrying out what Leonardi (2012) calls a Foucauldian reading of the global ecological crisis, precisely because of its use of the concept of governmentality, which we have seen holds together both the mechanisms and the historical dynamics of the construction of climate governance, we return to the Anthropocene narrative. In particular, to another aspect of it identified by Donna Haraway.

For the philosopher, the Anthropocene is one of those epochs in which genocides and species massacres, urgent catastrophes, can be consummated, i.e. Hannah Arendt's *Eichmann in Jerusalem. A Report on the Banality of Evil* (1964), whose figure for the philosopher was the Nazi war criminal Adolf Eichmann's inability to think.

In Arendt's analysis, Eichmann was not a monster, but the banal absence of thought, the routinisation of duty and ordinary thoughtlessness. «Eichmann was abstracted from the confusion of thought to the practice of *business as usual*, no matter what. [...]The result was active participation in genocide» (Haraway 2016). These are strong, evocative words, as always in Haraway's work, which make us shudder, but which methodically point the way forward. They make us aware of how necessary it is,

in the immaterial fetishisation of GHGs and the intricate mechanisms of the COP, to break out of the torpor of *gattopardism*, of apocalyptic emergence, and to realise the living urgency of addressing the consequences of climate change and, above all, its causes.

Chapter 2. Ethiopia's green state in the global climate governance[73]

Hegel remarks somewhere1 that all great world-historic facts and personages appear, so to speak, twice. He forgot to add: the first time as tragedy, the second time as farce. Caussidière for Danton, Louis Blanc for Robespierre, the Montagne of 1848 to 18512 for the Montagne of 1793 to 1795, the nephew for the uncle. And the same caricature occurs in the circumstances of the second edition of the Eighteenth Brumaire.
Marx K., 1974 The Eighteenth Brumaire of Louis Bonaparte, a [ed. or. 1852], 6.

The chapter aims to analyse Ethiopia's role (as a Least Developed Country- LDC) in the global climate regime governance, like a not-trasformative, *gattopardistic* system described in the previous one. Through a dialogue between ethnographic practice built on meetings with institutions and farmers and representatives of the small civil society aware of climate change, and the study of Ethiopian climate policies (Abram 2003; Feldman 2011; Magistro et al. 2001; Shore et al. 1997, 2003) the chapter aims to examine, deconstruct the climate change related plans and rhetoric that have been produced in the country since the second half of the 2000s. There is only a very faint trace of this rhetoric at the local level and once identified, it presents discursive and material tensions and ambiguities (S. Lee, 2015). As we have already pointed out in the introduction, Ethiopia, one of the least greenhouse gas emitting countries globally[74], is one of the countries hardest hit by the consequences of climate change (Y. Aberra 2012).

In the Top 20 Countries by Climate Disaster Vulnerability Indicators, 1980-2002, Ethiopia ranks first for people killed and fourth for people affected (Timmons et al. 2007, 77). The extreme events, that have cyclically passed through its history are becoming more frequent. Ethiopia's climate is exposed due to the country's geographical location to El Niño, a periodic climatic phenomenon that causes a strong warming of the waters of the Central and South Pacific Ocean. Maximum and minimum temperatures are rising; and rainfall is becoming increasingly irregular and erratic, to the point that it is harder to develop models (H. Zegaye, 2018).

[73] Some content in this chapter was published in the Journal article V. Acquafredda, "Non basta dire green. Le politiche climatiche alla prova della realtà in Etiopia", NAD (Nuovi Autoritarismi e Democrazie, Diritto, Istituzioni, Società), V. 4 N.2, 2022.
In addition, as clarified in the introduction, the choice to study Ethiopia's climate policies was dictated by my participation in the Pre-COP26 meeting, where I learned of the country's longstanding climate tradition.

[74] Ethiopia is one of the world's lowest emitters of GHG emissions, ranking 182 of 188 countries on per capita emissions1 and contributing 0.27% of global emissions. Ethiopia currently ranks 163 out of 181 countries in the ND-GAIN index3 (2016) for climate vulnerability, which is significantly lower than its previous recent rankings (e.g. 2014 ranking of 145) (Ministry of Foreign Affairs of Netherlands 2018,3).

Apocalyptic projections resulting from complicated models and the concern-filled stories collected among farmers/ stories full of concern raccontano due facce dello stesso cambiamento, che has lost the characters of emergency, assuming it ever had them, it has sharpened those of urgency. However, while people are called upon to handle larger and closer challenges with the same label-changing instruments, the state has refined its narratives and rhetoric by aligning itself with the demands of the global climate governamentality.

Ethiopia has taken an active part in that world order by ratifying international treaties, which have influenced national policy[75] on the environment since United Nations Conference on the Human Environment (UNCHE) in 1972, and on climate since the 1990s in a systematic way (Getu, 2012, 69). The governments of the FDRE (Federal Democratic Republic of Ethiopia) have grasped the totalizing aspect of climate change and made it the medium, rather than the end, to build a discourse and policy aimed, rather than action, at solving environmental problems concretely and countering the effects of climate change, to establish themselves as a green state in Africa (Death 2016).

Governments have identified climate change as «Ethiopia's greatest development challenge» (Bewket, 2012), a view also advanced in other developing world contexts that have begun to internalise the links between development and climate change. Indeed, Joyeeta Gupta reports how «By framing climate change as a development issue, it becomes an urgent national priority that needs to be addressed in current policy. Climate change and development discourses are merging, and climate change priorities (energy, transport, industry, land use) can be effectively linked to development priorities (water and food security, employment and education, budget deficit reduction and poverty alleviation, to name a few)» (Gupta 2009, 98). This reflection by the author takes on even greater significance if one considers that Gupta had argued in 1997, i.e. ten years before the above quote, that «climate change is not a priority domestic issue» for developing countries, defining it at the time as «a 'pseudo'agenda item» (Gupta 1997).

Thus, for more than a decade, the governments of Ethiopia have made climate change a crucial field of action, in which other African countries such as Mozambique, Rwanda and South Africa have also distinguished themselves. Yet from much literature (Taki 2019) and reportage (Corson et al. 2015,

[75] The term 'policy' often refers to general objectives which a state/government strives to achieve using a range of instruments or tools (Lasswell and Kaplan 1970; Friedrick 1963). As such, it is different from laws, regulations, strategies, plans, projects and programs which are meant to translate the general objectives into concrete results. However, for the purpose of this assessment, the term is employed loosely to refer to all conscious responses by the state (including laws, strategies, plans, projects and programs) to challenges of climate change […]». (EPCC,2015). *Ethiopian panel on Climate Change (EPCC), First Assessment Report, - An Assessment of Ethiopia's Policy and Institutional Frameworks for Addressing Climate Change, Published by the Ethiopian Academy of Sciences 2015).* Or «The term policy refers to the set of different activities (laws, programmes, actions, etc.) implemented by public and private actors aimed at achieving an objective of collective interest'» (Bagliani et al. 2011, 211, *Politiche per l'ambiente dalla natura al territorio*).

859), the Ethiopian case is often cited as unique. Prime Minister Meles Zenawi's leadership at COP15 in Copenhagen in 2009 and the development of the Climate Resilient Green Economy Strategy (CRGE), described as «a sea change in the country's approach to climate change» (Tajebe, 2017, 111), contributed most to building this reputation.

Ethiopia's commitment to climate has been a long and diligent path, punctuated by the stages of the country's climate mitigation and adaptation policy, all the contradictions of which have exploded at the same time, in the name of the green economy. These are the ambiguities not only of the Ethiopian case, but it is the ontological squint that underlies the entire global climate governmentality, as we have seen. Not unlike what we have analysed with the concept of sustainable development, the green economy includes, on the one hand, the purpose of protecting the environment in all its forms and, on the other hand, the dogma of economic growth that it does not intend to renounce.

Maura Benegiamo writes in this regard: «If, in fact, the integration of ecological concerns into the objective of growth has led to a new wave of commodification of nature, this tends to become part of governance agendas that, in promoting actions to intervene in ecosystems, aim to introduce new ways of relating to resources and the environment. The context of recent agricultural development policies in sub-Saharan Africa is, in this sense, strongly indicative» (Benegiamo 2019, 64).

And it is no different to the production of renewable energy through technocratic projects, such as dams, which are highly destructive of ecological and social balances (Jensen et al. 2021), another field in which Ethiopia, "the water tower of Africa", holds the continent's primacy.

Climate policies employ a powerful and attractive rhetoric, which is the hegemonic one, making them primarily the product of responses to the international climate debate, demands from the 'masters' of climate finance. In the face of the country's urgent exigence for climate action (Mersha and van Laerhoven 2018, 92) perceived as necessary by Ethiopian legislators (Aberra 2012) and civil society composed of local NGOs and researchers organised in the Consortium for Climate Change Ethiopia (CCC-E), climate policies do not improve the living conditions of the country's population, but are also far from being pure rhetoric, instead they are part of a project to build the Ethiopian state as a green state. Accordingly, the purpose of these pages is to subject the apparatus of climate measures to the same critical reading used for studying climate policy at the global level.

1. Pre-CRGE climate change policy making.

1.1 The first steps of climate policy making

Ethiopia's first reaction to climate change was the decision to become part of the global environmental regulatory framework by signing in 1992 at United Nations Conference on

Environment and Development (UNCED) and ratifying in 1994 the UNFCCC, United Nations Convention to Combat Desertification (UNCCD) and Convention on Biological Diversity (CBD).
Participating in the CBD negotiations in Nairobi was biologist Dr. Tewolde Berhan G/Egziabher (passed away in March 2023), whose professionalism and activism since then has been a flagship for the country, leading to the national adoption of the Biodiversity Conservation and Research Policy in 1998. The step was considered unnecessary because with the amendment, international agreements become an integral part of the country's law in accordance with Article 9 of the 1995 Constitution of Ethiopia, but it was of profound political and symbolic significance.
Ethiopias like many others in tropical and equatorial areas, is one of the biodiversity hotspots with many cultivated and an immense wealth of wild plants among the richest on the planet. Based on the concept of gene centres, developed by N.I. Vavilov in the 1920s, Ethiopia represents one of the eight centres in the world where crop plant diversity is strikingly high and where some of the crops concerned became domesticated. It represents a powerful narrative for the country's cultural identity: «The most precious resource we have is genetic resources. We believe that Ethiopia has unique genetic resources, [...]. Therefore, we believe that we need to maximize use of these important resources locally and manage them carefully» (Mulesa and Westengen 2020, 93).
Already in May 1976, through a bilateral technical cooperation agreement between the Governments of Ethiopia and Germany, a Plant Genetic Resource Centre (PGRC/E) was established. It has changed name and configuration over time, and it is the current Ethiopian Biodiversity Institute (EBI), as we have already seen. Its mission is to rescue the country's plant genetic bank from adverse impacts of various human activities and natural calamities, even before the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992, EBI recognised the value of biodiversity as a key component of the environment.
Before the Kyoto Protocol was ratified in April 2005 as a mitigation instrument, in 2001, Ethiopia produced and disclosed to the UNFCCC Secretariat, an initial report of its GHG (greenhouse gas) emissions, as required by Articles 4 and 12 of the UNFCCC. According to this report, the country's total GHG was 48 million tC02e in 1994. This was a mere 0.9 tC02e per capita and therefore the contribution of Ethiopia, and specifically its agricultural sector, to global GHG production was quite negligible (EPCC 2015, 21).

1.2 The de-politicisation of climate change: a convenient calamity

As an almost immaculate emitter of greenhouse gases, for Ethiopia, as for other developing countries, the climate discourse, not without criticality (McDonald, 2010), makes adaptation rather

than mitigation actions necessary (M. Taylor, 2015; Oliver-Smith, 2016). Hence in 2007, under the Ministry of Water Resources and the National Meteorological Agency (NMA), Ethiopia completed the National Adaptation Program of Action (NAPA). This was the first response to the UNFCCC's call in Article 4.9 of the Convention produced at the end of the 2007 COP-13 in Bali for developing countries to address the challenge of climate change, offering funding from a dedicated fund and the expertise of technical advisors to assess vulnerable sectors and groups. Of the thirty-seven adaptation options identified, eleven were prioritized and initiated as many projects covering a wide range of interventions. First, there are those aimed at strengthening and improving community response to droughts and floods, i.e., food security, disaster prevention and management, compared to which, specific projects on climate change and adaptation, which cover the promotion of capacity building activities, establishment of national research and development centers, and carbon sequestration initiatives, are secondary.

Indeed, NAPA represents an attempt to come to terms with climate change, which is not yet central to the designation and is not a priority in itself (NMA 2007, 32). The entire program sits alongside other existing initiatives, policies, and strategies whose intervention aims are primarily aimed at promoting rural and agricultural development and poverty reduction, chief among them the PASDEP (Plan for Accelerated and Sustainable Development to end Poverty, 2005-2010). These address climate change adaptation as a subcomponent of the overall development goal, particularly in relation to natural resources and environmental protection. But climate change shares with poverty and food security the fact that it is cross-cutting, and NAPA recognizes the importance of addressing these challenges holistically. Therefore, the NAPA, which will later be dismissed as the identification of short- and medium-term projects to implement them at regional and sectoral levels, setting of the climate phenomenon, its manifestations and impacts, is presented as a well-constructed report. The analytical approach and the structured framework of climate data, vulnerability identification, analysis, adaptation options, implementation, monitoring and evaluation are maintained in the design of the most recent plans and strategies. However, NAPA's most important contribution lies in having established a characteristic of climate change that has definitively shaped the construction of its narrative in the country and has remained constant in subsequent policies, namely its essence as a natural, or rather naturalised, phenomenon, (Claus et al. 2017) if not for the reference to GHG increases by the more developed world.

Climate change is explained in its variability of rainfall and increase in temperature at the centre of projections and models, and thus its ontological and historical connection with natural disasters. In this sense, to place the table with the chronology of El Niño as the cause of the droughts and famines

in the country is to merely attribute the condition of chronic poverty and food insecurity to them (NMA 2007, 28)[76]. In the construction of the respective discourses, the phenomena of climate change and poverty are presented as axioms, equally de-politicised and de-storicised, purged of the historical-political responsibilities at all levels that have led to the country's condition of extreme vulnerability (Tenzing et al. 2022), without mentioning the *pre*-, *in itinere* and *post*-disaster socio-economic management by both the international arena and the Ethiopian state. As "poverty is the enemy of Ethiopia" (Gebresslase 2015, 24in Comparative Analysis for the SDPRP, PASDEP and GTP of the FDR of Ethiopia by Tewelde Gebresslase Haile 2015, 24), so now is climate change.

In nutshell, the operation inaugurated by the government of Prime Minister Meles-Zenawi (1995-2012), of reducing the Ethiopian concerns a performative climate vulnerability, to use Sophie Wobber's (2013: Webber, S. (2013). Performative Vulnerability: Climate Change Adaptation Policies and Financing in Kiribati. Environment and Planning A: Economy and Space, 45(11), 2717-2733) expression, had begun. Obviously as has been repeated many times, Ethiopia like other countries in the Global South is paying the worst consequences for a change to which it did not contribute at all, and there are more and more recent studies showing that climate change is also having impacts on the El Niño oscillation. The point is to reduce within these plans the aetiology of famines and poverty *tout court* solely to natural or anthropogenic causes to the extent that they are not political and historical responsibilities because they come from climate change. The causes of famines, as well as the dynamics of response to it and drought is a much-studied line of research in the country.

In NAPA, on the other hand, the relationship between poverty and climate change is given solely by the cyclical phenomena of El Niño and how they have been exacerbated by climate change in recent decades. Undoubtedly, this framing is reminiscent of the incipit of Merrill Singer's (2019) aforementioned book crucial to my research, "*Climate change and social inequalities*". The anthropologist reconstructs precisely how the general rise in temperatures caused 'normally' by ENSO fluctuations, has occurred increasingly frequently in non-El Niño years, recording how among the seventeen hottest years ever recorded, sixteen have occurred since 2000, indicating the trend in climate change is towards an ever-warmer Earth. But a text like the Ethiopian NAPA and Singer's analysis differs in the framework in which they place these data. The anthropologist programmatically highlights how «However, climate change does not occur in a social vacuum; it reflects relations between social groups and forces us to contemplate the ways in which we think about and engage with the environment and each other. Employing the experience-near anthropological lens to consider

[76] In Ethiopia, the aetiology of famines is a much-studied line of research in the country.

human social life in an environmental context, this book examines the fateful global intersection of ongoing climate change and widening social inequality» (Singer 2019, 1). Instead, this analysis of relations is missing in NAPA. The Ethiopian government seized the opportunity to capture international attention and sensitivity, to channel the country's old and new problems into a global device such as climate change, which was thus taken as a convenient calamity. And the foundations were laid for a new image of the country, from victim of a catastrophic famine to a country committed to fighting climate change with a sharp and successful nation branding operation (Death 2016, 180, 230).

1.3 Ethiopian climatic leadership

Through the years, Ethiopia's efforts to tackle the effects of climate change have become more systematic and resounding, and 2009 was punctuated by important milestones that established the country's climate leadership in Africa.

First, the National Climate Change Forum (NCCF) was established under the auspices of the Ministry of Agriculture and Rural Development to coordinate national efforts, and NMA was designated as the national focal point for the UNFCCC. Thanks in part to external funding, the National Meteorological Agency has conducted significant investments in human resources, technology and research, and yet, farmers, not only those I encountered, are not benefiting from such significant advances (Dinku et al. 2016; Feleke 2015). Weather stations in the country are unevenly distributed and especially along the main roads, for this reason in the rural areas they complain that the forecasts are for the main cities and how the predicted weather conditions are in most cases opposite and completely useless to take into account once announced on radio and television, and how indeed it is a service that has been impoverished rather than enhanced over time.

Ethiopia's international credit in climate matters was enhanced precisely in 2009, the year of the COP15 in Copenhagen, a much-awaited political and media event with high hopes for a truly effective transnational climate governance (Brüggemann et al. 2020, 4). On this occasion, Meles Zenawi established the foundation for an effective and successful climate diplomacy in the country (Endalew et al. 2016). He made it clear how climate was a national priority, and also how, by assuming the role of chairman of the CAHOSCC (Committee of the African Heads of State and Government on Climate Change) and chairing NEPAD (New Partnership for Africa's Development) and for this reason invited to G20 meetings together with the South African government, he wanted to become a leader in advocacy for other African countries. They decided to present themselves as one delegation, a united front with clear demands for more financial resources from rich and Annex countries. These funds

were to be transferred in the form of direct offsets, amounting to at least USD 67 billion per year for Africa alone to repay the damage inflicted by the Global North, instead of waiting for the uncertain and limited returns of the carbon market through the financing of Clean Development Mechanism (CDM)[77] projects, which in any case, as we have seen, proved to be a failure and a form of carbon colonialism in the Global South (Death 2016).

In September 2009, Zenawi claimed vehemently: «If necessary, we are ready to withdraw from any negotiation that risks being another rape of our continent»[78]. Then, he reiterated this intransigent line again in November, during a preparatory meeting of the UNFCCC COP in Barcelona. But in December, before the COP15, the Ethiopian Prime Minister on his way to Copenhagen stopped in Paris, and, with the enthusiastic support of French President Nikolas Sarkozy, halved the aid request, accepting lower financial transfers and removing the threat of flight from other African representatives (Warlenius et al. 2015,16). «According to Mithika Mwenda of PACJA (Pan African Climate Justice Alliance), this act had the effect of 'undermining the courageous positions of our negotiators and ministers represented here, and threatening the very future of Africa.... Meles wants to sell out the lives and hopes of Africans for a pittance. Every other African country has committed itself to a science-based policy'»[79].

The Copenhagen Accord concluded on this matter with the establishment of two funds, the first one of USD 30 billion for the period 2010-2012, to be allocated to both mitigation and adaptation, and the second one of USD 100 billion per year by 2020 with a focus on mitigation for all developing countries (Decision 2/CP.15, Article 8 in UNFCCC, Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009, 2009, 7). But since 2009, «The sum in reality has never been fully reached, although gradually increasing year by year. According to the OECD (Organisation for Economic Cooperation and Development) report *Climate finance provided and mobilised by developed countries in 2013-2018*, it rose from USD 71.2 billion in 2017 to USD 78.9 billion in 2018. Even in subsequent years, funding remained around $80 billion in each year» (Butti and Nespor 2022, 192). As we have seen in the previous chapter, the topic of climate

[77] «The Clean Development Mechanism (CDM), defined in Article 12 of the Protocol, allows a country with an emission-reduction or emission-limitation commitment under the Kyoto Protocol (Annex B Party) to implement an emission-reduction project in developing countries. Such projects can earn saleable certified emission reduction (CER) credits, each equivalent to one tonne of CO2, which can be counted towards meeting Kyoto targets. […] The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction or limitation targets» in UNFCCC, *The Clean Development Mechanism*, https://unfccc.int/process-and-meetings/the-kyoto-protocol/mechanisms-under-the-kyoto-protocol/the-clean-development-mechanism).

[78] A. Ashine, Africa threatens withdrawal from climate talks, in The Nation, 3rd September 2009

[79] T. Reddy, From African Walk Out to Sell Out in Climate Chronicle, 18th December 2009, 1 cited in P. Bond Africa and the climate finance controversy, 21st October 2010, https://www.cadtm.org/Africa-and-the-climate-finance)

debt and justice remain after more than a decade among the most hotly debated and still unresolved issues at the UNFCCC Conferences of the Parties, but of Zenawi's betrayal (Bond, 2013) there is no memory.

Besides the literature (Dimitrov 2010) and specific reporting on the events of the "Copenhagen disaster", among the interlocutors in my research, only Dr. Million Belay, who was present there as activist, and director of MELCA NGO, attending KlimaForum09, the main civil society gathering at COP 15, and producing daily-reports for *Southern African Journal of Environmental Education* (SAJEE), described Meles' behaviour as «pure madness» (Interview, April 2022, Addis Ababa).

The others, the farmers, especially comparing Meles with Abiy in the light of the latter's actions, as we will see later, described the former as «a true green leader». Representatives of Ethiopian NGOs who participated in the CCC-E Workshop in Addis Ababa, in preparation for COP26 in November 2021, recalled in their presentations «the glorious past of climate engagement in the country», how there was diligent work from the bottom up done by the Environmental School Clubs, now reduced to a ghost of their former selves, but which represented at the rural level, a playground for "environmental education" that needs to be restored. Finally, some young people, not yet thirty years old from the capital city or from other cities in the country[80],still recall the Prime Minister's Meles Zenawi public engagement on climate change, the Copenhagen lustre, and an outreach activity at school level almost equal to that done to raise awareness and prevent the spread of HIV, for example, through the practice of English exercises.

Therefore, the events, or at least Ethiopia's prominent participation in COP15, had a great media resonance that left a vivid mark on the population and an acknowledgement that demonstrates how Meles Zenawi at least succeeded in conveying the message of the country's climate commitment (Epp 2019).

1.4 Knowledge is power

Unquestionably, COP15 was a failure (Dimitrov, 2010), especially since it received a great deal of media attention, and the expectations of even civil society were high. But beyond the disappointing outcomes, Ethiopia' s work on climate change in terms of both mitigation and adaptation did not suffer any setback.

[80] They are a group of young people who were setting up a tourist agency in Addis Ababa at the time of my fieldwork. They have different background and I had contacted them to work together an analysis of PM Abiy's speeches and his appearances in which he spoke about climate change in English and in Amharic. It was not possible to materialise this strand of research, in any case it was interesting, albeit in a few meetings, to enter into another way of experiencing climate change, through their school memories.

In April 2010, the Ethiopian Academy of Science (EAS), an independent institution charged with providing evidence-based policy advice to the Ethiopian government and other stakeholders, was established. In turn, the EAS established the EPCC (Ethiopian Panel on Climate Change), as a sub-project of ESACCCAP (Environment Service and Climate Change Analyses Program), a project jointly managed by the EAS, the CSC (Climate Science Centre) and the HoA-REC&N (Horn of Africa Regional Environment Centre and Network) of Addis Ababa University.

The EPCC -in a sense an Ethiopian version since the name of the IPCC- is a national platform composed of experts from universities, research centres, government offices and people working in the field that produces periodic assessments of climate change issues in the country, making up for the chronic and structural lack of climate change data that plagues many developing countries and is a major constraint on the work of the IPCC. Moreover, Ethiopia in 2015 was the first country, dubbed least developed countries (LDC), to use the IPCC methodology as an assessment tool (Endalew and Craft 2009). It has also produced no less than seven thematic reports on physical science, agriculture and food security, biodiversity and ecosystems, health and settlements, industry, transport and infrastructure, water and energy, and the policy and institutional framework on climate change. These are extremely valuable sources for studying the phenomenon of climate change in the country from every aspect, not only as a natural phenomenon, but also as a social one.

Furthermore, as stipulated by the Copenhagen Accords in early 2010, the government, under the guidance of NMA presented the UNFCCC Secretariat with the NAMA (Nationally Appropriate Mitigation Actions): a set of targets, policies, and actions that the country intended to undertake to reduce carbon emissions, albeit on a voluntary and non-binding basis. As the NAPA was drafted to obtain funding for adaptation projects from the Green Environment Facility (GEF), NAMA intended to increase opportunities for implementation and recognition of mitigation actions by facilitating financial and technological support for development.

In fact, developing countries are allowed to register information for all NAMA seeking funds for implementation, small projects, national initiatives by sector, and also to enter work carried out without external support in order to be recognised for their mitigation efforts by the international community.

In the Ethiopian case, the document, which appeared more like a wish list (EPCC 2015,39) listed about eighty-eight hydropower, wind, solar, geothermal, electric railway and municipal waste management projects, but to date, the country has only registered two projects more than a decade later, in August 2021: Creating Opportunities for Municipalities to Pro-duce and Operationalise Solid Waste Transformation (COMPOST) and Ethiopia’s National Railway Network and Addis Ababa

Light Rail Transit (LRT), components of which, such as the establishment of the Railway Academy and Transit Oriented Development (TOD), await support for implementation[81].

At a time when mitigation and adaptation measures were divided, until 2011, it was undoubtedly to the latter complex field of knowledge production and policy building that Ethiopia devoted most energy, as evidenced by the launch in 2010 of the EPACC (Ethiopian Programme of Adaptation to Climate Change). This, building on the NAPA project approach, developed a broader adaptation strategy on the basis of twenty-nine priority climate change adaptation measures, and invited all sectors at the federal level to issue their own programmes on the subject and to define planning, implementation and monitoring of activities.

Therefore, in 2011, in response to the EPACC's call, the Ministry of Agriculture set up its own adaptation programme, the ASPPACC (Agriculture Sector Programme of Plan on Adaptation to Climate Change), but rather than develop it from scratch, it borrowed interventions from pre-existing ones. In this context, the Productive Safety Net Programme (PSNP), already mentioned and which we will discuss in detail in chapter four, is enshrined as «a planned adaptation scheme in Ethiopia's agriculture sector» (Mersha and van Laerhoven 2018, 89), and a key climate change response mechanism (FDRE 2020, 41). But none of these plans have really caught the mainstream's attention, invoking green discourse and practices as a means of international branding, until the Climate Resilient Green Economy Strategy (CRGE), which says much more about the state and vision of the country than it does about climate change and the management of its harmful effects on the population.

2. *The complex and imperfect world of the Climate Resilient Green Economy Strategy*

The stage for the presentation of the spearhead of Ethiopia's climate commitment, the CRGE, was the 2011 COP in Durban, South Africa, the perfect context for the launch of the strategy, in terms of international, pan-African relations and the focus on climate change. While negotiations dragged on as usual (Klein 2015, 22)[82], Meles announced his climate resilient green economy strategy. This

[81] Public NAMA - Home (unfccc. int)

[82] The COP in Durban represents another crucial COP in the history of climate negotiations, as reflected in the words of Naomi Klein, who has become a reference in political reflections on climate change through her books such as *The Shock Doctrine: The Rise of Disaster Capitalism* (2007) and *This change everything: Capitalism vs. the climate* (2014), considered to have made a major contribution to the politicisation of the climate change discourse within the public debate (Erisksen and Mendes 2022,). In this book, Klein quotes the words and example of a young activist, before the examples of Greta Thunber and Vanessa Nakete, showing the importance of tracing geneaologies also with respect to movements that have built up from the grassroots (Klein 2015, 22): «"You have been negotiating all my life" ("Get It Done: Urging Climate Justice, Youth Delegate Anjali Appadurai Mic-Checks UN Summit", Democracy Now!, December 9, 2011). So said Canadian college student Anjali Appadurai, as she stared down the assembled government negotiators at the 2011 United Nations climate conference in Durban, South Africa. She was not exaggerating. The world's governments have been talking about preventing climate change for more than two decades; they began negotiating the year that Anjali, then

strategy is a source of pride for CCC-E institutions and civil society, as it is one of the first in the world (Fisher 2013, 12) to overcome the dichotomous view between mitigation and adaptation of NAMAs and NAPAs and to integrate them into a single development vision. Ethiopia's choice to adopt a green economy strategy, despite its insignificant contribution to GHG concentrations in the atmosphere, endorsed in the 2007 NAPA and reiterated in the international COP contexts by advocating *loss and damage* mechanism, should not be interpreted as overzealous endorsement of mitigation policies pursued by rich countries, but should be understood in the context of the country's systems of governance and the wider political orientation of the EPRDF ruling coalition, as a developmental state committed to galloping GDP growth.

Mitigation does not reflect the development priorities of most communities, but Ethiopia has mainly looked to Asian developing states, namely Japan, Taiwan and especially South Korea, whose advisors Ethiopia has often used to develop industrial and technological policies (Cellai 2022, 175): who pioneered the reconciliation of economic growth and environmental conservation and finalised his National Green Growth Strategy and Five-Year Plan in 2009.

In fact, Ethiopia used to prepare its development plans with the orchestration of various stakeholders, among which the World Bank's advice stands out, «As the most influential player in the donor community, the World Bank provides a networking/brokering role, with the Development Assistant Group (DAG) made up of a range of 'development partners'» (Amdissa Teshome 2006, 3).

And on the other hand, in the specific case of the CRGE, the government coalition and its technocrats have used, among many others, mainly consultants and experts from the Global Green Growth Initiative (GGGI), a South Korean intergovernmental organisation with links to private industry, to propose strategies focused on efficiency in resource and energy development (Jones and Carabine 2013; Paul and Gĩthĩnji 2018).

GGGI traces its inception to South Korean President Lee Myung-bak's proclamation in 2008 of a vision of low-carbon, green growth development, which aimed to move away from fossil fuel dependency towards qualitative growth with an emphasis on the use of new and renewable energy resources. This goal took shape in 2009 in the face of deepening recession, in the Green New Deal (2009-2050). The Green New Deal is a $38.1 billion fiscal stimulus package, 80 per cent of which has been earmarked for more efficient use of resources, renewable energy, and low-carbon vehicles and railways. This green spending package amounted to 95 per cent of the fiscal stimulus spent in

twenty-one years old, was born. And yet as she pointed out in her memorable speech on the convention floor, delivered on behalf of all of the assembled young people: "In that time, you've failed to meet pledges, you've missed targets, and you've broken promises"». (Klein, Naomi. *This changes everything: Capitalism vs. the climate*. Simon and Schuster, 2015.)

response to the financial crisis, 1.2 per cent of GDP, and aimed to directly create at least 334,000 new jobs. By allocating these resources in response to the financial crisis, Korea's spending on a green economy surpassed all other countries and was therefore considered a notable example in green growth initiatives by the Organisation for Economic Co-operation and Development (OECD). Indeed, countries from the North and South have turned to Korea as a green state for lessons in green development', hoping to overcome dirty technologies, as such the Ethiopia of Meles Zenawi (Death 2015; Lee 2015).

Both the WB's and Korea's approaches were in the direction of creating and pushing a context of ecological modernisation, in which the adoption of various technological innovations and 'tech-fix' approaches were sufficient to mitigate climate change (Singer 2019). The tools for the *ecologization* of economies consist not only in a superficial greening, but in strengthening the business-as-usual approach useful for the strengthening of the state itself, more than cope with climate change effects.

The governing coalition the ERPDF was interested in "changing" its economy as the only way out of underdevelopment (Paul and Gĩthĩnji 2018, 5) and this transformation passed through contradictions, and the dialectical, but not ontological resolution of economic growth and development and environmental protection.

On the one hand, the construction of the plan was in continuity with the assistance programme for African countries inaugurated by the World Bank in 2009 entitled *Making development climate resilient in Sub Saharan Africa*, which focused on adaptation and risk management as the driving force behind development in these countries (Death 2016, 179) and echoed previous climate plans - such as the NAPA and Ethiopia's Programme of Adaptation to Climate Change (EPACC). And on the other hand, the CRGE responded promptly to the request made by the UNEP Global Green New Deal (GGND) in 2009, after the triple economic, food and energy crisis (Barbier 2009), to rethink countries' economies in a green key, i.e. adopting the green economy, with the objective on the one hand to promote sustainable growth, halting GHG emissions at 2010 levels and at the same time making Ethiopia a middle-income country by 2025.

The CRGE, which has a plan of sixty initiatives to be undertaken to enable the country to "deviate" from the business as usual (BAU) and change the country development trajectory, is built on four interconnected pillars to build a green economy and climate resilience.

The first pillar for building a green and climate resilient economy is the 'improvement' of agricultural and livestock production practices as the driving sector of the country's economy. The second pillar is reforestation, afforestation and protection of forests due to their importance in storing and sequestering carbon and other ecosystem services. The third pillar is the expansion of renewable

electricity production, mainly hydropower, for local and regional markets. Finally, the fourth pillar is modern energy-efficient technologies for use in transport, industry and construction.

The priority given to agriculture stems both from the economic and social centrality of this sector, and from the observation that methane emissions from agricultural practices and land use account for 70.82% (42,678 metric tonnes of CO2) while nitrous oxide emissions account for 88.272% (32,521 metric tonnes of CO2), according to data reported in the CRGE and in line with the findings of the 1994 study presented to the UNFCCC[83]. The estimated level of emissions from livestock production- (which accounts for about 10% of GDP- reached 65 Mt CO2 in 2010, accounting for over 40% of total current emissions, while forests contribute 37% of total emissions, accounting for 4% of GDP.

The placement of energy, transport, industry and construction as the other two pillars is not explained by the relatively low "weight" of their emissions, at around 12 per cent of greenhouse gases, but by the fact that emissions from these sectors are set to increase as the country's economy grows in the near future.

The advantage of the CRGE is that it makes climate central to the development plan. For the first time in the country public policy responses will address climate change as an integral part of broader economic and development planning rather than as an isolated issue, combining policies on environmental protection with those on energy. However, the path to building real possibilities to address the consequences of climate change is not through the mere implementation of the CRGE, on the contrary. The *empasse* is not in the gap between what is produced in policy design and what is then turned into action and therefore sees it as impossible to maintain the goal of becoming a zero-emission, middle-income country, on the contrary. The problematic aspect is already all in the economic policy planning that are branded as green and climate resilient, but clearly not sustainable, and which therefore see the Ethiopian state playing a direct role, as a protagonist and not just entangled in the unequal power relations of global climate governance, as seen in the Death's analysis frame (2016). This is why it is necessary to analyse the construction of the CRGE, starting from the concept of green economy and what it entails especially in relation to agriculture, for the implications it has on the daily practices carried out by the farmers encountered during the research and on hydropower production. While green economy measures in the agricultural sphere are more complex to grasp and take time to make the state's political project visible, the dam construction, on the other

[83] Taking a more general view, it is possible to claim that the agro-food sector, taking into account its reality of delocalised supply chains, the use of pesticides and fertilisers, its industrialisation and mechanisation accounts for 48% of total global emissions (GRAIN 2011), making food production one of the most carbon-intensive sectors, the most fossil fuel-based. (Van Aken 2020, 116).

hand, symbolically demonstrates the muscular effort to legitimise a new era of large-scale infrastructure development and modernisation and reaffirm state control over resources.

2.1 The deception of the green economy

In 2015, within the CRGE's framework, the *Climate Resilient Strategy in Agriculture and Forestry* was produced[84]. The main greenhouse gas emissions depend on these sectors and moreover, they are the key sectors of the economy and the source of livelihood for almost the entire Ethiopian population (Abbadiko 2016) on whose productivity growth as well as the preservation of which depends not only a food security condition, but also the development of the country. Leaving aside forest management, which was marginal in the fieldwork, I limit the analysis to agricultural prescriptions[85], beyond all the rhetoric used in the 2015 strategy, considering that they also constitute the material and discursive backbone of the Ethiopian economy and the element of continuity between development plans and the heart of the CRGE itself.

The strategy for building the green economy is clear: it calls for an increase in the productivity of farmland and livestock rather than increasing the cultivated land area or number of grazing cattle. It emerges how the mitigation of the effects of climate change in agriculture intends, without renouncing the application of organic fertiliser, to focus on increasing agricultural production through a process of intensification based on modernisation of inputs, improved seeds and fertiliser, pesticides and hybrid cattle.

Indeed, it is the increasing use of synthetic fertilisers that is expected to have damaging impacts on the environment and also considerable in terms of emissions. On the contrary, the reduction in the number of cattle, the first in Africa in terms of livestock population, with the spread of hybrid cattle, which are therefore smaller in number but more productive in terms of meat and milk, is supposed to

[84] Dealing with forests while conducting research on agriculture and climate change was less obvious than I would have expected, at least in the contexts of my research. Agriculture and forestry have been constructed as antithetical narratives, moving from a separation of the sectors under the Derg to the reunification of the two sectors under the latest Abiy government set-up. The split perpetrated that separation whereby there was competition between the two sectors (deforestation as the cause of agricultural expansion), which in reality more than being perpetrated by the actions of the farmers, responded to the way they were institutionally thought of. In such a dichotomy, forests as a metonymic representation of the environment have been associated with climate change in the institutional set-up (consider for example the establishment of the Ministry of Environment, Forest and Climate Change (MEFCC) - Ethiopia in 2015) and as a resource to contribute to mitigation, according to the official narrative of global climate governance, reinforced by projects on carbon trading, among which REDD+ must be mentioned: Reducing Emissions from Deforestation and forest Degradation, plus the sustainable management of forests, and the conservation and enhancement of forest carbon stocks.

[85] Moreover, agriculture itself is seen as a determining agent of climate change, at the very beginning of its development, even before the gaseous emissions caused by the industrial revolution, causing the global temperature to rise by 0.6-0.7 °C and resulting in greenhouse gas concentrations that rose rapidly above their natural levels. Thus, already several thousand years ago, humans took over from nature in commanding the climate, having a modest but growing impact, and this early influence is precisely linked to agricultural activities (Ruddiman 2015).

reduce the methane emissions produced by them. In the CRGE itself, there are assessments to this effect: the use of fertilizers in crop cultivation produces approximately 10 Mt CO_{2e} which is three times more than N_2O emission (about3Mt CO_{2e}) from crop residues reintroduced into the ground.
Hence, the CRGE has so far failed to meet targets in climate mitigation, stabilising emissions, in line with what is happening all over the world. From 2011 to 2021 Ethiopian GHG emissions increased by 43%, Methane ones by 29% and finally Nitrous Oxide emissions by 33%[86].
But the point is that, as we shall see, the CRGE has not even come close to building climate resilience, which, although a limiting and problematic concept, because it is conservative, can be understood both socially and ecologically, as the ability to maintain the sustainability of local livelihoods and resource utilisation (Crate and Nuttall 2009, 10-11). And the explanation is visibly in the ontological squinting that underlies the entire construction of the strategy. In fact, on the one hand, compared to the past, CRGE is meant to be the synthesis of the dialectic between two narratives and their respective dominant discourses that has been going on since the 1960s, and has spanned the entire history of the country. On the other, the CRGE concretely meets the pages of economic development plans where, in fact, intensification of agricultural and cattle production was emerging clearly as a strategy, under the auspices of the green economy.
In other words, in the strategy converge on the one side the need for protection, to preserve natural resources, land and biodiversity recognised as crucial to cope with the increasing climatic variability and the heart of the country's agricultural resilience. On the other hand, there is the need to increase agricultural production through chemical fertilisers, improved seeds and artificial insemination strategies to ensure food self-sufficiency and get the economy off the ground. Simplifying, to the historical and political dichotomy between the dictates of environmental conservation and the dogma of the Green Revolution, which are linked to opposing scientific studies, the expression of the interests of different groups and supported by funding from equally different donors (Keeley and Scoones 2003,73), the CRGE proposes a reconciliation with the concept of the green economy.
The definitions of green economy produced by OECD, UNEP and WB strategy documents differ (Hickel and Kallis 2019, 2; Goodman and Salleh 2013, 415). Once again, the oxymoronic nature of green economy (Bassi 2018, 77), (Brand, 2012), as we have already seen for sustainable development, is the key to the concept success (Corson et al. 2015; Ponte and Brockington 2017). It remains open and semantically vague for its own promoters, as reflected in the words spoken by Meles Zenawi at the Sixth African Economic Conference in October 2011. He reaffirmed his commitment to

[86] From 2011 to 2021 Ethiopian GHG emissions increased by 43%, Methane ones by 29% and finally Nitrous Oxide emissions by 33%.

combating climate change and to spearheading the conversion of the evolving global green economy on the continent: «Many, I am sure, would agree that the key issue for us Africans is the structural transformation of our economy and not just GDP growth. The green economy, however, is something entirely different» (Zenawi 2011, 1). Indeed, 'green economy' was not a new concept at all, unlike the creation operation that took place with the concept of sustainable development. The concept of the green economy emerged as early as the 1950s, and for Emanuele Leonardi (2017), its clear configuration dates to the 1973 oil shock when the foundations were laid for the discourse aimed at transforming environmental constraint into a development ground for capital, a new business opportunity, a growth engine, the foundation of a new cycle of accumulation. This conceptualisation of the relationship between the economy and the environment in which environmental protection becomes a growth promoter, not a burden (Newson 1995) was contained in the idea of so-called ecological modernisation (Hickel and Kallis 2019,1).

The concept of a green economy re-emerged in the late 1980s with several publications (Death 2016,166), only to be revived following the triple economic, food and energy crises (Barbier 2009,2015). It was claimed by the Global Green New Deal (GGND) of the United Nation Environment Programme (UNEP) in 2009 to rethink the economies of countries in a *green* perspective. It entrusted a hue, a colour, 'green' with the responsibility of reconciling environmental protection with economic growth, which was in no way to be renounced.

In fact, already in the early 2000s climate change began to be discussed at the UN Security Council and the idea took shape that acting later would be more costly than acting now (Death 2016, 167). «The damaging impacts of climate change on temperatures, rainfall, disease, flooding, grazing patterns, and crop production in Africa politicians, activists, and citizens, although scientific discussion of climate change has been slow to permeate popular discourse» (Death 2016, 167).

Finally, the green economy emerged as one of the themes of the Rio+20 Conference on Sustainable Development in June 2012 with the document *The World We Want*, which simultaneously called for a 'green economy' and a less handy 'sustained economic growth'. Representing a radicalisation of the concept of sustainable development, the green economy shared with it the amorphous nature and semantic vagueness necessary to make it the new environmental orthodoxy (Goodman and Salleh 2013, 421), presented as the latest great idea of international environmental policy (Death 2016,158). Once again, Ethiopia makes a language that has become hegemonic its own and is among the first countries to build on the decisive but entirely illusory potential of the green economy (Leonardi 2017) the vision of its own development project. It does not bother at all to clarify in any way how the implementation of government-mandated transformation activities outlined in the agricultural

strategy can be reconciled with the goal of ensuring community-based environmental protection and engaging in emission abatement in the CRGE. It is not necessary, having placed it under the sign of the green economy is a guarantee of self-evidence.

With all its precarious feasibility and rhetorical vacuity, the CRGE becomes structural to the country's economy with the GTP II (Growth and Transformation Plan 2014/15-2020 Addis Ababa, 2010, 77-78). The GTP inherits from the CRGE the vision of the ambitious strategy of rapid growth and economic diversification aimed at transforming Ethiopia into a 'middle-income country by 2025', where it lands with all its precarious feasibility and rhetorical vacuity.

But the concept, even if not quite the expression 'green economy', makes its entry into the country's policies in 2010 with the GTP I (First Growth and Transformation Plan, 2010-2015) launched therefore a year before the CRGE where it is stated that one of the objectives of the plan is "building a carbon neutral and climate resilient economy and enforcement of existing environmental laws are priority actions in connection to the environmental conservation" to be realised through mitigation and adaptation strategies (MOFED 2010, 77/119-121 in Growth and Transformation Plan (GTP) 2010/11-2014/15).

In fact, already in the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (2005-2010) a focus on the environment was noted, for the need to manage polluting industries, undertake waste management activities at the urban level, and awareness creation at the school level through student environmental clubs. But the goals of environmental sustainability remained in the background, and they were strongly compromised by the structural objectives of the growth plan and specifically the focus on growth and commercialisation of agriculture. This goal stated programmatically in the PASDEP was a change from the previous Sustainable Development and Poverty Reduction Programme (SDPRP) plan and ushered in a vision of the country's economy and development that in fact continues to this day, culminating in the Ten-Year Development Plan. A pathway to prosperity (2021-2030) and through the two growth transformation plans.

Since the PASDEP was released, it has become clear that the Ethiopian government is no longer interested in protecting equity and poverty reduction, but sees broader economic growth as the way to achieve these goals in the long run, the environment as a resource for development, and the state as the controller and guardian of the country's development. Henceforth, the strategy of both the EPRDF and Prosperity Party governments in Ethiopia will be to entrust the poorest and most vulnerable to the meshes of the ever-growing food security and social protection programmes, and on the other hand to push for a pro-growth strategy.

In this regard, Ethiopia is pioneer in formulating and implementing the climate resilient green economy strategy. Accordingly, enhanced efforts will be made in areas of improving crop and livestock productivity to ensure food security through reducing emissions; protecting forests and re-afforestation including carbon stocks; expanding electricity generation from renewable sources of energy; and leap-frogging to energy efficient technologies in transport, industry and construction during GTP II period» (FDRE 2015, 80). But the demonstration that the insistence on productivity would always prevail over environmental protection emerged clearly with the opening up for the first time to private and foreign funding in agriculture (FDRE 2015, 25-26), a possibility that until then had only been reserved for the industry and infrastructure sector, effectively accelerating the monetarisation of the environment and its components, opening the country's doors to the so called land grabbing phenomena.

Finally, the "Building climate resilient green economy" includes a controversial renewable energy production, especially hydropower, a multi-purpose sector for Ethiopia's development project, necessary to sustain economic growth in the country, functional to its continued state-building, and a shortcut to reduce emissions. This project was already clear in GTP I and became programmatic in GTP II.

> Climate and development are strongly interlinked. Well-designed policies in these areas can make growth and climate objectives compatible and mutually reinforcing in both the short and medium term. In the long term, if climate change is not tackled, growth itself will be at risk. Ethiopia is currently in a very strong position of having very low emissions per capita, huge renewable heat and electricity resources and the opportunity to address climate risks into the short term that result from outdated fossil fuel technology and seek clean and renewable 93 alternatives. The Government has recognized this and plays a leading role in driving the climate resilient green economy agenda (FDRE 2015, 92-93).

2.2 The construction of dams: the dark shades of green

In terms of environmental and social effects, it is hard to consider large dam projects as 'green', since in the 2015 Climate Resilience Strategy: Water and Energy, production is still almost entirely hydroelectric. Indeed, the plan is stated to diversify renewable energy sources by investing in wind, solar, geothermal and geothermal-solar and also to develop natural gas for export, after discovered gas reserves in Ogaden area with an export terminal in Djibouti to reduce dependence on water, in light of rainfall variability, but these remain secondary (FDRE 2015, 37). The strategy aimed to upgrade this production from the 2,178 MW of installed capacity to about 24,092 MW of available capacity by 2030, when the country's energy demand is estimated to be 14,213 MW, to export 3,655 MW of electricity to neighbouring countries by the same date to provide a source of foreign exchange income and support regional integration.

According to the environmental group International Rivers[87], Ethiopia has more than twenty dams currently in operation or under construction, more than any other African country, and that these technocratic projects have boomed in the last decade alone, providing an average generation capacity of 8,629 GWh/year. But half of the population lives in dramatic condition of energy poverty (51.1 %, average between 93.2 % urban and 39.4 % rural) without access to electricity and heavily dependent on biofuels and waste (88%), consisting largely of traditional biomass fuelwood accounts for more than 80% of households' energy supply today, particularly in the rural areas. The 2015 strategy planned to build and have operational by 2030 the Genale Dawa III hydropower plant (254 MW) in operation by early 2020, the Gibe III (1870 MW) and the Grand Ethiopian Renaissance Dam (GERD) (6,000 MW) (FDRE, 2015, 21).

The Gibe III was completed and inaugurated in 2015, resulted in the lowering of Lake Turkana, the largest lake in a desert location in the world, by 1.5 metres, and, due to the 243-metre high damming of the Omo River, the stopping of its flooding, on which the lives of hundreds of thousands of people in Ethiopia and Kenya depend. The highly controversial GERD is still only partially in operation, but destined to be the largest hydroelectric power plant in Africa. The construction of the dam on the Nile, due to a number of contingencies (Cascão and Nicol 2016), was announced the same year as the launch of the CRGE, in 2011, and created deep tensions in the region first of all with the countries downstream of the basin, namely Egypt and Sudan (Salman 2016; Yihdego 2013; Swain 1997). But as Yeshiwas Degu Belay (et al. 2020, 28) argue, quoting Filippo Menga, the fact that the Ethiopian leadership has framed it as a foreign policy issue has allowed it to sidestep the domestic debate on its negative consequences in terms of social and environmental impacts.

Ethiopia began filling the reservoir in June 2020, although there is debate over whether the filling was intentional or the result of natural processes (Meseret 2020; Zane 2020). After talks between Ethiopia, Egypt and Sudan failed to reach agreement on management of the dam, in 2020 the US suspended USD 130 million in aid to Ethiopia (Kiruga 2020).

Thus, in the name of the green economy, of the effort to halt the growth of GHG emissions and produce clean energy, initiatives are being pursued that are anything but inclusive, overwhelming entire communities or forcing them to become impoverished according to policies and dynamics that in history, it has been seen, are not at all resolving, but damaging socially, environmentally and even economically (Abbink 2012).

[87] International Rivers | People, Water, Life, https://www.internationalrivers.org/?s=Ethiopia

2.3 A review of a decade of CRGE

Heretofore, the CRGE's analysis has covered the guidelines, the frames, but fundamentally, as argued at the outset, the strategy provides a long, redundant list of activities that can be traced back to the four identified pillars that have nothing particularly different from the perspective of climate resilience - as seen in the field of agricultural practices proposed at the structural level, but in any case, do not even track GHGs mitigation.

The slow and weak transformation of policies into practices, or rather what makes them so ineffective, is not simply the lack of resources, the malfunctioning of administrative-bureaucratic machine, the top-down approach of strategies, the complexities of reality and the differing interests of the actors involved (Kelbessa 2015), but more specifically the continuous institutional restyling of the country that prevents structures from settling, maturing, managing their activities and hoping to reap the fruits of their interventions (Tigabu et al. 2014). The CRGE implementation was the prerogative of the Environmental Protection Agency transformed into the Ministry of Environment and Forest into 2013, renamed two years later Ministry of Environment, Forest and Climate Change, under Hailemariam Dessalegn governament. This was an upgrading that allowed environmental and climate issues to be represented in the central government's decision-making process, i.e. within the Council of Ministers. But in 2018 the Ministry was be downgraded to the Environment Forest and Climate Change Commission and finally to the Environment Protection Authority in 2021, under the Dr. Abiy current mandate.

This making and unmaking of institutions takes place at the federal level and at most at the regional level as a result of Proclamations Nos. 295 and 299 of 2002, which recognised that each region could establish independent Environmental Agencies or designate an existing one to deal with the implementation of the 1997 national law, the Ethiopian Environmental Policy and Conservation Strategy. But at the lowest level, at the zone level[88] - and *woreda* level, there is no chance that these continuous transformations and reconfigurations will take shape, since even when dedicated and independent offices are established in this constant and inexorable process, and not departments for environmental protection in the broader sense, accountability remains ancillary and subordinate in the allocation and management of resources to the Agricultural Office, according to that productivist model analysed above. However, the Facility system has not been fully implemented in this decade,

[88] Let us take the example of the Gofa Zone, of which the Demba Gofa *woreda* is a part. This zone only came into existence in 2020, after the separation from the Gamo Gofa Zone, and is still in the process of completing the construction and installation of offices, and the implementation and monitoring of projects continues very slowly, partly because it was chosen to be located halfway between the towns of Sawla and Bulki in order to avoid centralisation on one of them.

there is a lack of data, accurate mapping, both for mitigation activities, and measurement and evaluation of the results of projects implemented on adaptation[89]. And this difficulty is evident at the lowest level, i.e. at the *woreda* level, where the CRGE and its Facility system has only been in place since 2019-2020, basically as a monitoring of the activities carried out by the other departments and offices of the *woreda* especially at the urban rather than rural level, whose leadership is divided between the Finance Office and the Environmental Protection Office, whose exact name changes from region to region[90]. Therefore, the activities in themselves carried out within the CRGE were not particularly 'significant' in the sense of a break with the past. When they did not create an overlap with those always carried out by the Natural Resources Management department or were not limited in recent years to the Green Legacy planting days, which we will see in the next section.

A second element is related to the declared dependence on external aid with which the plan is constructed. According to Overview Report April 2020, USD 82 billion has been spent on identified projects that have a direct or indirect link to CRGE, with plausible impacts on mitigation and adaptation, coming first from Ethiopian public funds, and then from international aid, while private sector funding played almost no role (FDRE, Overview Report Ethiopia's Climate Resilient Green Economy (CRGE) Strategy (2011-2019)-Implementation Progress Assessment Report, Addis Ababa, 2020, 4-5). The entire CRGE and its vision is a remarkable test for a developing country like Ethiopia, which, while intending to utilise the country's resources, is largely dependent, as was explicitly stated from the very first lines of the plan, on USD150 billion in funding for 20 years mainly from developed countries. For this reason, the Ministry of Finance, in collaboration with the Environment, Forests and Climate Change Commission (EFCCC), established the CRGE Facility in late 2012 and made it operational in early 2013. It is the cornerstone of the country's climate governance strategy, the *conditio sine qua non* of CRGE implementation, i.e. a financial and technical mechanism to support the implementation of the strategy's priorities, assist the government in accessing and facilitating international climate funds, and guide and harmonise domestic and international sources of finance, both public and private, through performance-based grants, guarantees and loans.

The CRGE Facility was supposed to provide the rhetorically perfect framework for development aid to flow into an increasingly crowded and competitive arena (FDRE 2020, 83). The various recipient

[89] Ethiopia Report Climate Finance PathFinder, 2020, https://climatefinancepathfinder.global/ethiopia/.

[90] The MoA has established a dedicated CRGE coordination unit with a full-time coordinator and technical experts. The CRGE coordination unit is assigned to lead, steer, mainstream and monitor the performance of the agriculture sector's components of the CRGE. It is also implementing a pilot project known as the CRGE fast-track project. The project started in 2014 and is operating in 27 *woreda* of the four main regions with the aim of developing best practices for mainstreaming climate-resilience activities at grassroots level. CRGE focal persons at regional level are assigned to coordinate Regional CRGE Technical Working Groups that give guidance to regional and district level CRGE activities. At the community (kebele) level the development agents (DAs) serve as the CRGE focal persons.

states are in fact ranked on the basis of an international ranking, which serves to pit countries against each other on the basis of certain achievements and performance, environmental considerations including the implementation of climate policy guidelines, and which create the idea of green or laggard states (Death 2016, 204-205). Ethiopia, or how it has always been able to attract aid (Fantini 2008), but the arena of climate finance in itself is particularly lucrative than the rest (Bryant and Bailey 1997): «To the extent that such financial transfers are now linked to, Third World states have a strong incentive to adopt 'green' policies (Adams 2001). Perhaps more importantly, most Third World states now realise that 'ecofriendly' policies can also be financially lucrative» (Bryant and Bailey 1997, 61).

The Facility system and the entire discourse behind it find a perfect description in the words of the anthropologist Pasang Yangjee Sherpa. «The techno-managerial approach to climate policies and programmes is rooted in the development culture of the donor-recipient. The availability of the Climate Fund after the Kyoto Protocol served the national government to formulate basic climate policies in 2010 and 2011, after three or four years of preparation [...], and to subsequently bring climate change policies into the mainstream» (Sherpa 2022, 235-236).

Not only by imposing conditionalities, government techniques and technologies developed in the West and promoted by international agencies often shape preferences and interests and thus forms of environmental governance in Africa and other developing regions', with repercussions on the domestic politics of countries and their process of building and establishing themselves as green states.

In this regard, Farhana Sultana writes «Furthermore, the roles of development institutions and funding come under critical consideration, as development can and has perpetuated forms of neocolonial control over the post-colonial and occupied world through the operations of state and non-state organizations, and cognitive conditioning of citizens and institutions. Donor-driven development is about power; it is neither neutral nor benign. What is climate-resilient development or adaptation may not involve local input despite intense local impacts, thereby needing interrogation» (Sultana 2022, 7).

Nevertheless, despite its massive and historical dependence on aid, Ethiopia has never relinquished its leading role as a proactive country, one that therefore acts, as well as invokes and awaits the mechanisms of climate justice with its own plans, its own strategies. Indeed, as seen from Meles' early climate pledges, climate change has enabled the mobilisation of a discourse that has functioned both as nation branding inside and outside the country, and especially as a device to read droughts and famines under a new, totally unaccountable lens of rightly *westocentric* climate change.

And an example is offered by the 2015 Paris COP another, important stage to construct global climate governance, before it too ran aground the rendezvous par excellence for the fate of the climate and a world stage on which Prime Minister HaileMarian Dessalegn's Ethiopia did not miss, indeed he took part with a speech retracing the country's pioneering role, and restarting from the funding demands for developing countries that were disregarded in Copenhagen and even later (Rahmato 2015), without of course mentioning the responsibilities of his predecessor on that occasion. «We have not caused climate change. We cannot solve it on our own. We find ourselves in a situation which justifies surrender, hopelessness, and bitterness. But we choose to be hopeful and proactive. […] If poor people like us can resolve to create a carbon neutral economy, surely better placed nations can and should do much more. […] If the poor in Ethiopia can sacrifice saving and labour, surely better placed nations can and should do more to support them». Dal discorso di Hailemariam Dessalegn, alla COP21 di Parigi, 30 Novembre 2015.

The current PM Abiy Ahmed also expressed himself on the same issues on another occasion, in a speech to the African Union on 18 February, in which, compared to the pan-Africanism of the climate struggle, he did not fail to emphasise Ethiopian exceptionalism: «Global meetings on climate change are rich with the rhetoric of climate justice, the just transition, common but differentiated responsibilities of parties. These talks, however, are hardly ever backed up with action. And Africa cannot wait. Ethiopia is definitely not waiting for solutions to come from outside. Instead, we are doing all we can to contribute to climate change mitigation and adaptation. Over the past four years, Ethiopia's contribution through our national *Green Legacy* initiative».

Undoubtedly, Abiy's commitment to climate comes through his country's replanting project, but although it has been seen from the first hour as linked to climate engagement by the international press and traced back to it in the dedicated contexts of climate governance extroversion, at the national level it is intertwined with other themes and issues.

Abiy demonstrates an ability to wield recognisable iconography and practices in the international, powerful, plastic discourse of climate change in pursuit of building his own role as an Ethiopian leader.

3. *Beyond climate change, The Plasticity of #Green Legacy*

On 29 July 2019, the Prime Minister, who has been in office since April 2018, launched the #Green Legacy campaign for Ethiopia's green development. It was a mass reforestation initiative to

plant 200 million trees in one day, in fact in 12 hours, breaking the planting record held by India. The tree planting campaign, as it turns out, is not a new practice in the country, with the provision of nursery sites and reforestation and afforestation activities carried out by both and international agencies, local and foreign NGOs or previous governments, but the aim has never been to enter the Guinness Book of Records, establish supremacy and gain popularity in the world.

The Ethiopian government reported that 25 billion seedlings had been planted in four years, where they had set a target of 20 billion between agroforestry, forestry and ornamental species, thanks to the contribution of 25 million Ethiopians, with an impact equivalent to taking 64 million petrol cars off the road for a year (Ahmed 2022 c). Green Legacy has tripled the number of tree nurseries from less than 40,000 in the area with very low production capacity to 121,000 with the potential to produce up to 7.6 billion seedlings of various species including fruits, especially avocado, mango and papaya. The campaign has also created 767,000 jobs, mainly for women and young people; 1.8 million hectares of land have been identified for planting, of which more than 200,000 hectares have been geo-referenced. There has been a significant reduction in the rate of deforestation, the creation of new forests that will be essential for carbon sequestration as «Ethiopia moves forward in efforts to address climate change», with a positive impact on watershed development, expansion of agroforestry, ecotourism opportunities, and improvement of urban green space (Ahmed 2022 b). This is a long list, tedious but far from sterile, giving us a measure of the effort, that Dr Abiy intends to communicate. The #Green Legacy campaign is closely linked to Prime Minister Abiy and his image as a green leader, and since the first edition of the initiative, it is possible to highlight features that have remained constant, first and foremost the media coverage. Prof. Teshome Shoromessa, interviewed in Addis Ababa, points out during the interview, October 2021, how the fact that Green Legacy is launched by means of a # and is constantly re-proposed in this way, already indicates the sense of the message[91], i.e. to appear and go viral not only in Ethiopia but in the whole world, a goal fully achieved given the resonance of the news in the international and even Italian media.

[91] The use of hashtags is very common the Abiy government, which for example has not launched another very viral, as well as dangerous hashtag *#itsmydam*.

Figure 8 - Representation of Abiy circulating on social media.

The number of photos, of Abiy's representations as a "tree planter" (Armiero 2013) in which he hoes or plants while wearing a military uniform or shirt and tie, with a T-shirt, alone or with other people around him observing or imitating him in his movements, is impressive. It is evident how the photos or images produced have an intense rhetoric and powerful effectiveness. It is remarkable to note the solemnity and sacredness with which Abiy is depicted in Figure 7, in the first edition of his personal and national green ritual and by exploiting the natural and intrinsic symbolism of trees. Primarily, the sacredness of trees refers to their image in the sacred scriptures. According, in fact, to William R. Osborne's analysis in *Trees and Kings* (2018) these are linked to the kings and prophets of Israel and Ancient Near East tradition.

And it is an analysis in line with the general image construction of Abiy, who has on several occasions spoken of his mother's dream of him becoming the new king of Ethiopia. Moreover, Abiy is in the habit of ending «most of his speeches with blessings and has repeatedly drawn parallels between his task as Prime Minister and a mission to save Ethiopia. These new ideological and religious legacies take Abiy to a level of personalisation of power that not even the former autocrat Meles Zenawi had achieved, as he seemed bound by the party's central committee» (Labzaé 2022, 239-250).

Indeed, there is no shortage of analyses that seek to grasp the influence of Abiy's religious in his politics, between the prosperity gospel and Pentecostalisation.

In Ethiopina PM "green messianism" one can also find similarities with the American Vice-President Al Gore, well known for his efforts to counteract the effects of climate change, who was awarded the Nobel Peace Prize with the IPCC in 2007, another point of contact with Abiy[92], who interpreted his non-election as US President as a sign to devote himself solely to his 'environmentalist' interests[93].

[92] The reference is to the fact that Dr Abiy was awarded the Nobel Peace Prize in 2019 for bringing peace between Ethiopia and Eritrea. This has elevated the Prime Minister to the top of his popularity in Africa and the rest of the world, with prestigious comparisons to Nelson Mandela. The events of the civil war and Abiy's military rhetoric made this Nobel Peace Prize an awkward legacy.

[93] This testimony, although often expressed by Al Gore, can also be found in the pages of the Preface he edited of the new edition of Rachel Carson's book *Silent Spring*, published in Italy by Feltrinelli in 2009.

The trees in Abiy are seen and used as monads in their own right, in their number, their essentialisation, their speed of growth and reproduction (such as *Eucalyptus spp*, *Cupressus lusitanica*) and their aesthetic value and such as *Pinus spp* and *Acacia decurrens*. In fact, according to critics, they are chosen for this very reason, regardless of the country's agro-ecological differences, which should determine the type of species to be planted. In most cases, they are selected from among non-native species, rather than as part of the whole of forests and woodlands, as I found among *woreda* officials during my data collection.

A little more than a year after Abiy's ascension as Ethiopia's premier in April 2019, the gesture of planting new trees eloquently represented the Prime Minister's willingness to tie his term in office to the country's rebirth under his leadership, considering that shortly thereafter, i.e. at the end of 2019, he would found a new party, the Prosperity Party, ending the 30-year EPRDF coalition. The break with the EPRDF also means the rejection of the developmental state model and the inauguration of a new political season under the sign of *medemer*, which also gives the title to his book published in Amahric and Oromifa in the autumn of 2019.

Medemer means to gather, to accumulate or to unite, it is a synergy that includes national unity and prosperity as pillars, not as matters of choice, but of survival for the Ethiopian people, called upon not to lose their value and identity, to unite and succeed as in an eternal Adwua victory[94]. Indeed, in his speech at the 2023 edition, the Green Legacy itself is referred to as a new Adwua Ethiopia, a source of national pride inside and outside the country.

As we have seen, the vision of Ethiopia as green, sustainable, modern, capable of capturing international aid and resources by showing its ecological commitment, is by no means new. In fact, the Green Legacy initiative is also informally referred to as Meles Park, precisely because it evokes those *regreenization* activities already undertaken by former Prime Minister Meles Zenawi (1995-2012), as the closest temporal reference (Lefort 2012), but in fact widespread since the 1980s in the country.

These are examples of the lemmatic fluidity, informality of oral conversation, or memory of the landscape that Abiy is remedying by beginning to rename places with his name.

Using simple and powerful language, he has given new political meaning to the already established and well-known rural practice of planting trees. The Prime Minister did not just plant a tree and broadcast pictures and videos of himself and a few people planting a tree as if it were a simple day at

[94] The reference is to the historic victory of the Ethiopian army led by Emperor Menelik II against the Italian army led by General Oreste Baratieri who faced each other near Adwa, Tigray, on 1 March 1986. The Battle of Adwa represented the climax and decisive moment of the Abyssinian War. The Ethiopian victory is commemorated with a national holiday in the country.

the port, but he wanted it to be a massive mobilisation, and to be told as such, in which the numbers were strategically important, repeatedly showing men, women and children at work, intent on digging, clearing and planting trees.

Celebrations were held in every corner of the country, in national offices and in the gardens of international agencies. The task of the multimedia language was not to capture the peculiarities of the country's different agro-ecological realities, but rather the unanimous response to this call. Indeed, it is no coincidence that the data published on Green Legacy emphasises the proportion of trees planted per person in four years, equivalent to 250 seedlings for the Ethiopian.

The media and propaganda campaign surrounding the initiative is similar to that described in detail by Armiero in his book *Le montagne della patria*. *Natura e nazione nella storia d'Italia. Secoli XIX e XX* (2013), which refers to a different time and context, that of Fascist Italy. However, Armiero's pages are in great agreement with the chronicle and the meanings that can be constructed from the political texts used for Green Legacy, images, social content, videos, statements, from year to year in search of a higher aesthetic perfection.

The connection was rhetorically set in opposition to a past of irresponsible and inappropriate actions that caused environmental degradation. The difficulty and scale of the task is well illustrated by one of the first images of the campaign, shown in Figure 8, in which the depiction of the country's green efforts is simplified in concept and graphics, as if it were a cartoon. In subsequent campaign promotions, such as the video posted on Abiy's Telegam channel on 12 October, this child's language is gradually abandoned, but without losing its effectiveness, because it is placed in an equally common horizon of meaning, that of the representation of climate change, with forests catching fire, melting glaciers and violent floods.

Figure 9 - A graphic of the #GreenLegacy initiative (AfricaNews.com).

The decision was made to use the main national language (Amharic) and English to explain the images and videos, given that this is an event that promotes Ethiopia on the international stage and also involves photographers and videographers from the country.

Over the years, in all four editions, Abiy has been able to combine the standardisation of the ritual of the communal act of planting, which must be repeated in order to be recognised as such, with historical contingencies, exploiting the plasticity of the phenomenon. In fact, Abiy went further in his invitation to participate in 2020, during the pandemic of Covid 19, he did not give up on mobilising the entire Ethiopian population through social media and television. He launched a telephone campaign urging them to plant trees safely, using masks and replacing the incoming recorded voice on each call with advice on how to prevent the spread of the virus, arranged by Ethiopia's state-owned mobile phone company. This was the creation of a direct relationship with the population and an invasion of their daily lives by speaking directly into their ears, which could be read as the unfolding of the biopolitical construction of the population in Carl Death's (2016) analysis seen in the introduction.

Figure 10 - Abiy's tweet on July 15th 2022.

In the third edition, in June 2021, the Green Legacy days are just before the elections and there is a lot of emphasis on this being the first free and fair election, with an obvious reference to past events and the violence and repression of 2005. The extent to which Ethiopia's rebirth is linked to the election of Abiy's Prosperity Party and his leadership has become even clearer, as reflected in the Prime Minister's compulsive tweets a week before the June 2021 election. Figure 9 shows one of these, which illustrates Prime Minister's message well; on one side is an icon of a voting hand, and on the other a hand holding a seedling. The edition also planned to distribute more than 7 trillion seedlings to the six neighbouring countries according to a specific allocation: 9 million to Djibouti, 29 to Eritrea, 386 to Kenya, 129 to Somalia, 91 to South Sudan and 316 to Sudan (Jalleta 2021) to strengthen regional cooperation in transboundary ecosystem management and beyond.

Once again, trees are not in the foreground, they are not the focus and objective of the policy, as reflected in the motto used, #Let's adorn, according to a view of nature as a corollary and accessory, but rather the tool for embellishing the whole country, for removing the ugliness associated with regional, ethnic, religious divisions and those caused by civil war.

Figure 11 - Note: One slogan, widely circulated by the campaign, is "We plant while electing" https://greenlegacy.et/green-legacy/home)

«To plant trees was metaphorically to cultivate democratic change; with a slight vegetative tweak, the gesture could breathe new life into the dead metaphor of grassroots democracy» (Nixon 2011, 133), are the words used by Rob Nixon about the Green Belt Movement of Kenyan politician and environmental activist Wangari Maathai. But in Abiy there is nothing of the revolutionary and transformative scope of Maathai, who occupies a central and iconic role in the environmental movement. Maathai is a woman, dissident, critical of power in her contestation of ecological degradation and injustice, ostracised, persecuted, imprisoned and tortured by President Moi's regime (Death 2016). Instead Abiy, a man of power, messianic, with his mass mobilisations reminiscent of the Derg state environemnatlism (Dessalegn 2001) is everything Maathai was actually fighting against.

The political message, in the sense of the party, is precisely made explicit and put in writing a year later, in the Prime Minister's statement of 19 June 2022, entitled Ethiopia's Green Legacy Initiative - *Planting our print for future generations*. It inaugurated the fourth edition of the Green Legacy, in which the role of reforestation and afforestation practices in mitigating the effects of climate change had instead remained secondary (Ahmed 2022a). The centrality of climate change was instead clarified in the August statement, *Hands that are Greening a Nation*, issued on Abiy's birthday. This is a serendipity that can be interpreted as purely coincidental or as a clever ability to overlap two different rituals: the Ethiopian reforestation campaign and the celebration of the Prime Minister's birth, and further enshrine a strong personalisation of the initiative.

Further evidence that this is a task that is closely and politically linked to Abiy's mandate is the fact that the institutional body in charge of disseminating the messages and communications regarding the Green Legacy until 2021 should have been the EFCCC (Environment, Forests and Climate Change

Commission), now the EPA (Environmental Protection Authority), and not the Prime Minister's Office, as is the case. And several passages in the head of government's statements leave no doubt:

> "It is my call and that of Ethiopia's those other African countries and the global community in general, initiate such practical actions as a means of collectively tackling the adverse effects of climate change. I implore my African counterparts to invest more in planting as one solution, than is invested in conferences to discuss the problem" (Ahmed 2022 b).

Although this statement anticipates, but does not exhaust the speech given at COP27 in November 2022 by Abiy himself, it is the maximum expression of another narrative enacted by Green Legacy: the tangibility of measurable results of mitigation practices (Ahmed 2022 c) and Ethiopia's role as a model for all of Africa in afforestation and reforestation practices, after having long stayed behind other African countries in terms of forestry legislation and management (Ayana et al. 2013).
Indeed, Ethiopia's head of government, referring to the realities outside his country, recognises how they can «accommodate Ethiopia's Green Legacy Initiative as a best practice, in tandem with other climate change adaptation and mitigation strategies» (Ahmed 2022b), where instead at the national level not only the exceptional nature of the initiative is celebrated, but also its exclusivity. Indeed, although the initiative sheds a new light, that of concreteness, on mitigation initiatives that are often characterised, especially in developing countries, by the hollowness of their impact and the need for long time scales, the current re-greening measure has a strong tradition in the country, especially in rural contexts (Lemenih 2014). However, Green Legacy does not stand in continuity or even at the pinnacle of the history of similar and past practices in Ethiopia, nor does it stand alongside other plans undertaken by both government, civil society and international agencies that are still in place and expanding, such as projects like the Resilient Livelihoods and Landscape Project (RLLP), still known in the country as the Sustainable Land Management Programme (SLMP), and Reducing emissions from deforestation and forest degradation in developing countries (Redd+) (Fikreyesus et al. 2022).
But these practices are simply never mentioned in Abiy's official speeches, where he talks about greening and not re-greening (Ahmed 2022b), breaks with everything that started in the past before

him (Figure 11), also considering the desire for a political caesura with previous government experiences, and extols the novelty of his *modus operandi*.

This novelty, however, lies not so much in the multiple goals of afforestation and reforestation linked to different needs of the country and communities, such as climate change mitigation, job creation, food security and soil quality preservation, as the Prime Minister outlines, but in the plasticity of meanings that the Green Legacy can take on depending on the occasion, the contingency and the audience.

Figure 12 - Emperor Haile Selassie plants a tree. Photograph from the web

Therefore, the uniqueness that has been shattered in the epic of results, which has given rise to more than one suspicion, has been artificially built on forgetfulness, which does not apply to the farmers and the institutions at the rural level, who are used to not differentiating - except for the counting that the federal government asks them to do - between what they have planted for the Green Legacy and what for other structural activities at the *kebele* and *woreda* level, and who do not see any extraordinary change in it. In fact, they clearly see its propaganda intent in the use of cameras and mass mobilisations. With the words «This is just politics!» a farmer, Israel Gebru, commented on the events of Green Legacy's days (FGD, April 2022, Ubabare *kebele*, Demba Gofa *woreda*). In addition, farmers interviewed in this *kebele* reported that all the seedlings planted last year had been lost due to rising temperatures, a result already seen in these mass reforestation and afforestation operations undertaken in the past.

Similarly, Abiy and his Green Legacy disregard related activities performed at the same time by other African countries, promoting and spreading the idea of a plan, successful, designed, reproducible and exportable elsewhere, but 'made in Ethiopia'. But Green Legacy is far from being a patent. Indeed, in two very recent studies, the Ethiopian campaigns are among the examples of virtuous actions, placed after Maathai's Green Belt Movement (Ennos 2021, 237) and alongside fifty-nine other urban re-greening projects in Africa in the last decade 2009-2021 (Lobe Ekamby et al. 2022).

And the re-greening of Ethiopia has its showcase in the restyling of the capital Addis Ababa, which aims to erase the traces of the socialist vibrancy and essentialism of the past with vibrant colours, starting from green, through the construction of three major parks: the Unity Park within the Grand

Palace built by Menelik II, the Friendship Park celebrating the much fruitful partnership with China, and the Entoto Park. But as Prof. Teshome Soromessa explained to me, the parks were part of a much larger plan, carefully designed by Addis Ababa University, to rehabilitate the river that runs through Addis, from Mount Entoto to the city centre. But with Abiy's green obsession, they turned out to be the purpose. They are very expensive projects that, in difficult times such as those the country is experiencing due to the civil war, are perceived as superfluous, unnecessary[95], and Western by the population of the capital, according to a survey carried out in May 2022. Undoubtedly, the cost of access, in dollars for foreigners but unaffordable even in local currency for the majority of the capital's population, is not designed to integrate into the fabric of the community.

The aforementioned Prof. Teshome complained about the cost of the initiative, which was of course open to the public, and the scenic nature of Green Legacy. He criticised the fact that the principle of species planning on the basis of different agro-ecological zones was not even respected, and the lack of adequate preparation of the population, the mass-appeal of the operation. «Wherever they were, they removed the stones, dug a little and planted the seedlings. You can learn a new posture, not to cut, but to plant, but basically for now in this mode, it is nothing but a game, a show. While this is good, because it draws attention to the issue of forests, it does not change the structural problems that plague forests in the country. I don't call it *green legacy*, I call it *green fever*!». And this purely instrumental and political propaganda aspect was also emphasised by the farmers themselves, one of whom, Basketo Bayne from the *kebele* of Lote Zata (FGD, April 2022, Demba Gofa *woreda*), commented on the planting day as follows: «They called us to take pictures while we were planting, and then that was it, we went home».

Dr. Million Belay defines Green Legacy as «an expensive, toxic, superficial branding. Climate change is not only fought by planting trees. A loss of credibility for Ethiopia after the commitment of plans and policies» (Interview April 2022, Addis Ababa). Indeed, while the link between climate change and reforestation may be immediate in the collective imaginary[96], it is not self-evident when one considers the plan also launched by former US President Donald Trump[97], who is known for his

[95] It should also be noted that the lack of green spaces in the capital is not something that Ethiopians do not notice. Many of the respondents to the research, as well as my acquaintances on informal occasions, complained about having to go to the Orthodox church compounds or to Mount Entoto to find trees, most of which are eucalyptus. Although they are not indigenous species, they have become an integral part of the image and landscape of Addis Ababa (Horvath 1968).

[96] The comment refers to the fact that if the phenomenon of deforestation is known to be linked to climate change, being responsible for 35 per cent of the increase in carbon dioxide emissions by reducing the absorption of carbon emissions by forest biomass, and if conversion to other forms of forest land use must be prevented, then caution must also be exercised in both reforestation and afforestation operations by creating new carbon sinks (Bagliani and Dansero 2011, 95-96).

[97] A Trillion Trees: How One Idea Triumphed Over Trump's Climate Denialism - The New York Times (nytimes.com) February 12th 2020.

denialist stances, but it requires a far more complex commitment and planning that goes beyond such spectacularisation. Prioritising a tree-planting initiative does not automatically mean that the Abiy government has identified climate change as a key priority. Indeed, framing deforestation as a driver of climate change at the national level, and contributing to climate change action by avoiding deforestation as a mitigation measure, is extremely reductive. Indeed, even the framing of climate change in the national 10-year plan is predominantly under the headings of climate change mitigation, GHG reduction and protection of wildlife and biodiversity (FDRE 2021, 73)[98]. It is a conservative logic that does not intend to plan new policies to help people in both cities and the countryside cope with the threat of climate chaos, and in Abiy's words, which work as an effective zoom: « [Climate change] is a constant source of concern for the global community. East Africa has suffered repeated droughts and floods. Ethiopia is at the eye of the storm» (Ahmed 2022 c).

In addition, in the days of attending the CCC-E, while there was indeed concern about making Green Legacy's experience in carbon trading mechanisms bear fruit, there was unanimous criticism that the Minister of Environment, Forest and Climate Change, created by Haile Marian Dessalegn in 2015, had been downgraded first to a commission and then to an authority under Abiy's new 2021 government.

In this way, the emphasis and spectacularisation of activities that are quite common and frequent in the country's history are given a new meaning that goes even beyond the fight against climate change and is rather linked to the Prime Minister's transformative ambitions to show his country and the rest of the world.

However, on the one hand, Green Legacy has yet to demonstrate with clear data and evidence, including from actors outside the state hierarchies, that it is sustainable and effective in terms of climate mitigation and adaptation, especially as, after four years, doubts about the extent of this

President Trump Signs One Trillion Trees Executive Order, Promoting Conservation and Regeneration of Our Nation's Forests – The White House (archives.gov) October 16th 2020.

[98] «The main focus area of the environment and climate change plan is ensuring sustainable development by developing, enriching, maintaining and protecting the country's natural environment, forests, wildlife and other biodiversity resources, and also through ensuring sustainable utilization as well as maintenance of healthy ecosystem interactions. The principal objectives of the environment and climate change plan are to identify invasive foreign species and, through research, substantially mitigate the damage they cause; collect and preserve biodiversity and genetic resources; reduce the amount of sectoral greenhouse gas emissions; and strengthen the development and protection of forests, the ecosystem as well as the wild life. The following targets have been laid out to achieve the objectives of the plan in the areas of environment and climate change for the coming ten years (2020/21- 2029/30): • To increase greenhouse gas emissions reduction capacity from the present 92.7 million metric tons of carbon dioxide equivalent (CO2E) to 162.3 million metric tons of carbon dioxide equivalent; • To increase the coverage of protection against illicit activities in wild life habitats from 62% to 92%; • To increase national forest coverage from 15.5% to 30%, and increase the coverage of wild life habitats from the present area of 8.6% to 14%; • To increase the number of enriched wild life and biodiversity species from 311,470 to 743,447, and the number of species maintained from 179,285 to 764,361» (FDRE 2021, 73).

heritage are growing (Fikreyesus et al. 2022). On the other hand, such practices, between rituality, insinuating insistence and bodily invasion, have undoubtedly taken climate governance to another level, to the point of constructing new political subjects (Agrawal 2005), which in Death's analysis, as we have seen, is essential for the construction of the green state.

In fact, I believe that with this increasingly intense phase of Green Legacy, we are witnessing the construction of environmentalism, the inculcation of a set of practices in individuals through their participation in institutionalised management. And such practices, on the one side, may be important in disseminating and creating awareness among the population about climate change, but on the other side, it is evident how making Ethiopians, or trying to make part of them, the product of the ritualised embodiment of environmental practice, has purposes that go far beyond efforts to mitigate and adapt to climate change.

But it should also be pointed out that these operations involve the cities, as a particular target of the Ethiopian population, which has access not only to television, which is very limited in rural areas, but also to social media, the main channels through which this initiative-related content is conveyed. And this is an interesting statistic, given that the country is one of the last, in the world in terms, of Internet access (Climate Action Tracker 2020, 19).

However, in the construction of these biopolitical themes through what Abiy has called the building of a «green, behavioural and life culture», as we have seen, there is no shortage of criticism that has historically accompanied these top-down reforestation mobilisations in the country (Rahmato 2001) and that in the third millennium also takes the form of jokes and memes on the web, demonstrating that the political and theatrical nature of the process is well understood by the population, from the cities to the countryside (Watts et al. 20).

Figure 13 - Ironic image from Facebook.

Indeed, a section of the public sees how all this talk of life, rebirth and the future clashes with the reality of the country's ongoing civil war. This is why a joke, an image full of cutting irony (Figure 12), went viral on Facebook in the summer months of 2022, coinciding with the launch of the fourth edition of Green Legacy. The illustration shows Abiy in his usual tree-planting scene, with a skeleton holding an umbrella below him, alluding to the fact that the trees planted will only shade graves.

Figure 14 - Cartoon by Alemayehu Tefera, published on his Twitter account on 21 September 2020, before the start of the civil conflict.

In conclusion, it is worth pointing out as we have already mentioned, it was Abiy's Green Legacy that prompted CVM's exploratory choice to deal with environmental and climate projects, but we have seen how in reality this goes far beyond the issue of climate change, of which it is only a part, perhaps not even the most important.

And while I do not have the software or the technical knowledge to do an ecolinguistic analysis of the speeches of the leaders at the COPs, or even the tweets, or the trove of images, I believe it is an important part of my research. It is certainly a fascinating topic that deserves a lot of attention because, as Carl Death (2016) argues, the construction of the African green state and its most dangerous aspects also pass through these micro-practices of power, their discourses and performative processes. And then, they are themes that can be declined at the national level, in the historical and cultural and iconographic heritage by trying to find in Abiy's politics the traces of the action of past rulers and old emperors, or even the kings of the Old Testament prophets that so permeate Abiy's conception of religious power (Osborne 2018). And the subject of Green Legacy lends itself well to analysis and comparison with what is happening in the rest of the African continent and internationally, paying attention to the reasons and implications of afforestation and tree planting campaigns in the name of climate change.

Finally, I am particularly fond of the analysis of Abiy's Twitter policy (2020 a-e), which was crucial to begin the study of his governance as plans and programmatic strategies had not yet been published. Far from being a return to this kind of "armchair anthropology", this kind of research, although partly forced by the Corona virus syndemic, was enriched by field data from interviews, meetings and my own direct experience. As Maja Hojer Bruun and Ayo Wahlberg point out in *The Palgrave Handbook of the Anthropology of Technology* (2022) «the field of digital ethnography has contributed to the development of a range of methodological innovations as new possibilities for online ethnography are explored—not least during the COVID-19 pandemic when in-person interactions were impossible.[…] Perhaps more than ever before ethnographic research methods have become flexible and pliable» (Bruun and Wahlberg 2022,20).

Finally, Abiy's climate "non-politics", which led my interlocutors to bring up Meles' experience, provided the starting point from which to reconstruct Ethiopia's climate efforts backwards. This initial core of analysis also provided an immediate opportunity to understand the complexity of the implications of climate change, which has become so ubiquitous that it is now not only a buzzword but also a *buzzpractice*. And yet the traces of concrete actions that would really allow us to rethink the living conditions of farmers, of those who are most vulnerable because they are more exposed socially and economically to the effects of climate change, are faint, very weak.

Chapter 3. Finding “slow violence” by looking for “the bull of winter” among farmers

He'd put a handful of dried raisins in a cloth in his pocket and at noon they sat in the dead grass by the side of the road and ate them. The boy looked at him. That's all there is, isn't it? he said.
Yes.
Are we going to die now?
No.
What are we going to do?
We're going to drink some water. Then we're going to keep going down the road.
Okay.

In the evening they tramped out across a field trying to find a place where their fire would not be seen. Dragging the cart behind them over the ground. So little of promise in that country. Tomorrow they would find something to eat.

THE ROAD by Cormac McCarthy 2006, 51.

What echoes are reaching the local level of the Ethiopian governments’ almost 20-year international commitment to climate change? In the rural *kebele* of my research *woreda*, Green Legacy activities of seedlings are linked to structural activities of replanting degraded areas, conservation of existing public forests through both local and exotic species, dating back to the Derg, which have had a strong impetus again since 2011 as environmental protection actions to combat climate change (Lefort 2012, 694). Both in the programmatic management of rural institutions, kebele, the systemic application of policies on pollution, waste management and sustainable alternative energy -except in cases of cook stoves production or village biogas projects in East Gojjam-, normally conducted in towns, is totally absent here.

Here, at grassroots the climate justice[99] in the formula the 'loss-and-damage' mechanism invoked by the Prime Ministers, the right request of compensation by the richest countries demanded by the civil society gathered around the CCC-E to claim no responsibility over the global ecological footprint, is practically non-existent.

Despite the absence of these ‘actions’ that could represent a caesura from the past, farmers, sentinels of change, obviously perceive the changes taking place in the environment that have devastating effects on their lives and subsistence farming, dependent on adverse weather, climate variations and

[99] It is an increasingly studied phenomenon Leonardi 2023; Tassan 2022 that also brings out new forms of climate governmentality that arise from below. But these kinds of practices, mobilizations, and discourses are completely absent in the kebeles of my research.

change (Molnar, 2010; Zery et al. 2016). They manifest themselves either as extreme events that increase in likelihood and violence, or in a gradual manner.

Indeed, there is a growing literature in the country that intends to analyse from the highlands to the lowlands the perceptions and actions of farmers, fishermen, and pastoralists in response to climate change with sociological analysis (Geize 2019; Gegulo et al.2019; Hundera et al. 2019; Regassa and Stoecker 2014) ethnographic research (Merid et al. 2017). Thus, the study of the devastating effects of climate change is part of that strand of studies aimed at understanding the mechanisms of understanding and resilience to droughts that have cyclically affected the country's history, considering first and foremost both the geographical exposure to ENSO fluctuations, and the vulnerabilities historically produced by the policy in the country.

I attempted to fit into this strand with my research. The questions that accompanied me during the camp were firstly about how farmers are conceptualising change, as crisis and what kind of crisis climatic, ecological, social, moral, assuming these categories made sense in relation to their perceptions. It was important to understand what changes in their climates mean for the farmers in the rural *kebele* in Amhara and in SNNPR, in two different systems, as we saw in the introduction. How much the narrative of the Amhara South, especially for the *woreda* in Basketo still 'held' from the sudden effects of climate change. As we have already pointed out, except for the latter, Basketo special *woreda*, where assessments were underway to declare it a food security *woreda*, with the identification of *kebele* for the next five-year PSNP, the other three *woreda* were, according to the Ministry of Agriculture division, non-productive and recipients of the food security programme.

And this is where action to counter the effects of climate change, should take the form of food justice, as Dr. Million Belay argues, «that is, a right to food, not only in the access and quantity needed, but that is healthy and has cultural meaning for people» (Interview in Addis Ababa, April 2022). And at the time of my research, there were many serious concerns on the part of my farmers interlocutors about the impossibility of being able to continue to feed themselves in the immediate future. After all, the conditions in rural Ethiopia are known as mass starvation in the collective imagination that to this day epitomises conceptualisations of "African disaster" (Tenzing and Conway 2022,5).

Nevertheless, the element that breaks the naturalisation and normalisation of these phenomena of drought and famine, is on the one hand the speed of these changes that are taking place in the atmosphere in terms of rainfall, temperature, on the other hand the fact that farmers for their livelihoods are not only dependent on rain, but also on fertilisers, on external inputs on which they have now become just as dependent as on rain. Fertilisers that during my camps were severely delayed in their distribution to farmers, waiting for both rain and seconds. In fact, the world was experiencing

shortages, first because of production slowdowns due to the pandemic (2020-2021) and then because of the Russian-Ukrainian conflict that broke out in February 2022.

If this element had already emerged during the 2021 camps, it became central in the spring of 2022, testifying to a condition of systemic, slow and violent dispossession that is making farmers poorer year by year, due to a policy of erosion of their capacities, in the name of improving productivity and climate resilience, as seen in the CRGE agricultural strategy analysis.

Consequently, while the climate models, painstakingly reconstructed in Ethiopia as we have seen by scholars and development agencies, are being blown apart by climate change, the cumbersome historical legacies of the farmers' living conditions are encountering the violent and slow, but inexorable construction of inequality imparted by recent national economic and agricultural policies. These, which we have already mentioned in the previous chapter, accelerated sharply between 2005 and 2010 and are expected to be even more aggressive in the coming years according to the Ten Years Plan (2021-2030). Furthermore, what made the research even more important, beyond the contingent shortage of fertilisers, was the fact that until now the issue of external inputs, despite its rapid spread in recent years, has not been adequately considered in the country, indeed not at all normalised by institutions and not fully shared by civil society organised around environmentalist NGOs. The basic idea is that climate resilience passes through the intensification of production by means of external inputs that solve both the problem of the shortage of land, and that of an ancient agricultural land incapable of producing by itself the antibodies to its own decline, and which must ‘now’ come to terms with climate change.

Therefore, the most emotionally complex and engaging fieldwork is reconstructed here. From the humanitarian livelihood concerns, the need to study the causes and political implications of the environmental crisis in such contexts emerged more and more clearly, as the responsibility of the critical anthropology of climate change (Baer and Singer 2018; Singer 2019).

In these pages, the visual and sensory perceptions of the farmers encountered focus on the common elements that emerged from their words, while maintaining the dialectic nature of FGDs. In fact, despite the geographical and historical differences, which have been painstakingly mapped out with different approaches among the four *woreda* and eleven *kebele* of the research, on the one hand the ‘quick and dirty’ (Severi 2019) conditions of the research did not allow me to go into detail, to plumb every minute aspect of the social life of the rains, the seeds, the cultivation and harvesting activities, and to be able to understand and contextualise them. On the other hand, surprisingly, my attention and my synaptic reconstructions both during the fieldwork and during the writing phase captured more of the sonority and meaning of the common elements because of homogenisation and

normalisation produced by the capillary transformations implemented by the state, politics and apparatus measures that affect the way people relate to the environment as the source of their livelihood. Indeed, the farmers' descriptions, far from being an account of an exotic and immanent climatic "cosmogony", bring up God (Zgabir), but speak mainly of 'mengist' and politics.

1. Farmers' perceiving and narrating climate change

Once already emphasised several times in the introduction, movement between regions, from one *woreda* to another, and between *kebele*, made it impossible to conduct climate ethnography (Crate 2011). I mean research traceable to those «studies of perceptions and observations of climate change, and of local impact, based on long-term ethnographic research in specific geographical places and localities, […] » (Crate and Nuttall 2016, 12). On the other hand, the continued research in Siberia by Susan Crate among Viliui Sakha communities (Crate 2008), those in Palestine by Mauro Van Aken (2020), the extensive fieldwork conducted by Kristen Hastrup (2013) in northwest Greenland, where Paul Nuttall (2018) also conducted his research among the Inuit, to those of Riccardo Ciavolella (2013) among the Fulaabe in Mauritania, show that it is the long research, made up of frequent returns, that allows for a proper analysis of the changing climate, i.e. allowing the researcher himself to follow the community, the population, the families in the experience of change, as well as relying on the memories of his interlocutors.

The length and depth of the field first and foremost ensures the adequate understanding of the words, "weather words" as defined by Nuttall (2018) referring to the terms that Inuit use to describe changing weather and sea conditions offer insights into their experience of the effects of climate change on the environment. The lexicon, the expressions, of local knowledge, proverbs related to weather and climate, crucial in cultures, a legacy of the stratification of knowledge, its pervasiveness, and the intimacy dependence, tight connection to life in all its forms, has great relevance in the aforementioned works. Anthropologists Sarah Strauss and Ben Orlove wrote in this regard.

> «To state what may seem obvious, but what nonetheless merits consideration, we note that human responses to weather and climate rest on talking. People communicate through various forms of verbal expression, from proverbs to oral histories and everyday conversations, and on to scientific discourses. Moreover, the social and political responses to specific weather events or climate change reflect these cultural constructions of time. […]. Our different cultures shape the way that we think and respond to the weather; as we face the impacts that climate change processes bring to our communities, we must recognize that our perceptions as well as our reactions are shaped by our culture » (Strauss and Orlove 2003, 6).

In my case, the first step was to understand what words farmers used to name and describe climate change, what they related to it, what words and deeds they used to tell and explain it, whether they

had an old, recent local lexicon and definitions of it, or whether it had penetrated from outside, from the language of politics, development, education, the media.

In Amharic[100], Ethiopian official language, unlike languages such as Italian and English, for example, which possess an etymological caesura in the face of a certain semantic continuity between the word 'meteo/clima' and 'weather/climate'- (Hulme 2017; Sillitoe 2022) the word for 'climate', yeayer nibiret, contains within it the word for 'weather', '*yeayer tsebay'*, emphasising their cumulative aspect, affirmed by the term '*nibiret*' meaning in fact 'property, accumulation'. This makes in most cases, the concept of climate change familiar and deducible to farmers, without it being perceived as a scientific, western, external category to be grasped, an aspect that in the context of climate change, is being outlined precisely by studies on the reception of the concept) and where the concept of climate change is expressed with '*yeayer nibiret lewite'*, i.e. by adding '*lewite*' word meaning 'change' and not as an abstraction, as has been the case in the "scientific" meanings attributed to the term. In this regard, it must be specified how climatology, as we know it today, was defined in 1882 by the Austrian mathematician, chemist and physicist Julius von Hann (1839-1921) as the science of the states of the atmosphere, separate from meteorology, which studied the atmosphere in the present moment, as a systematic analysis of the average state and the deviations of this average. The climate became a statistical description, the result of an approach that levelled out the multiple variations of the weather (Pelletier 2021 [2015], 25). This simplification and normalisation, operations normally induced by statistics, are the result of an abstract construction of averages over a defined time of thirty years. Climate change is thus a change and deviation in the long-term statistical mean of weather (Taylor M. 2015, 21).

Therefore, the fact that the concept of climate change was also an emic concept, beyond the construction of meaning within Western climate science, was already a first fact, and not even a foregone conclusion. Indeed, there are cases in the literature such as the Matsigenka people of the Peruvian Amazon, where Dan Rosengrendiscusses carried out his research, which attest to the fact that the idea of 'weather' itself is not universal. This does not mean that these people are unfamiliar with meteorological events such as rain, wind and sun, but that they simply do not conceive of them as collected together in a climate equivalent category that encompasses all atmospheric phenomena.

[100] No comparison was made between the Basketigna language and the Goffigna language because the Amharic expression *'yeayer nibiret lewite*'was also understood in Basketo and Demba Gofa, as was the term '*akababi*'. In Basketigna, for example, '*akababi*' is a loanword, it enters in common use and they are not using the basketigna one. And a farmer (Sarah) in the middle of the FGD in Sassa had to call her very old husband to remind everyone how it was said, as they were all curious to rediscover it. Moreover, although I have not been able to illustrate the causes of this process, which is extremely common in multilingual contexts such as Ethiopia, where Amharic is the official language alongside the 'protection' of local languages, I think it is significant how the word environment, so crucial and inescapable in people's lives, is being forgotten in the local language.

Similarly, the Wola people of the New Guinea mountains, studied by Paul Sillitoe, have no category equivalent to climate, focusing instead on the daily weather (Sillitoe 2022, 4).

Moreover, this allows me to endorse Camille Frazier (2019)[101] and Akhil Gupta's (2021) scepticism about the dichotomous division between climate as recorded and weather experienced adopted by Ingold and Kurttila (2019, 444)[102], «because that reinstates a series of binaries: climate is statistical, and weather is sensory; climate is abstract and distant whereas weather is immediate and intimate. Such distinctions are built on an older notion of the body and the senses that precedes the age of media-saturation» (Gupta 2021,4)[103].

The presence of words and concepts makes it possible for Ethiopian farmers to express, describe and narrate perceived climate change. «The visual and narrative representations that people evoke when describing their environments provide unique insights for an anthropological study of the human dimension of climate change» (Roncoli et al. 2016, 91).

The collection and study of perceptions are a central element in the anthropology of climate change (Crate 2008), they make it possible to grasp local nuances, whereby perception is understood according to Ingold's (2000, 52) definition as "embodied", his concept of "sentient ecology" (Ingold 2000, 10).

> This notion perfectly captures the kind of knowledge people have of their environments that I have been trying to convey. It is knowledge not of a formal, authorised kind, transmissible in contexts outside those of its practical application. On the contrary, it is based in feeling, consisting in the skills, sensitivities and orientations that have developed through long experience of conducting one's life in a particular environment (Ingold, 2000, 52).

Furthermore, perceptions has also been recognised as a scientifically foundational element by the UN National Research Council Committee on the Human Dimension of Global Change in the light of its contribution to understanding and resolving climate phenomena as well (Weber 2010).

A criticism often levelled at the heuristic use of perceptions relating to climate as well as environmental change is that once collected, they are never given in a definitive way, taken in their contingency, they should not be absolutized. But in this sense not only perceptions are strictly tight to the single chronotropy of the interviews, for example, climate science is also made up of data and models that change with time: «Obviously, climate science should not be regarded as the guardian of an eternal and indisputable truth; rather, its history reveals the momentary and always reversible

[101] Frazier, Camille. "Urban Heat: Rising Temperatures as Critique in India's Air-Conditioned City." *City & Society* 31.3 (2019): 441-461.

[102] (Ingold, Tim., & Kurttila, Terhi. (2000). "Perceiving the Environment in Finnish Lapland". Body & Society, 6(3-4), 183-196.).

[103] Akhil Gupta 2: "Feeling Climate Change" in City and Society Forum, Volume 33, Issue 1, 2021,2).

outcomes of different controversies, simultaneously political and epistemological (Caserini 2008)[104]» in (Leonardi 2012, 164). Furthermore, the IPCC observatory itself and its publications serve precisely to update this type of information.

Moreover, in Ethiopia's rural contexts, as there are no measuring instruments, it is the perception of the *kebele* and *woreda* staff and a box to be ticked that are relied upon to collect data on the amount of rain that falls. Then they forward this data to the Zone or directly to the Region, as in the case of special *woreda* (Interview with Gofa Zone Official, Natural Resources Department, April 2022).

The narrative dimension allows a complexity of its own to be restored to the description of change (Sheperd et al. 2018), the importance of irreducibility to this or that model, to this or that generalisation of the environment, '*akababi*' in Amharic, in which this becomes evident. It is a different word from '*tefetiro*', which means 'nature, wild animals, landscape'. The word *akababi* stands for a socialised, heavily man-made space, the result of environing practices (Bergthaller et al. 2021, 37).

«It is my field marked by borders, divided by that of my neighbour» (FGD March 2021, Wojen, Shebel Berenta)[105]. The meaning of akababi can be rendered with a list, e.g. the list of the 'got' closest to one's own, as it emerged during the FGD in Ubabarè *kebele*, Demba Gofa; or like another kind of list: «It is the water, the soil, the rain, but also the electricity» (FGD March 2021, Doma 08, Enibse); or rather with a precise reference: «It is that pylon of light there, a new world» (FGD April 2021, Kosoiè, Goncha).

It is inevitable to evoke the concept of *axus mundi* and imagine the electric tower as another fascinating example of Marcellinara's bell tower[106]. Electrification is, as one can imagine, a frequently recurring element that has marked the everyday life of people and the landscape itself, being in many cases 'naked landscape', especially in the *kebele* of East Gojjam, the only towering element. But even in the *kebele* in the peri-urban *kebele* in the South, it has been an oft-quoted element: «When we say environment, says Gash Demo, we mean schools, houses, plants, animals,

[104] Caserini, Stefano. 2008. *A qualcuno piace caldo*. Milano: Edizioni Ambiente. In Leonardi, Emanuele, "Biopolitics of Climate Change: Carbon Commodities, Environmental Profanations, and the Lost Innocence of Use-Value" (2012). Electronic Thesis and Dissertation Repository. 959.

[105] Here are parts, segments of the FGDs held during the third fieldwork, the translations of which were analysed, trying to find elements in them to bring out the commonalities and differences. What was needed was to create a narrative of the different farmers' perceptions of climate change. This was time-consuming because there was a large amount of material to report in the density of each FGD, but it risked losing the focus of my investigation. Therefore, an operation of stitching and weaving together the answers of the farmers deprived of their first and last names is reported in these pages, not because they were not provided, but to avoid lengthy delays. The answers may seem, unfortunately, brief, perhaps not adequately argued, but they are explained by the dynamic nature of the FGDs, albeit neatly composed.

[106] Martino, Ernesto de. "La fine del mondo". *Contributo all'analisi delle apocalissi culturali, Einaudi, Torino* 4 (1977).

health, centre, shops, market, all toghether» to which Basketo, the merchant woman, adds «churches, the grinding centre machine, water, road, electric power» (FGD, April 2022, Lotte, Demba Gofa).
For some, 'environment' can also mean: «The Amhara, our country, Ethiopia»; for others: «No, it's our *kebele*»; «It's too much, its our *got*» (FGD May 2022, Tenta, Enibse).
But '*akababi*' also means semantically 'around' -according also to Tim Ingold definition of environment 2016. «What a question, I can't find the words. Environment is all around» (FGD March 2022, Punobasa Basketo), a space characterised by a strong integration of its parts: «Environment is a place where there are people with the same feeling and culture, around the church, a particular place, a specific geographical area, including living and non-living things» (4 March, FGD with HEWS in Gamborè, Goncha). For the farmers interviewed, the concept also expresses the dimension of proximity «Sorrounding area, where we live» (FGD, April 2022, Awrasosta, Basketo); of integration and sharing, which reaches extreme peaks with «as far as we can ask for help», (FGD, May 2022 Mojen *kebele* Shebel Berenta).
It is never only words that weave common definitions, but also body language, mimicry, onomatopoeic expressions, as primary reactions to my questions, e.g. accompanying with the movement of the chin, or with the hands as if to indicate never a geometric figure, more an orchestration, their words and indications of what the references of the environment were for them. And finally, *akababi* is also synonymous with "healthiness" «It's a good locality, health environment, but now we are countering the opposite; because warming is not a good condition» (FGD May 2022, Mergech, Shebel Berenta). And this change, rendered by the emphasis on the 'now', is precisely the condition that both are experiencing, because climate change and environmental change are equivalent, one is inscribed in the other.

From the descriptions of the farmers interviewed, a phenomenology of climate change can be reconstructed. This is defined in the literature as the sum of the main shocks and effects of the shocks encountered. For the farmers who were my interlocutors, it flows through extraordinary and structural events. They are rising temperatures and irregular rainfall patterns, which have a great, but not absolute, influence on the decrease in production and the deterioration and disease of livestock and humans.
The occurrence of extraordinary events, although present, was the aspect less emphasised by the farmers: «More than the drought, I remember a scary hailstorm seven years ago. There was ice, there was no food, nothing, we were helped by the government, seven people from this village died and we survived» (FGD March 2021, Yeguch, Enibse Sar Midir).

The most disturbing element is the chaotic weather patterns and climate disorder, a chaos, which disrupts the models reconstructed in the Introduction and which several authors have been engaged in, and which climate governance is struggling to (re)construct.

«Before, seasonal rains corresponded to seasonal crops, now everything has changed. Recently it happened that crops grew well, but then too much rain came and destroyed everything, and afterwards, when rain was still expected, we had dry and hot weeks, basically everything was destroyed» (FGD, March 2021, Wonije, Shebel Berenta).

Farmers-interlocutors describe the alteration of normality, of the standards established by their experience, by the change in the rainfall and temperature regime, «the environment is neither hot nor cold, it has totally changed» (FGD May 2022, Tenta, Enibse). Droughts and floods are now dailylife experiences, yet the speed with which they recur is a new problem, after all, it is the unprecedented acceleration of like climate events that makes the difference (Eriksen 2016).

The droughts have lost their cyclical nature, once occurred every three to five years, now are more frequent and worst in intensity and severity. Sometimes even by the older people interviewed, the national dramatic famine of 1983-1984 is not mentioned or at least not remembered as the most terrible, even in East Gojjam. In the South the memory of this is almost non-existent, making it clear to me that it was a phenomenon that affected Tigray and Wollo Zone, in Amhara Region droughts that occurred locally are remembered and mentioned. A common memory between northern and southern *kebele* and of more recent memory are the drought events of 2015-2016. However, what they are experiencing, in the hic et hunc, is becoming more and more critical and this became clear between the interviews and conversations I had in East Gojjam exactly one year apart in the same places, where in the SNNPR I was in two different periods, briefly in October 2021 and then in March-April 2022.

Similarly, floods are even more frequent and devastating, given the abruptness with which they occur, although the causes related to eroded soil, deforestation, are always mentioned: the rains become more concentrated and intense and the too dry and weak soil cannot withstand them. The rainfall is so violent that they wipe out rivers and roads, they cause the loss of animals, land, houses. They affect entire families who lose everything and each one of farmers participating to FGDs has a memory of it, because it happened in the neighbouring got or because they heard about it.

Rainfall is losing balance, it is becoming more and more erratic in timing and flow and obviously this has an impact on farm-work schedules, it can disturb land preparation routines; delay sowing dates and necessitate replanting, which is not always possible; reduce the sowing of late-maturing crops; affect seed-set and grain fill and obviously have consequences on land production. «Nowdays, the

rainfall is never in time, starts later and stops later» (FGD, March 2022 Sassa, Basketo). «According to our exsperience, they [rainfall] should start softly, then there is an intense phase, then again, a soft end. Now there is no equilibrium» (FGD, April 2021, Tenta, Enibse), «Even at the end there is heavy rain and that is not good, it is totally destructive» (FGD, May 2022, Yeguch, Enibse).

Moreover, the divergence from the normal pattern of the so-called "spring rains" is a cause of concern. They precede the peak season, in both the East Gojjam unimodal system and the Demba Gofa and Basketo bimodal system. And farmers consider it «the season of hope and happiness if the rain comes on time as expected and a desperate season if otherwise» (Merid et al. 2017,571).

Similarly, farmers pointed out to me that an abrupt interruption after the heavy rainfall phase could be detrimental, because the less intense rainfall at the end normally continues to wet the crops, (FGD, March 2021, Doma, Enibse). And that is why they expect rain after Meskerem[107], because that is important for the cattle, and in any case should it rain heavily until Pagume[108], it can be considered a good season. Similarly, «It rarely rains in October, but it is important for the cattle to reduce the dry season, it could mean three months of feeding, it is important that it rains after harvest» (FGD, April 2022 Awrasosta, Basketo).

The spring rains are so central that in the FGD in Mojen, Shebel Berenta, farmers described how they began to notice the change precisely when, in April, they began to lack water and delayed land preparation. In this *kebele*, maize can no longer be planted on the plains in May, which is essential as a residual crop for animals, but now often also a vector for spreading disease, as farmers and the Agricultural *woreda* Bureau explain. People add that if the government had not built a small dam long ago to collect water, they would have died of thirst (FGD, May 2022, Mojen, Shebel Berenta). «Last year there was scarcity of rain, this year there is drought; the flat part was wet, now it is sunny and there is a lot of dust» (FGD, Tenta, Enibse). «The country is dry», they summarise during the FGD in Ubabarè, Demba Gofa and «More and more people are eating roots and tubers, enset, sweet potatoes and beets» (interview with DA in Sassa, Basketo, October 2021).

Nevertheless, from the North to the South and from the lowlands to the highlands, the consensus is that despite the enormous difficulties they are experiencing, «The rains are not a problem, not much has changed, there have always been such irregular or unexpected seasons. Gash, [turning to the older man present in the FGD for confirmation], the problem is that the temperatures are always warmer,

[107] *Meskerem* falls between September 11th and October 10th (Gregorian Calendar).
[108] *Pagume* is the 13th month of the Ethiopian Calendar, and it is the shortest which typically consist of four up to six days.

in general, but especially compared to when you prepare the soil. I think these differences in temperatures have consequences for the harvest» (Wojen, Shebel Berenta, March 2021).

In Awrasosta, Basketo (FGD, March 2022) on the other hand, the elder Gash Zelalem, would have agreed with Ubalich's words, the lady in Wojen FGD above quoted, since he recalled saying: «You cannot know, as I said before, when I went to school, there was still Haile Selassie. I remember a burning year, really burning, like this one. I must say that now every year it gets hotter».

Indeed, even if the absence or erratic occurrence of rainfall is normal, or at least acceptable, «People are not happy, the land is ready, but no rain, but they are quiet, because it is normal for them» (Interview with DA working in Sassa, Basketo, March 2022), more serious, on the other hand, is the rising temperatures issue. In this regard, an expert from the Agricultural Office in Basketo calls the phenomenon a "kollazitation" of the middles and higllands, meaning that temperatures in these agro-ecological zones are rising so dramatically that they are becoming similar to those in the lowlands, *kolla* in Amharic.

Indeed, the problem is that «There is evidence that Africa is warming faster than the global average and this is likely to continue» (Collier et al. 2008, 338). And in the literature, on the specific case of Ethiopia, climate literacy studies show that in the lowlands there is a greater awareness of climate change than in other agro-ecological zones.

«Here we now have the same temperature as the gorges, there is desert, there is no forest» (FGD, April 2021, Tenta Enibse).

And the high temperatures are not an "abstract proxy", these burn the seeds before the rain comes: «Look at the maize, showing me the seedlings - we took the seeds and planted them a couple of weeks ago, rain was forecast for these days, but it didn't rain, now, look it's completely burnt, what can we get from here? Nothing, absolutely nothing» (FGD, March 2022, Punobasa, Basketo).

From farmers' perspective, we are far from the danger of global temperature reification that Mike Hulme (2011) warns us against. For the geographer, it is an abstract entity that has seized power over the human world and, like GDP, has acquired an extraordinary role in science, politics and public discourse on climate change, objectively and simultaneously measuring the behaviour of the Earth System, revealing the future, regulating geopolitical negotiations and disciplining the human imagination. The process of objectification (Morton 2013) of global climate change in the words of farmers is brought back to its palpable immanence.

Albeit not using eco-linguistic analysis software, an important heuristic tool with which to further study the transcripts, it is evident that all the farmers' narratives and descriptions are dichotomous, there is a 'before' (*baifit*) and a 'now' (*aun*) in Amharic. This fracture occurred is in most cases dated

five years ago, in some between seven and ten years ago, only in the case of Basketo's Health Exstension Workers (HEWs) ten years ago, because for them it is connected with the expansion of the city of Laska to the detriment of the countryside, of the forests that used to be closer.

In any case, two aspects that emerged from the fieldwork need to be underlined. The first is that no one, not even the oldest, mentioned a change noted over a long period of time, such as thirty years, which is the average "scientifically" placed to detect a change in climate. The second point concerns the memory embodied and shared with family members and acquaintances even by the youngest, who did not experience great droughts and floods at first hand. They, however, responded by reporting what they were told.

A common finding is to see "how tradition, historical teaches", as a reservoir of anchoring knowledge and practices to be drawn from, no longer seems to function in many regards, as some of the more solid devices have broken down. In the *woreda* of East Gojjam, an interesting element emphasised by the farmers concerns clouds, the change in their corporeality and behaviour in announcing the arrival of rain.

In fact, a few days later in May 2022, in Yeguch, Enibse, during the FGD it emerges that «In previous times you could look at the sky and if there were clouds, it meant rain was coming. Now, even the clouds lie[109], they are there, they are big, they are heavy, they are filled, but it is not raining». And then in Woninye, Shebel Berenta, the farmers described that morning as a 'beautiful' day, albeit a dreary one, because the clouds had appeared, and the wind had calmed down[110]. On the other hand, farmers in many cases cannot rely on 'modernity' tools, such as national weather forecasts broadcast by radio and television, contrary to what Roncoli, Crane and Orlove (2016) claim, not only because of a question of access to such devices, but because such forecasts are almost always wrong, referring only to cities, regional capitals. This weather station service, they explain, as we have seen in the previous chapter, rather than being enhanced, has over time been decommissioned or at any rate they no longer receive news and updates. And the weather service conveyed, in no way allows one to forecast conditions at the local level, unless, the farmers ironically say, one thinks the exact opposite.

[109] An element about government had come up just before, and the human characteristic of lying is transferred in the discussion to the clouds.

[110] Like water, wind is considered to be a highly destructive element, it is not 'good' for the soil, because it scatters land and disperses seeds, sweeps away houses and in the *kebele* of Bunobasa, in the *woreda* of Basketo, it even caused the school to collapse in March 2022. The schoolchildren were provisionally accommodated in a UNICEF tent, which due to the high temperatures, already endemic in the lowland, became a furnace during the hottest hours of the day, making it unliveable for the students. This was one of the occasions when the farmers explicitly asked me to take pictures of the destroyed school and asking me, by virtue of my "belonging" to the NGO, to intercede for them, requesting my chiefs to help them rebuild the school, which even before the disaster, was already experiencing.

In the South, on the other hand, the mechanisms of tradition, and thus also important certainties, were blown apart when in the midlands, *enset*, a high drought-resistant crop, the resilient plant by definition Valentina Peveri (2012) defines it, «[*Enset*] once was useful for us, it was our safety from drought and famine, but now even *enset* is burnt, nothing can be done» (FGD April 2022, Awrasosta *kebele*, Basketo). We have seen in the introduction how *enset*, considered the resilient plant par excellence in Ethiopia, is now, due to high temperatures, developing 'fermentations' referred to by farmers and experts as *woreda* that cause diseases in animals. Farmers and experts share the same aetiological view of the disease.

Like age, gender, and likewise to my surprise, could not weave a particular subplot in these narratives about perceptions. On the contrary, in the work of three Ethiopian anthropologists who have done research in all three agro-ecological zones but in other East Gojjam's *woreda*, it is pointed out how men and women have different evaluations of rising temperatures. These differences are linked to the off-farming activity par excellence of women in rural Ethiopia, i.e. the preparation of local drinks such as *arake* and *talla,* which the high temperatures make more desirable thus increasing their income and also allowing them a faster drying of hops and malt needed for the preparation of local liquor and beer (Merid et al. 2017, 567-568).

Only in this case and to allow the growth of crops where previously due to low temperatures in the highlands it was not possible to plant them, especially horticulture products, an aspect that officials in East Gojjam do not overlook, the rise in temperatures may also bring benefits. For the rest, the spread of diseases is the counter-evidence. For humans first of all, malaria has become endemic in the *kebele* of middle-land where before it did not exist in the *woreda* of Basketo and this is incontrovertibly linked to the high temperatures.

From this point of view, it is not only the farmers but also the HEWs in Basketo who provide me with important details, given their greater familiarity with diseases' cases and symptoms. Firstly, they report the increase in baldness in men, but fearing a reaction from me as a *farenji*, a foreigner, they immediately point out, «it may not be scientific, but it is our thinking, we think that there is a ink between the rising temperature and many men becoming bold». Secondly, the custom of using an umbrella, once an expression of social status, now it is not unusual to see men using it too, they report. If in humans the changes are visible, but still epidermal, understood as superficial and as a disease is spreading in Lotte's *kebele* among children who need to be washed several times a day according to the HEWs' instructions, increasingly aggressive diseases are occurring in cattle.

«We stand, they die» (FGD, April 2022 Ubabare, Demba Gofa). Cattle are the first to be affected by the dwindling and lack of food, and their emaciation and death is one of the thermometers that

historically allow us to gauge the severity of the situation at hand (Asefa et al. 2022). It is also a frequent image in studies of famines of the past, although these only share with those of the present the consequences of misery and suffering on the victims (Pankhurst 1985).

The importance of livestock is given by the fact that they are a valuable and holistic resource, «like our children», farmers use to say, given their contribution to plowing activities and for the investment one makes to buy a cow or young calf to resell later at a higher cost if well fattened, a possibility that has been greatly reduced and a practice that is increasingly uncertain. In fact, they explain to me how one of their concerns is to find the right time to sell cows, oxen, goats and sheep, even small livestock, before they die, without waiting until they can sell them at a better price because they would risk losing both the animal and a source of income. The problem is that alongside the diseases that cause violent sweating, problems with the animals' legs, which in East Gojjam *woreda* also attack donkeys, and against which veterinary treatment can hardly be decisive, there is the scarcity of food.

In fact, the animals are undernourished and to those experts who accuse them of free grazing, the farmers instead reply that it is they who are afraid to take the animals out to pasture, precisely because of the strong sun and lack of shade. The eucalyptus trees, which are widespread throughout the country but undoubtedly dominate the landscape of East Gojjam compared to that of the SNNPR, do not provide shade, they told me, compared to other types of trees. But they have to periodically graze them to prevent them from becoming lazy and no longer useful for plowing. In general, the problem of insufficient sustenance of animals, as well as people, which is less referred to, lies in the decline, defined as continuous and inexorable, of land productivity, measured by crop yield, which is increasingly eroded and deemed to be failing. After all, it is the first manifestation of change that farmers notice compared to the past, although production, crops are never all the same, bad and good seasons have always alternated, yet now the former far outweigh the latter and «we are becoming poorer and poorer» (FGD, April 2022, Ubabare, Demba Gofa).

«Still 10 years ago for 0.5 hectares we harvested 8 quintals of teff, now 4» (March 2021, FGD Demba Gofa). «The last good production was more than 5 years ago when I harvested up to 12 quintals of maize from my hectare, 10-12 quintals of nuts, 3 of teff. Last year I harvested 3 quintals of maize, 4-5 quintals of nuts, 1 quintal of teff, I remember it well» (FGD April 2022. Lotte, Demba Gofa). «Nowdays, only for consumption-another farmer replies- Even for consumption is not enough» (FGD April 2022. Ubabarè, Demba Gofa). The farmers define their condition as hand-mouth production.

The problem becomes more serious for large families, especially those with children still too young to contribute to the family economy, because it leaves very little margin to sell anything and what they get is then used to buy other necessities coffee, salt, *berbere* (chili pepper), soap and clothes.

The causes of the decrease in production are mainly related to the spread of pests and fungi, which infest the crops: maize, not only in the lowlands, but also in the middlelands, making it almost impossible to cultivate; tef, affected by so-called 'wags', the hemic term for tef rust; other pests affected pulses, especially chickpea, the second most important element in the Ethiopian diet, providing protein to a cereal-based diet. For the farmers, these infestations are only partly due to the rising temperatures, or at least they assumed and noticed that the sun fuels the spread of their eggs, which is why they always try to work the soil, the only advice they received from the development agents who were unable to advise them otherwise.

However very often, the farmers' evaluations also call into question fertilisers and their perception of these as pharmakon, which should improve the performance of their production. Farmers report it did at the beginning, some twenty years ago when they started using it, and compensate for the progressive loss of soil fertility, but not without consequences. «We can't find this year soil for the next year, it's gone, the fertility has decreased, the soil is like sand now, now it's wet, now it's dry. The truth is that what we grow has decreased a lot, before you could grow even spicy here, lentils, pees, now not anymore. The soil has changed» (FGD, May 2022 Wonije, Shebel Berenta). In these words, there is echo of what reported by the authors of a study at Choke Mountain: «If our lands have mouths to speak, they will tell us how much they are exhausted by ploughing all these years' and lands are now deaf to hear our investment» (Smit et al. 2017,236).

Farmers report that they roughly started using it about fifteen to twenty years ago in the *woreda* in East Gojjam, and more than ten years ago in those in SNNPR. In the beginning, the use of the chemical fertiliser, synthesizer, modern often called it, compensated for the progressive loss of soil fertility, producing good crops for the first few years, but not without consequences. «All people were happy at that time. We thought we solved our problems. But then new kind of problems started» (FGD Apirl 2022, Awrasosta, Basketo).

«We can't find this year's soil for the next year, it's gone, the fertility has decreased, the soil is like sand now, now it's wet, now it's dry. The truth is that what we cultivate has decreased a lot, before you could even grow spices, lentils, pees, here, now not anymore. The soil has changed» (FGD, May 2022 Wonije, Shebel Berenta). In these words, there is an echo of what the authors of a study in Choke Mountain reported: «If our lands have a mouth to speak, they will tell us how exhausted they are from ploughing all these years and the lands are now deaf to hear our investments» (Smit et al. 2017, 236). But the farmers I interviewed identified the cause of the current condition of the fields, 'eroded quality', the same expression translated to me to indicate the poor health of livestock, not only in over-ploughing and rising temperatures but precisely in the use of fertilisers.

And further, «The production of everything has decreased, nothing yields like it used to, look at this newly planted corn, it's burned, what will it yield? The soil is dry, modern fertilisers help but they can't control the sky, plus they are getting more and more expensive, like seeds, but we have to buy them, the soil is addicted to them now, and in the end, the production is half of what it was a few years ago» (20 March 2022, FGD Sassa, Basketo).

Fertilisers, and green technology in general as inputs for agriculture have been a hot topic, regarding the contingency of perceptions on environmental and climate change, practically dominated my third fieldwork, although it had already emerged in the spring of 2021 in Amhara, since the coronavirus pandemic. «Due to Corona, there is shortage of fertilisers suppliance» (FGD, March 2021 Goncha *woreda*). But the issue exploded in the months leading up to the arrival of the rains in 2022[111], as there was a shortage of fertilisers and their cost had almost quadrupled due to the ongoing wars. On the one hand there was the Russian-Ukrainian war and the embargo on Russia, the world's largest exporter of fertilisers, accounting for 23% of ammonia exports, 14% of urea exports, 10% of processed phosphate exports, and 21% of potash exports[112]. And on the other, there was the Ethiopian civil war, which had left the government with a shortage of foreign currency to buy as usual and intervene to calm the fertilizers price.

«We are worried about fertiliser, we have compost, but still it is not enough, the only alternative would be to grow beens which require less fertiliser. We have applied for credit and registered[113], but that does not mean we agree on the price. They will distribute it when the rain starts. Last year the price of a bag[114] was 1,600 etb, this year 4,600 etb» (FGD, May 2022, Yeguch, Enibse). «For one hectare I buy 1 quintal[115] of fertiliser and this year it costs 5,200 etb, last year the same amount cost 2,000 etb» (FGD April 2022, Lotte, Demba Gofa).

The recurrent expressions with which they explained the situation were 'big concern', 'serious issue', also because they were still 'undecided, confused. They had to decide whether to buy fertiliser with the money from the rent of their own land and practise share cropping, or not to buy it and condemn themselves to an undoubtedly inferior production since «The soil is dry and it's thirsty» (FGD, May 2022, Mojen, Enibse). Indeed, the issue, highly debated in those months even at the national level,

[111] The owner of the guest-house on our arrival in Bahar Dar, when we asked about Agricultural Bureau, asked if we were there to solve the fertiliser problem. Her family in Awi Zone in the rural areas was suffering a lot.

[112] Statement on Russia-Ukraine Conflict | TFI | The Fertilizer Institute; https://sinistrainrete.info/articoli-brevi/23248-elena-vigano-guerra-e-sostenibilita-alimentare-globale.html.

[113] In two cases, also in Amhara, the fertiliser was demanded on credit after having paid the required 25% down payment.

[114] In Enibse's *woreda*, as the farmers already knew, there were cartons of liquid fertiliser, *Ecofertilizers*, ready to be distributed. However, it must be pointed out how crop variety and soil type affect the rate of application of fertilisers.

[115] The national blanket recommended application rate for Ethiopia is 100 kg of diammonium-phosphate (DAP) and 50 kg Urea per hectare.

came up in most FGDs even when the farmers were dismissing the issue of price and shortage as a problem of Ethiopia as a whole. During the FGD in Mergech, Shebel Berenta, the farmers had shared a few comments about the suspicion or rumours heard and conveyed through Facebook posts about a distribution that had already taken place in Oromia, and of assaults on the *woreda* offices to seize it. But across the board it has emerged how the soil is addicted to fertilisers and without them it is impossible to achieve much production.

Therefore, the issue of fertilisers, both for its shortage and the soil addiction and problems it causes that have been mentioned, represents the only new element, next to the speed and the constant and inexorable rise in temperatures in the semantics of the current crisis compared to the drought descriptions of the past. In fact, the cause of the aggressiveness of the new environmental conditions, increasingly erratic rainfall and rising temperatures is blamed on divine retribution and involves both farmers and institutions in deploying the same response mechanisms, as has always been the case. The consequences of the delay in the application and the use of fertilisers themselves do not fall into this category, they are not the prerogative of either God or the farmers, although they are accused of not preparing and applying it well by officials and development agents (DAs). Fertilisers, like all artificial agricultural inputs, are the prerogative of politics, of the state, and are increasingly structural. The fertiliser crisis, as it used to be called, shows how farmers are not only dependent on rain-fed agriculture, at the mercy of climate change. Even in *woreda* that are considered non-productive, and therefore not drivers of the country's agricultural transformation, they are at the mercy of other elements besides climate change. As Ubabalich judged during Sassa *kebele* FGD in Basketo in April 2022 said: «It may rain tomorrow, but our situation does not change, we need fertilisers». It is no coincidence that the fertilisers' concern recalled the problem of inflation (evident in the graph below), as arenas in which it was pertinent for the state to act.

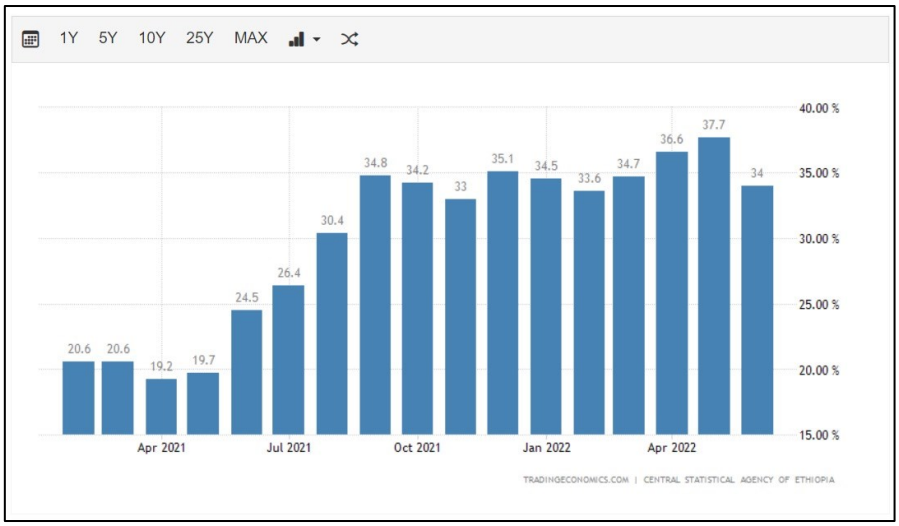

Figure 15 - inflation trends in Ethiopia since April 2021 to April 2022 (tradingeconomics.com).

I therefore propose a differentiated analysis that emerged from the study of the material collected during the FGDs. On the one hand, there are the aetiologies and responses to climate change, in continuity with the data already available in the literature on the topic and also in relation to past events. On the other hand, the analysis of the fertiliser crisis, which emerged strongly during the fieldwork, proved to be the issue that aroused the most interest and animosity among the farmers, and thus gradually became the focus of FGDs discussion and of the data collection from institutions at different levels.

2. *Old aetiologies and the same response*

From the farmers' descriptions, it is possible to gather the aetiologies of environmental and climate change into a few typologies, a type of analysis that links as will be seen from the responses, links the closer and more aggressive challenges of recent years to the droughts and famines of the past (Merid 2017, 572; Baye 2017, 424).

The first typology concerns the impossibility of formulating an explanation, the response «We don't know, we are just farmers» is usual, a *leitmotif* that is interpreted in the literature as farmers acting from empty boxes (Rahamato 2009).

Their second explanation lies in the consideration that change is a natural process: «Our parents and elders tell us that their world no longer exists, so it is normal for it to change» (FGD April 2022, Doma 08, Enibse).

The third is resolved with a tautology that the elements through which climate change manifests itself - higher temperatures above all - are also the cause. This is different from the idea that emerged on two occasions during the FGD, with the Health Extension Workers (HEWs) FGD in Demba Gofa and with the Moniye farmers FGD in the North, for whom the cause of change was deforestation [116]. And finally, the last category argues how the current situation «[It] depends on God, on his will».

This interpretation alternates with the equally common one in which the divine will is not seen as inscrutable but as a clear consequence of human action: «It is God's punishment». It was a common definition across all religions, Orthodox dominant in the North and Protestant in the South, with few cases of Muslim farmers, a common attitude across faiths that the farmers themselves emphasised by saying that, they are all busy praying, «Christian, muslim, all of us we pray to God for good time» (FGD, April 2022, Lotte, Demba Gofa)[117].

In fact, the divine nature of aetiology manifests itself as anger, a responsibility on the part of people. It is a concrete fault, but an immaterial one, nothing different from the greenhouse gas emissions that are the main cause of anthropogenic climate change. Even if we do not speak of greenhouse gases in this context, the cause lies in the misbehaviour of the community and of the country in general, and the lack of rain and the high temperatures are God's punishing, but there is a struggle to find the culprits and appropriate solutions[118].

The search for this sin can engage a community, as in the case of Doma in Enibse «Definitely, it is God's punishment, but we cannot understand what our sin is, we have behaved well, we have not failed in anything» (FGD, May 2022, Doma, Enibse). Guilt is linked to a greater sin, such as the Civil War and the acts of violence that are gripping the country and «Look at what is happening, we are at

[116] Interestingly, this idea was the subject of a recent study which concluded that deforestation has this kind of effect in wetlands, but not in dry areas (Makarieva et al.2023).

[117] Unfortunately, non-planning and the impossibility of adding religious leaders as research interlocutors prevented me from exploring this important aspect in depth. In this sense as well, the field was complex and diversified, given the presence among the farmers interviewed of members of the Orthodox religion, prevalent among the respondents in East Gojjam, Pentecostal, prevalent among the respondents in the two *woreda* in SNNPR, and Muslim present in smaller numbers in both regions. Only one farmer, Burtukan in Awrasosta *kebele* in Basketo, declared that she belonged to Only Jesus.

[118] This argument is developed in the book by Wolfgang Behringer *Storia culturale del clima. Dall'era glaciale al riscaldamento globale* (2016 [2010]). I do not agree with the historian's basic thesis, which is founded on trust in the ability of the human species to adapt, and which is supported precisely by the historical reconstruction of temperature variations, to which humanity has always responded without measured data, but from time to time with its own interpretative models. However, the first two paragraphs of chapter four "La collera di Dio" and "L'economia dei peccati come motore" are undoubtedly based on a wealth of reference material, including interesting iconographic sources, to show how, in the early centuries of the Little Ice Age, the theologians of the sixteenth and seventeenth centuries expected punitive acts from a personal God, and these acts could refer to any crime, whether moral or spiritual. And to this end, they had devised an economy of sins linked to the deteriorating climate, in which they did not seek an expiatory leader, but intended to intervene in the behaviour of the great mass of believers in order to change it (Behringer 2016 [2010], 184).

war, people are being killed, there is violence, thieves, how can God not be angry with us» (FGD, April 2022, Bunobasa, Basketo). And finally, it manifests itself as a case already analysed (Baye 2017, 425). «These events are a punishment from God, because to work we no longer respect rest, but the land needs too much care and treatment and we cannot stop working» (FGD, Awrasosta Basketo, April 2022).

In reality, this explanation is what is contested by the authorities, according to which the religious calendar of the farmers, which they consider to be a legacy of Menelik's impositions, interferes with productivity.

This is well illustrated, for example, by the issue of renting tractors, which are few and very expensive, costing between 1,000 and 1,5000 etb to lease, but just as much in demand, a necessary investment to make the land productive, for which there is always a lot to negotiate. «This traditional calendar is one of our biggest problems, an obstacle to change. For example, we as a region [Amhara] already have very few tractors, and we can't use them as much as we should, because then they [peasants-farmers] sit idle on Sundays, holidays and during fasting periods» (Officials from Amhara Bureau, Bahar Dar May 2022).

The priority of the institution and the world in which these farmers are involved, the models and the paradigm of production have changed, yet the farmers put themselves in God's hands to find an explanation. But at the same time, the farmers are working as they always have, within the possibilities that they have, and they are responding to the challenges posed by the climate crisis. In fact, some anthropologists have referred to these practices as 'responses' (Roncoli et al. 2016) in order to avoid using the overused and abused term 'adaptation', preferring this notion also to the expression 'coping strategies', since they are very often not part of careful and precise planning. Such activities are individual, familiar, undertaken at the suggestion of experts, DAs or other farmers.

Based on response strategies that are seen as external to normal agricultural management arrangements, they range from attempts to diversify their income through off-farm work both in their woreda and elsewhere, firstly through migration. Secondly, by establishing good kinship through the marriage of their children. These are two of the oldest ways of ensuring survival and improving their living conditions. Farmers use both informal and formal credit, when there is not enough collateral to offer for one or the other, families try to access social protection and food security programmes, as we will see in more detail in the next chapter. These pathways are illustrated in the responses of my own interviewees.

However, during the uncertainty and period of high ethnic tension due to the war, but even before it, the possibility of migration was reduced for the Amhara: «It's not a good time for us, Amhara, outside

our region» was a common answer. «When there are times like this it is normal for people to move, to migrate, that is what happened at the time of resettlement, I would only leave if I had the land» (FGD Yeguch, Enibse, May 2022).

Instead, in the South, when the farmers of Basketo and Demba Gofa are not joining the ranks of the unemployed in the towns of Laska and Sawla, especially those who owned land in the peri-urban areas, left landless by the expansion of the town, as "Laska new poor", a HEW from Basketo argued them during the FGD, or because the richer ones are redeeming the land from the farmers, they head for Jinka, South Omo, the second land for Basketo people. In 2021 alone, according to data provided to me by the woreda administrative offices, more than 1,000 people, boys and girls between the ages of 20 and 30, left the Basketo woreda, and the latter to work as domestic workers or sex workers.

Instead from Demba Gofa people follow other migration patterns, moving to Jijiga to be employed in construction companies, to Moiale and Kabrdar for the mines, to Jinka to work in the sugar mills, or to Afar as day labourers in the mines of Dima. But migration is not only about young people, also fathers of families leave, divorcees, or may leave with their wives, and also women may find work in some factories or as day labourers, and «their plots are still there». Against the many who leave, there are those who say: «I'm old, where do you want me to go, no matter what will happen, we don't want to go. We know that people are leaving: old ones no, young ones yes, they can move, migrate and change their life, sending money and supporting family» (FGD April 2022, Lotte, Demba Gofa).

It is not only old people like Gash Abdu from Lotte in Demba Gofa who do not want to migrate anymore, since he has been moving all his life, but also a young woman, Tigist, tells me how she is originally from Gondar, moved with her husband to this *kebele* where he is from, but she has a 15-year-old daughter who works in Addis Ababa as a domestic worker.

After a short or long migration plan, the second most frequent response is the hope for a good marriage for young children. Thirdly, the use of credit, especially in the East Gojjam *woreda*, from the Amhara Credit and Saving Institure (ACSI), a registered microfinance company, is an established practice for some farmers, despite the high interest rates on loans required for the purchase of agricultural inputs or other basic expenses. In most cases, small loans are only sought from the support and help network represented by family and village members, if they have the minimum contribution to participate. These mutual aid realities take the form of *Iddir*, funeral associations, *Equb*, rotating credit associations, *Senbete* church-based religious associations to pay for health treatment, to buy food or rent land, to deal with "extraordinary" expenses, such as weddings, even these are increasingly minimised, because «the poverty teach us how to live» (FGD, May 2022, Moniye, Shebel Berenta).

As noted above, none of these attempts to cope with the disruptions caused by climate change are new. Moving from the extraordinary to the ordinary, from non-agricultural to agricultural practices, the continuity with 'normal', ordinary agricultural strategies and practices, aimed at treating the land well and conserving it thanks to institutional rules or sometimes the ingenuity of the farmers themselves, is evident.

Yet, there is no shortage of proud declarations of cultivating land on steep slopes, even though they know that they are not recommended, but neither are they forbidden, because the slope is less than 30%, perhaps because they are well irrigated, and thus a "promised land" where they can grow khat (*Catha edulis*), banana or the necessary to make talla, as we have seen hops and malt. There are also farmers who, having access to well-watered land in their plot or garden, decide to allocate part of it to the profitable activity of horticulture, also taking advantage of the rising temperatures, for example by planting onions, in the first case in Yeguch, Enibse, and coffee, mangoes, oranges, a species of hops (*Rhamnus prinoides*), *gesho* in Amharic, *berbere* in the second, at the *kebele* of Woninye, Shebel Berenta, which are the norm in the production of the SNNPR's *woreda*, along with fruits and vegetables such as ginger, avocado, sugarcane and moringa.

Here as in other East Gojjam *kebele*, and in the two middle-land *kebele*, they know what is necessary for soil erosion: they make compost, they build soil dams, they reforest degraded watershed areas with local and exotic species, «we do everything is necessary», even in Yeguch they point out how they have also made gabions, which if done well are effective, but they do not have that technological capacity. «It is important to stress that both the set of adaptation strategies and the drivers of adaptation (such as extension services) have been traditional components of rural development programmes» (Di Falco and Veronesi 2013,758).

In fact, these are practices that have always been implemented by farmers, not new responses to the accelerating variations caused by climate change. Farmers, as a 'last resort', are left with «eat less, prepare ourselves to starve».. Where the quintessential and most widespread climate resilience response proposed by the state is to repeat, insist on, and support the application of the traditional components of rural development programmes, in particular the adoption and effectiveness of land and water conservation practices, which we will see in the next chapter, and the use of improved fertilisers and seeds, which we will see in the next section. But then the *mengist* fails to provide and distribute them, and now, after being "forced" to buy and apply fertilisers, farmers have to deal with a land that not only 'demands' but has become dependent on them and forces them to apply more and more of them.

3. At the root of un-resilient and un-sustainable agricultural system

The issue of fertiliser and Green Revolution technologies is crucial in Ethiopia, though it may tend to be downplayed in comparison to other countries in Africa or especially other developing countries. This consideration can be summed up in the words of Prof. Teshome Soromessa, of Environmental Sciences at Addis Ababa University: «Ethiopia is not India» (Interview in Addis Ababa, November 2021). The reference is to the fact that, with the denunciations and struggles led by Vandada Shiva (2016 [1991]), the Southeast Asian country has become the paradigmatic example of the Green Revolution and its disastrous failure, which benefited wealthy farmers but condemned millions of them to debt, degraded their environment, affected their health, and eroded their seeds and culture.

As in fact, Dessalegn Rahmato had already noted: «The green revolution, we should note, had a much longer history in Asia than in this country» (Rahmato 2009,63). It is a reading that, although partial, is correct, considering that Ethiopia, along with other African countries, has its own policy, indeed its own policies regarding green technologies in the country.

Indeed, through the Abuja Declaration (2006) and the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Better Livelihoods (2014), African countries emphasised both the centrality of agriculture to their development and the need to avoid the mistakes of the Green Revolution in Asia. The former declared that fertiliser is a strategic commodity and stated that African Union member states should promote its use through targeted subsidies. The second affirmed the need to improve access to quality and affordable modern inputs through the provision of 'smart' protection - carefully targeted and managed subsidies - to smallholder agriculture (Abate et al. 2020, 34).

The fact that the target of these interventions was smallholder agriculture, and not just large-scale commercial farming, is an important clarification of the implications that emerged from the research. Such policies have not been carefully implemented, yet over the last two decades there has been an increase in the use of fertilizer[119] in African agriculture. On the continent, it has increased from 4.1 million metric tonnes in 2002 to 6.5 million metric tonnes in 2017 [...]. Countries with the largest

[119] The uptake and use of chemical fertilisers in Ethiopia (mainly DAP -*diammonium-phosphate*- and urea) can be assessed in several ways: in terms of total fertiliser imports, percentage of farmers using fertiliser packages and improved seeds, percentage of land cultivated with fertiliser applications, and estimates of fertiliser application per hectare at household level.

shares of fertiliser consumption on the continent include Ethiopia, Kenya, Malawi, Mali, Nigeria and South Africa (Abate et al. 2020,37).

It is only in very recent work on the diffusion and application of green revolution technologies in Ethiopia (Abate et al. 2020; Rohne Till 2021) that a clear and substantial picture emerges, even overturning a certain crystallised vision of the country. Indeed, as noted in the introductory quotes to this paragraph, for a long time many studies reported that Ethiopia was a "Cinderella country" in terms of fertiliser use compared to other African countries, and there would be nothing wrong with that, on the contrary, if only it were true. Therefore, research, government reports (Spielman et al. 2010) or academic (Agbahey et al. 2015) aimed at suggesting how to improve the diffusion and use of chemical fertiliser.

Moreover, this is also the view I gathered during meetings and interviews with officials from Agricultural *woreda* Office, who indicated that although rising through years, fertiliser consumption and even its proper application by farmers is far from government's standard.

It was therefore this discrepancy between the desperate situation of dependency described by farmers, aggravated by the precise contingency of their lack, and the minimisation of impact perpetrated by institutions and much of the literature, with the exception of the ethnographic studies by René Lefort (2010; 2012), Sabine Planel (2014), Anne Cafer and Sandy Rikoon (2017) that prompted me to look more closely at the supply system of green technologies - fertiliser and improved or hybrid seeds- in the research area.

The fieldwork showed that the causes of this underestimation of the penetration of green technologies in Ethiopian subsistence agriculture can be linked to several factors. First, the inability to achieve such optimal coverage, even in the face of increasing farmer demand. Conversely, to episodes of farmers' resistance to purchase and use, which are also documented in the literature (Cafer and Rikoon 2017); or either to their dissatisfaction, as the supply is not particularly diverse and flexible (Spielman et al. 2012). Finally, another reason often cited by institutional representatives is the 'Ethiopian version' of the Green Revolution paradigm, in which the state-maintained control and a centralised production and distribution system of agricultural inputs, even in the face of WB and IMF demands to liberalise the market (Labzaé and Planel 2021). The decision not to open the fertiliser - and seed - market to private investors has so far been made possible by donor support. These have helped the government to finance fertiliser imports through aid. It is unclear whether the system will be able to maintain current levels of use if donor support is withdrawn (Jayne et al. 2003, 312).

In fact, although the state has repeatedly announced that it would start domestic production of fertiliser, this has never happened. The state, through the National Fertiliser Industry Agency,

manages these imports with a monopoly since there is a licensing system that obliges the import of batches of 25,000 tons of fertiliser. Obviously, the costs of this amount are far beyond the reach of a private company. Once purchased, the fertiliser is distributed to the Farmers Cooperative Union (FCUs) system, which is responsible at the zonal level (in East Gojjam there are three: Gozamen, Ghion, Mota) for distribution at the *woreda* level to registered farming households[120]. The farmers in Enibse and Shebel told me that they were counting on a greater role in mediating the shortage and price issue fertilisers from FCUs, but this was not happening.

This makes the country's agricultural production highly dependent on the dynamics of the global market, as shown by the coincidence of two production crises, first caused by the syndemic and then by the Russian-Ukrainian war. This war, however, was not mentioned at all by the farmers during my fieldwork. They talked about the bankruptcy of the FCUs, the corona virus that shut down the factories and stopped production, the internal war and the war with Egypt for the replenishment of the GERD.

In the meantime, the cost had risen from 1,500 Ethiopian Birr in 2021 to an average of 5,000 ETB in 2022, according to data provided by farmers and the Agricultural Bureaus in both regions. Besides the contingent shortage, the use of chemical fertiliser in Ethiopia has increased at an impressive, I would say alarming, rate, according to some data provided to me by the regional offices.

In particular, in East Gojjam, the use of chemical fertiliser has increased by 23 percentage points between 2008 and 2018, in SNNPR, it already accounted for 92% of total fertiliser sales between 2003 and 2011, and is increasing every year, to the point where officials complain that production is not enough to meet the needs of all farming households. The indications are that fertilisers will be applied mainly to cereal crops, i.e. maize, teff, wheat, with their non-local but certified versions, in order to increase productivity.

Indeed, while fertiliser remains the most important agricultural input in the country, certified seeds represent the largest production in the country, as maize, teff and wheat depend on them, and they are increasing in both East Gojjam and SNNPR *woreda*. These are called market-oriented varieties in the jargon of the experts. The difference is that maize seeds are artificially produced and called hybrids; instead, teff and wheat are new variations, "improved" as a result of crosses within the mixtures, with a guided pollination process, i.e. not open air, on which natural, local plant breeding is based.

The approach is to select seed varieties considered more resilient, useful for maintaining productivity and other requirements under changing conditions, including climate change.

[120] This refers to the procedure whereby farmers give their name and the amount of fertiliser bags they want to the DAs who register their names on the forms provided.

In both Amhara and SNNPR, the Amhara Seeds Enterprise (ASE) and the Southern Nations Nationalities and Peoples Region Seed Enterprise (SRSE) were established between 2008 and 2009. These are two state-owned regional seed companies that are effectively linked to the Ethiopian Institute of Agricultural Research (EIAR), a national research system that also includes a number of federal research centres and university departments that follow all stages of seed production from laboratory production to certification for packaging and distribution.

Instead, maize production is basically in the hands of a private company Piooner Hi-Breed International[121]. Hybrid maize seed has to be bought every year and is therefore a much more profitable business[122], unlike teff and wheat, of which up to three to four generations can also be used. Indeed, it is no surprise that maize is the number one crop in Ethiopia, a consideration that still leaves some people shocked, thinking that it is teff, Ethiopia's native crop, exactly as James McCann reported in his book *Maize and grace: Africa's encounter with a New World crop, 1500-2000* (2005). The last mile of distribution to the *woreda* is always done through the FCUs. They are also involved in the production of the first generation of seeds and have an agreement with the regional institutes in which they undertake to germinate them. This practice has created a black market[123] for these seeds, which are not returned to the regional institute, and at the same time created some uncertainty for the families whose plots have been converted to such mono-production. The farmers call these seeds "modern", explaining the difference in the chances of using the teff and wheat seeds for more generations, without defining them as "improved" and "hybrid"[124]. In any case, they reject the concept of "drought-resistant" seeds, because there are no such seeds. Between the two regions, different types of hybrid maize are sold to improve performance according to soil characteristics.

But the problems affecting this type of production remain the same in both regions. Although there is a certification process, especially in the case of improved teff and wheat, the effects of poor cleaning, broken seeds and low germination rates remain in the production stages. Subsequently, farmers and

[121] In SNNPR they provide type BH540, as in Amhara, where the most common is type BH546, alongside BH141, BH660, BH661.

[122] Also in the hands of private individuals is the trade in pesticides that are no longer supplied by the cooperatives, leading to the smuggling of such products that are bought by the farmers. The creation of the black market in agricultural products is seen by the institutions as a limitation to achieving their agricultural development targets. But the farmers, much more violently, refer to the fact that they are being cheated, being sold expired products that are not consistent with what the traders claim, and that they are leveraging their inability to read and write labels.

[123] This is a crucial growing phenomenon with devastating effects on the population, which is still little researched in Ethiopia (Desta 2019, 47). It is interesting how both farmers and institutions refer to it. The former, especially in relation to outdated (Edwards 2004), illegal pesticides sold by private traders with counterfeit labels and increasingly unavailable through official channels. Institutions, on the other hand, refer to the above, i.e. the failure of farmers to return all germinated seeds that escape laboratory control and certification and are still circulating on the market.

[124] In any case, experts and officials accuse farmers of not knowing or caring about the difference between improved and hybrid seeds, of using hybrid maize seeds for several generations than just one, and of combining local seed varieties with improved ones when sowing, using the old method of 'intercropping'.

technocrats complain about late deliveries and inappropriate varieties for the agro-ecological zone. The worst judgements were made by farmers, particularly in the southern *woreda*, where they prefer to limit their choice to hybrid maize because they consider the wheat seeds to be small and hollow and believe that they have expired. Instead, in East Gojjam, they are satisfied with the quality of both teff and wheat, which can guarantee high productivity in good years. In Doma 08 kebele in Enibse in particular, farmers were particularly proud of their production, which they said was unrivalled in neighbouring woredas.

On the other hand, in the Basketo and Demba Gofa *woreda*, also from the Agricultural Bureau, the DAs and representatives of the institutions complain that the seed distribution is not always correct, that it does not meet the requirements of the agro-ecological zone types made at the registration stage, and they argue that this is due to the marginality of these *woreda* in the landscape and politics of the SNNPR.

Despite these limitations, and although the informal seed system has not been completely abandoned (Thijssen et al. 2008), it is possible to see that the system based on green technologies, whose supply and distribution system has been reconstructed in the last pages, is now dominant. Data reported by the Amhara Seeds Enterprise official shows that the use of improved varieties of teff and wheat has increased by 15 percentage points nationally, with Amhara performing particularly well. In East Gojjam, there has been an upward trend in the supply and use of improved seeds. «Despite some irregularities, the distribution of improved seed has increased from about 1.1 thousand tonnes in the 2008/2009 harvest season to 4 thousand tonnes in the 2018/2019 harvest season, more than tripling in the last ten years». The same "improved" picture is reported by the Southern Nations Nationalities and Peoples Region Seed Enterprise (SRSE).

Only those farmers defined by my interlocutors in the FGDs as "very, very poor", far from being considered producers of biodiversity (Breda 2003), and living on the geographical and social margins of the *kebele*, use only local seeds for teff, wheat and maize, depending on their needs. They live in areas furthest from the centre of the *kebele*, where most of my interviewees circulated in some way, "around the kebele office", to the point of being intercepted for interviews and FGDs.

In other words, the spread of hybrid maize and improved teff and wheat has not dismantled the informal seed system, which remains the only supply system for all crops that, though secondary, are crucial in the Ethiopian agricultural and food system, from other cereals crops like barley, millet and sorghum, sesame, to varieties of pulses[125]. However, all the farmers interviewed, with the exception

[125] The seeds of horticultural varieties, e.g. onions, lettuce, carrots, are all imported from European countries, primarily France and Holland, with a label on them that they were packed in Addis Ababa. I had the opportunity to follow the initial

of those landless, buy at least one variety of certified seed and, of course, fertiliser. «Only the poorest of us use only local seeds» (FGD Wojen, Shebel Berenta, May 2022). I believe that these latter farmers can be considered the expression of what Robert Chambers (1983, 13-16) defines as "hidden poverty". However, as evidenced by the rising cost of fertiliser, such external inputs come at a significant financial burden, particularly for food insecure farming households. To help farmers cope with these input expenses, the quasi-governmental microfinance institutions ACSI, already mentioned, and Omo Micro Finance Institution (OMFI), controlled by the regional governments of Amhara and SNNPR respectively, have been set up[126]. But it is a risk that farmers are willing to take in the absence of other alternatives.

The debt trap of the poorest is clearly documented in the literature, both in several African countries (Death 2016, 213) and in the specific case of Ethiopia (Planel 2014; Lefort 2010; 2012; Cafer and Rikoon 2017), where it is reported how farmers are falling into a cycle of debt and dependence on expensive external inputs, forced to lease their land, practice sharecropping, depend on richer farmers, and an eroding natural resource base. Indeed, farmers complained that they were «getting poorer and poorer, year after year».

The impressions gathered from the institutions were mixed regarding the dissemination of inputs, as there were not only officials who spoke with the rhetoric of reports, but also those who tried to look critically at the system that had been created, a situation that emerged in both regions when I tried to point out the limitations and contradictions of the system itself. Since officials often invoked climate change as an additional cause of vulnerability for Ethiopian agriculture, I asked them how combating climate change fit in with climate mitigation goals, considering the greenhouse gas emissions caused by fertilisers.

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stages of the procurement of these seeds by CVM staff in both regions where, at the time of my fieldwork, women's horticulture cooperatives were being established. This is an activity encouraged by the government because it is profitable production to the extent that there is a National Horticulture Development Strategy 2013-2023, on which officials and experts insist a lot not only in Amhara where the market for horticulture is small compared to the production of fruit and vegetables in the south. It is an insistence that unlike what is being conveyed by the institutions, does not find resistance tout court from the farmers in East Gojjam, resistance to change, resistance to giving up cereal crops in favour of such production. In fact, this rejection, in the words of the farmers, finds simple, concrete explanations related to the fact that their plots/parcels of land are not sufficiently irrigated to sustain horticultural production. In fact, the farmers who do have water have long since planted fruit trees and various vegetables, primarily onion, garlic and lettuce.

[126] The microfinance sector, considered strategic by the government for development, but also for consensus building, in rural areas, was regulated through Proclamation No. 40/1996, which implicitly intended to order a field in which too many autonomous and independent actors had emerged in previous decades, and declaredly favoured its expansion to offer financial services to the poor in a sustainable and growth-oriented manner. The creation of the state-affiliated microfinance sector meant, as is often the case in the country in light of the state's structural intervention, that this network became one of the largest on the African continent, indeed a unicum, with 1.5 million clients (Fantini 2008, 204-205). Yet, in spite of the good intentions and capillarity, the work of the microfinance institutions, controlled by the regional governments, as we have seen, is far from problem-free, on the contrary.

«Yes, that is the risk, absolutely. But it is climate change that makes this necessary, farmers need to hurry up and adopt these technologies. We need to push in good years for more production, knowing that more and more severe droughts will occur. In any case of the other seeds (no whhet, teff and maize) there are no improved variants, they are safe. Then about nitrogen emissions from fertilisers, these will be cut somewhere else, which is why Ethiopia is building the Gerd, focusing on water, but also on geothermal energy. After all, with most of the population living in the countryside, it is normal for agriculture to produce the most emissions» (Interview with Official from Enibse Agricultural Office, April 2022).

Then there were those who believed that the limitations of the system were non-systemic, in farmers psychology: «We need to study the farmers psychology, why after so many trainings and demonstrations, do they still plough wrong? They do not plant teff in row, but scattered like traditional crops, why? They have new technologies, but they use old practices» (Interview with Official from Amhara Seeds Enterprire, May 2022).

It was a statement of staggering violence. Firstly, to accuse the farmers of not knowing how to plough was to accuse them of delusion, from the latin etymology of the word. It means to deviate from the furrow, from the lyre, *de*: out e *lira*: furrow)**.** And then the reference to the modern way of sowing teff meant referring to the prescriptions of ATA: Tef Improved seed Reduced rate and Row planting), because ATA's directions prescribed how production was more than doubled, exactly as happened with the production of rice in Asia during the 'first green revolution'.

But I also happened to meet officials who were less 'organic' to the precepts of the ATA and agricultural intensification: «Over the years of course, it is as if the use of fertiliser has increased, that's how it works, even the use of seeds, although in reality the quality continues to be sub-optimal. But the effects on productivity are still minimal, it has not increased as much as expected especially with the cost of fertiliser. and then as this year is lagging behind, and this creates problems for the small subsistence farming of farmers. They are already exposed to other problems» (Official from Gofa Zone Agricultural Office, April 2022).

But when I asked if the "fertiliser crisis" could be useful to rethink the whole system, he responded by reaffirming the paradigm. «It was just a fluke, when will the covid, one year war in Europe and here at the same time happen again? We were just unlucky, bad timing, next year will be better» (Official from Gofa Zone Agricultural Office, April 2022).

This prediction actually come true with the grandiose announcement in March 2023 of the fertilisers stock arrival in the spring through the Agriculture Ministry's canals.

The fertiliser crisis, as a moment of choice, of rejection, of separation right from agricultural language, from the Greek verb '*krino*'. It means technically to separate the chaff from the grain, to discern and to evaluate. Therefore, the fertilizers crisis represents a missed opportunity to programmatically recognise the violence and environmental and economic unsustainability of the agricultural system set up in recent years. Therefore, the input system put in place makes agriculture an expensive activity.

The question is: how was it possible for such an unsustainable and qualitatively poor system to take off and spread beyond the enthusiasm of the early years? How was it possible for at least fertiliser to become a structural element of farmers' agricultural practices in a subsistence "food economy" that is not dedicated to large-scale production, as in these *woreda* in Amhara and SNNPR, whose supply system is inflexible and tied to the top-down structure of the state?

Fertilisers, such as improved seeds, entered the country's landscape early on, since the time of Haile Selassie (Rahamato 2009), and had established their widespread presence over time.

Indeed, the paradigm of agricultural modernisation in Ethiopia, as in other sub-Saharan African countries, was to correct soil depletion with chemical fertilisers and improved seeds varieties to reverse nutrient loss and increase production through input intensification rather than land expansion. Soil fertility was thought to be threatened by competition within the agricultural system: cattle dung, which is a useful fertiliser, is also used to produce energy, and crop residues, which are needed for soil regeneration, are used as food for livestock.

Development Agents (DAs) complete the package that has made the history of agriculture in Ethiopia, its 'development' understood according to the dominant paradigm, one of the most capillary instruments with which the EPRDF has established itself as a developmental state (Lefort 2012; Planel 2021) and, in parallel, as a green state.

DAs are Ethiopia's "street bureaucrats", agents of the Ministry of Agriculture, in charge of establishing various farmer lists, teaching improved farming techniques and distributing agricultural inputs' (Labzaé and Planel 2021,82), but they are also "torchbearers of development", the dividing line between two different words, agents of agricultural extension and conduits of state power through the performance of political tasks (Chinigò 2022,94).

Unfortunately, this is not the place to summarise the early stages of the development of the agricultural extension system (Belay 2003; Khairo et al. 2007; Abebe and Hailemariam 2018), crucial as they were, but it must be stressed that this history is riddled with failures, many of them under the eyes of the donors themselves and the critical analyses of many authors aimed at lashing out at a homogenising approach of development experts (Rahamato 2009).

We can therefore ask ourselves together with Teferi Abate Adem «why several farmers continued to adopt the technology packages with no attention to their economic costs and benefits» (Adem 2012, 95), reversing the dominant narrative that sees farmers misapplying fertiliser, never enough, the way of planting seeds, or recycling maize seeds like that of other cereals. The mediation of the state -the non-freedom of the farmers is in these constraints- has gone beyond the collectivisation of the land and its redistribution, but has gone so far as to create an unsustainable system, in which the limits of their own plot are added to the limits of their possibilities for action, which do not even include the chance to decide what to plant and when.

The presence of these constraints is further confirmation that this system of input is in fact a political space (Adem 2012,83). *Mengist* manifests itself, disciplines, demands, but at the same time the farmers say "mengist yellam", i.e. there is no, and the high cost of fertiliser, is also the minimum problem compared to the ongoing civil war and relentless inflation.

Moreover, through the extension system, the largest on the continent and constantly expanding, farmers have become channels and victims of state domination (Planel 2014, 426). The state tried to persuade them through the Training and Visit (T&V) approach and the work of the inefficient Farmers Training Centres (FTCs), but also forced them to buy fertiliser and certified seeds. And the purpose of transforming the performance of smallholder agricultural production is driven by the double imperatives of economic growth and social penetration to secure political control to maintain power (Kassahun and Poulton 2014; Planel 2014; Cafer and Rikoon 2017). It can be clearly observed in this regard «The supply and management of agricultural inputs entailed a great deal of political control, through the routinized and bureaucratized exercise of state domination. In the name of development, forcing farmers to buy fertilizer regardless of their specific needs was the norm» (Labzaé and Planel 2021, 82).

But now, unquestioned, it is being carried *tout court* into the future with the usual blinkered goals of tackling climate change, maintaining the sustainability of natural resources, and improving productivity and production. In recent five-year plans, starting with PASDEP (2005-2010), the government's approach to farmers has changed, with a strong insistence on production.

And this situation, the materials and thoughts of the Green Revolution, misunderstood or underestimated by so many academics and politicians in Ethiopia's past, turned out to be the norm during my fieldwork and its paroxysmal crisis. However, while acknowledging the historical depth of this process, I was still missing one element to complete the picture of this late, "new" Green Revolution in Ethiopia: how, the process that had led the peasants to accept the use of fertilisers?

It was becoming clear how the farmers could no longer give it up, the land was now corrupted, addicted to chemical fertilisers, but the *woreda* technocrats kept saying that the farmers' utilisation was still not enough, it was still not as widespread as planned.

I found the answer not only in the explanations of important researchers mentioned above, but also in the boost given to the agricultural intensification system by the establishment of the Agricultural Transformation Agency (ATA). With this institution, the Green Revolution, which had been avoided for decades, finally got under way.

The ATA was set up as an autonomous body from the Ministry of Agriculture, but with its full support, reporting directly to the country's political leadership and coordinated nationally and widely. Funded by the Bill and Melinda Gates Foundation, the Consultative Group on International Agricultural Research (CGIAR)[127], the World Bank and supported by several international NGOs, embassies and multinationals, it is an implementing agency with a clear agenda: to radically transform the agricultural sector from small-scale subsistence farming to market-oriented agriculture. The first step was and is to increase the productivity of smallholder farmers using fertiliser and hybrid and improved seeds. The ultimate goal is transforming farmers in contract farmers, negotiating with a company yield consistent, high-quality produce in return for a pre-determined payment system.

Such a programme existed before the creation of the ATA and had its antecedents in an apparently successful programme called Sasakawa Global 2000 (SG 2000) [128], initiated in 1993 by the Sasakawa Africa Association and the Carter Centre's Global 2000. This programme fitted well into the Agricultural Development-Led Industrialisation (ADLI) policy inaugurated by the Ethiopian government in 1992, having created a favourable environment for the growth of the agricultural sector.

After reading the SG 2000 reports of 1996-1997 that showed encouraging results, Prime Minister Meles Zenawi decided to make this pilot programme structural to the whole country with targets of millions of farmers in under five years.

It was a high-profile programme that dovetailed well with the country's previous rural development projects, but at the same time, it was externally driven, with advice from Nobel laureate Norman

[127] It was in one of CGIAR's laboratories in Mexico that Norman Bourlang did his pioneering work on seed wheat, which, along with new varieties of maize and rice and synthetic fertilisers, was a key factor in the agricultural revolution that changed the world in the 1960s and 1970s. Bill Gates remembers him as a hero, pointing out that he won the Nobel Prize in 1970 and that virtually all the wheat grown on earth is derived from the plants he bred (Gates 2021, 112). On the other hand, Shiva (2016) points out how this has led to genetic erosion, an orientation towards industrial monocultures, the impoverishment of small farmers and the production of huge amounts of greenhouse gases.

[128] SG 2000 extension strategy aimed to assist Ethiopia's efforts to increase agricultural production through an aggressive technology transfer program that disseminated improved production technologies to small-scale farmers through the extension service by invigorate the linkages between research and extension (Abebe and Hailemariam 2018, 204).

Borlaug and former US President Jimmy Carter. Soon, however, the state was asked to lead it. In fact, SG2000 was a politically and technically driven solution that required firm central direction.

However, ATA's establishment made the pro-green tecnhologies strategy incredibly pervasive (as documented by *Ten years of the Ethiopian Agricultural Transformation Agency An FAO evaluation of the Agency's impact on agricultural growth and poverty reduction*), as my ethnographic research revealed by travelling from town to town across Ethiopia and noting the ubiquitous presence of the ATA's Agricultural One-Stop Shops (AOSS)[129].

Whether it has been by compulsion since the 1990s, or whether it has accelerated recently especially in the case of fertilisers, the point is that dependence on external inputs is undeniable, the soil is dry, it is thirsty not only for rain, but also for fertilisers.

Farmers are well aware of both the political nature of fertiliser control as well as its being both a benefit and a curse to the land and their economies, but what was once an external constraint is now a constraint imposed by the land, dry and thirsty.

If for Bill Gates (2021, 117) fertilisers are magic; for the government fertiliser remains a strategic agricultural input to increase productivity and its adoption a practice of adaptation response; the farmers are clear that it is a pharmakon, that is, yes positive, but also a poison, eroding the soil and poisoned, carrying with it the very essence of the state, both present and harmful and absent and equally dangerous. Aware that they can do little against the forces of globalisation in which they are clearly embedded and on which they depend, the farmers call for state intervention.

The crisis is not of their presence or the catastrophe of their horizon of meaning in the face of climate change, it is rather in the pauperization of their quality of life, lack of decision-making power even on inputs. During the FGD in Tenta, Enibse, talking about the change, the farmers were just listing problems, then the a development agents who was working around the *kebele*, pointed out how they had built the school, health centre, but the farmers retorted by saying that their standard of living was low, «Our, it's a long story with no solution» (FGD in Tenta, Enibse, May 2022).

This attitude on the part of the farmers, of the state, which is explained by their lack of freedom, or conversely by their passivity, shows us clearly how climate change and the challenges associated with it are a matter of political will and its choice of what actions to take or not to take under that banner or brand. The analysis of climate change in the farmers' lives highlights how its increasingly frequent and violent variations in patterns, strain their very living conditions to the limits of subsistence: «We

[129] AOSS represent one of the retailers where improved seeds and agrochemicals for plants, crops and livestock can be purchased.

are ready to suffer the hunger» (FGD Punobasa, Basketo, April 2022). Or again «The poverty teach us how to live» (FGD Moniye, Shebel Berenta).

Precisely taking Barnes and a plethora of anthropologists' (2013) invitation to go beyond the description of the issues impacting on their lives, I have tried to go as far as the causes, at least the ones that are historically closest and emerged from the words, complains of the farmers themselves. One is quick to say that «Farmers, [are] therefore, experts in the uncertainty of the future and in growing food for the family in relation to changing weather» (Van Aken 2020,166).

Rather, they are those for whom Latour quoting Heidegger writes: «He [Heidegger] says when a peasant sows a seed, he is leaving it to mercy of the Earth, but when I use artificial fertilizers I work the land hard. It is a though I was being demanding of the Earth, like holding a gun to somebody's head to rob them. Heidegger clearly favours the position of leaving yourself at the mercy of the Earth» (Latour and Weibel 2020, 28). The farmers I met in Ethiopia, on the other hand, argued how: «It may rain tomorrow, but our situation does not change, we need fertilisers».

It is obvious how things have changed since Robert Lamb and Milas Seifulaziz wrote: «But for the moment the immediate fate of the highlanders depends not on land-use schemes or resettlement, but on rain. In Marxist-Leninist Ethiopia, everyone is praying hard» (Lamb and Seifulaziz 1983, 157).

And it is this awareness acquired during the research that made me consider how my findings in the search for the *Bull of the winter* from the title of Susan Crate's (2008) well-known essay[130], on the aetiologies, cultural crises and visions caused by climate change, led me to identify Rob Nixon's (2011) *Slow violence*, i.e. the existence of processes of vulnerability generated by the very structures of a system, represented by the process of dispossession of decision-making power over its production inputs.

4. *Discovering alternatives: interviews to Million Belay and Feleke Woldeyes*

But beyond the misgivings leaked by some officials, only one figure, at least that I was able to intercept, critically opposes such a totally unsustainable system of agricultural production: Dr Million Belay. He is the co-founder and coordinator of the Alliance for Food Sovereignty in Africa (AFSA), a network of different civil society actors, working as individual or organization for seed and food sovereignty, promoting agroecology and supporting the rights of local communities and indigenous

[130] This is undoubtedly a simplification of Susan Crate's important article, based on his fieldwork among the Viliui Sakha in northeastern Siberia, where it becomes clear that the acknowledged capacity of indigenous peoples to adapt to change may not be sufficient to cope with these impacts. In any case, anthropological research goes far beyond the search for local data and promotes an action-oriented approach to anthropological climate change research, culminating in the dissemination of this information and its use in the development of adaptive strategies, policy recommendations and advocacy.

peoples to their land. Belay is also one of the founders of MELCA, which has a programmatic reality in its name.

MELCA means '*ford*' in both Amharic and Oromo. It refers to a crossing point on a river, and is used symbolically to indicate the need to move people away from their misconceptions about local people and culture towards an understanding and appreciation of traditional ecological knowledge. An Ethiopian NGO working on agroecology, intergenerational learning, forest conservation and improving the livelihoods of local communities and indigenous peoples.

Meeting him was one of the most decisive moments in my research, because it allowed me to find answers to so many doubts and conflicting perceptions that were crowding my mind, but also the opportunity to confront a critical interlocutor with whom I could analyse the situation of agriculture in Ethiopia.

He was the only critical voice in Ethiopia that did not simply refer to the country's biodiversity and wealth but spoke of an agriculture in danger. We met in the quiet hall of the Magnolia Hotel in Addis Ababa for a few hours of sharing and conversations. Many topics were touched upon in what was more of a discussion than an interview in the methodological sense, an in-depth look at issues he has been working on for practically his entire life, and which I was now inebriated with.

In the chain of questions, I put to him, he really was a river in flood. With his words, he had touched on crucial points in my research, the geography of which I had obviously explained to him, the research questions and some preliminary results that were now taking shape, and how it had also taken shape thanks to his critical spirit, albeit from a distance, reading some interventions in online newspapers on the state of Ethiopian agriculture. Meeting him in his charismatic simplicity, in his burning anger, was a unique experience in the course of my research.

It really was worth it. I had earned the perhaps unflattering nickname of 'begging Valentina' for the number of times I had tried to arrange an interview, even online, or to frame our different journeys through the capital. During our long conversation, Million Belay touched on four themes that were extremely pertinent to the analysis conducted so far.

The complete interview, edited for some cuts and repetitions, is reported here:

VA: what do you think about ATA? It is not clear to me what I found in the literature, and I'm still confused. I mean in the literature it talks about green technologies with the return of Haile Selassie, not spread all over the territory, but as scattered major projects[131]. Yet, during the

[131] The reference is to the Chillalo Agricultural Deveopment Unit (CADU) and the Wolamo Agricultural Development Unit (WADU) established in the late 1960s in a potential agricultural area of southern Ethiopia, to conduct research, testing and demonstration of green revolution technologies and provide agricultural extension advice.

research last spring and now (April 2022), farmers are desperate for fertiliser, and I see ATA everywhere I go, with the disturbing logo of CGIAR next to it? What role does it play in all this, because from the *woreda* to the region they refer to it but I cannot grasp the scale and depth of its work? And with respect to climate change what should we expect, i mean really in the future of the farmers?

MB: I think ATA is acting as if there is no climate change. Climate change requires diversity to cope with shocks. Diversity of crops and knowledge is crucial. Completely replacing farmers' seeds and knowledge will only increase our country's vulnerability. The [ATA] Agenda makes farmers and the soil totally dependent on external forces. The ancient practice of farmers producing, saving and exchanging their own seeds will no longer have a reason to exist. They will enter into a system of buying seed from suppliers every year, as has happened in other African countries. But at some point the soil will be conditioned by the use of fertiliser and will no longer respond without input. The ATA is the green revolution that Ethiopia did not have, but it also scares me for other reasons. If it prevails, in terms of resilience, there will be a regime change in Ethiopian agriculture. This is after a point of no return has been reached. In the 20-30 years that the ATA gives itself to fix Ethiopian agriculture, it will transform our system enough to make it the best example of the Green Revolution. When I think of the ATA and the Ministry of Agriculture, I think of a tree called '*geteme*'. This tree is a parasite. It grows on the main tree, strangles and kills it and becomes THE tree. I think the Ministry of Agriculture will change beyond recognition and become the ATA. The priests and proponents of the Green Revolution will also use Ethiopia and ATA as a framework or "best practice scenario" to convince other African countries to copy. I would not be surprised if this is already happening. That is why the ATA agenda is becoming an African agenda. The drive for change is in the name of technology, the advance that must tear down the backward. They want to tackle climate change with the same productivist, short-sighted, neo-Malthusian approach, for them the environment is a problem. Do you know *The Doughnut system*[132]? Well, this is where we live. Economics should ask how can I serve this? And not the other way around.

VA: How do you explain Ethiopians' pride in biodiversity with the fact that improved and hybrid seeds dominate the country's agricultural production?

MB: «Biodiversity, biodiversity, our coffe, our teff, it's an empity pride. I am sure that when the ATA agenda is fully successful, we will stop calling Ethiopia one of the 8 Vavilovian centres of seed

[132] The reference is to a *The Doughnut of social and planetary boundaries* of economist Kate Raworth. https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(17)30028-1/fulltext

diversity[133]. And then, we talk about biodiversity erosion, we should not only care of plants and crops, but also of livestock. Ethiopia is the first country in Africa in terms of number of cattle, but we, following Bill Gates, have decided that there are *too many* of them -italic is mine- because they emit methane and therefore, we give up its wealth for hybridization. Have you read Bill Gates book about climate change?[134].

VA: Actually, I did it to prepare for the interview with you!

MB: Really? So do you remember when he wrote something about a family from Kenya who decide to open a business with a hybrid cattle to improve their production and then income and finally become rich like Americans[135]. I was shocked. Nobody cares about the genetic wealth of cattle, only human income.

VA: You seem to be obsessed with Bill Gates[136], before I followed your work more closely I thought all this talk about feeding Africa with chemistry had been dismissed, instead I realise there is still much to be done. On this subject, what is the role of Ethiopian civil society in mobilising and penetrating the rural areas and denouncing the distortions of agricultural intensification and the challenges of climate change?

MB: In Ethiopia there is no civil society aware of the problem, or better, yes, we can meet, we can talk, but what projects do we pursue, but what is the paradigm, dogma? You're right, when you said earlier that I write a lot about Bill Gates, I didn't even remember writing that much [he laughs], I sound obsessed don't I? The point is that we can all go to the farmers, collect information. So, there are many studies, data collection. It is the lens, the paradigm, the belief that makes the difference. What do we want to understand? The whole discourse, who is behind it, how resources are allocated, by whom, for whom? »

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[133] In 1926, Russian botanist and phyto-geographer Nikolai Vavilov took a major expedition to Ethiopia and his quest for unusual seeds indicated that this region was one of the more distinctive centers of crop diversification on earth.

[134] The reference is to the book Gates, Bill. *How to avoid a climate disaster: the solutions we have and the breakthroughs we ne*ed. Vintage, 2021.

[135] The reference is to Bill Gates' meeting with the Talam family in Kenya in 2009. They were smallholder farmers who had moved from subsistence farming to a better livelihood by investing in the purchase of cows whose milk could be sold raw to the refrigeration plant that had opened nearby, providing them with a source of income. Gates' argument highlights a dilemma that runs through the book: the cows the Talams are buying in increasing numbers are contributing to climate change. The author explains that the Talams' choice is a reasonable one, arguing that for many poor farmers, earning more money is an opportunity to invest in valuable resources, including animals, a source of protein and extra income from the sale of milk and eggs. But the shocking concept is contained in this quote: «That's the problem: as people move up the income ladder, they do more and more things that cause emissions. So we need innovation to help the poor improve their lives without making climate change worse» (Gates 2021, 250-254). For Bill Gates, there is no difference whether the ecological footprint is due to emissions from a decent life or from luxury.

[136] The reference is to some popular articles written by Million Belay denouncing Bill Gates, his philosophy and everything he stands for, like "Bill Gates: Stop Telling African What Kind of Agriculture Africans Need", Million Belay and Bridget Mugambe. *Scientific American*, July 6, 2021; "Africa at the Crossroads: Time to Abandon Failing Green Revolution", Million Belay and Timothy A. Wise, IPSNews, September 23, 2020.

VA: My approach is that of critical anthropology of climate change, in its matrix of political ecology.

MB: That's interesting. But what do you mean by political ecology?.

VA: A study of the environment that is not seen as 'natural' but the result of political processes and decisions?

MB: That's right.

I lighten up, the interview had gone beyond all expectations.

VA: When we talk about political ecology, the anti-mainstream of agricultural practices, agroecology, comes to mind. What is it? To what extent is it a local practice in Ethiopia, especially at the grassroots level?

MB: Agroecology involves a holistic, systemic approach to managing production activities, healthy in preserving their bio-cultural diversity, but also in developing and institutionalising innovative approaches and experiences, to cope with social and ecological shocks of communities. There, I thank you for that cue, if someone were to ask me what ASFA is, I would answer that it is the Anti-AGRA in Africa. Do you know? Alliance for a Green Revolution in Africa, called AGRA? Funding green revolution activities means not allocating them for agroecological practices. If you look at the budgets of FAO, IFAD, WFP[137], only 2.7% of their budgets are allocated for agroecology. In this situation, ***We can't breathe***[138]. I recently declined an invitation to speak at AGRA's Green Revolution Forum, they called us to attend their meeting, we declined, and in September 2021, AFSA published an open letter of complaint against the organisers' chosen format. They summarised the outcome of the annual meeting, which ended on 10 September, arguing that it had provided a 'single, coordinated African voice' to present at the UN Food Systems Summit. This was the voice of the host Alliance for a Green Revolution in Africa (AGRA), which is not that of ASFA, its vision and what it stands for, which is effectively challenged in its claim to represent Africa's present and future by agrochemicals, improved and semi-hydrogenated and obsolete technologies that ruin the environment, put farmers in debt, damage their health and so on. Here is why: We disagree with Green Revolution's approach at the grassroots level.

With MELCA in the past election, or maybe it was two elections ago, I don't remember well, we had a project in Oromia, in Tallaciù, well, there it was the only place where EPRDF didn't win. Good thing, nobody linked it to our project. This is to tell you what? That farmers need a factual

[137] IFAD: International Fund for Agricultural Development; WFP: UN World Food Programme

[138] "Africa Says 'I can't Breath': An African Civil Society Perspective on Systematic Racism", Million Belay, *Common Dreams*, June 10, 2020.

and concrete alternative, agroecology can provide it, but there is still a long way to go. You can't expect to have agroecological conversion tomorrow, it is a long and complex road, and farmers need to be supported and sustained economically in the meantime, and the state needs to take charge of it».

VA: If I may, I would like to ask you what you think of Dr Abiy's current climate policy and whether it can in any way be described as such. I remember that last autumn (October 2021) you posted a tweet criticising the decision to make the body in charge of climate change activities an authority. If I am not wrong, you wrote: "Climate change needs more than one authority".

And finally, you use the analytical and narrative framework based on a North-South dichotomy, a legacy of colonialism. You accuse the representatives of philanthrocapitalism Bill Gates, Rock-Feller Foundation and so on, of wanting to make Africa an intensive monoculture, what do you think of the Ethiopian state and its agricultural policy, beyond ATA, is there any cause for concern?

Million Belay is not only a Laocoon that criticises and foresees the consequences of the green revolution in the country, but also has a concrete alternative, a constructive proposal, that of agroecology as a practice. It is a practice that is by no means new in Ethiopia and has even been institutionalised in the Ethiopian Biodiversity Institute.

Indeed, Ethiopia has a long history of agroecology, as explained to me by Dr. Feleke Woldeyes during our meeting in November 2021, vice-president of EBI, which was founded in the late 1980s, antithetical to the Green Revolution technologies, as part of a coalition of international NGOs committed precisely to the work of protecting local seeds as a way of escaping food and agricultural insecurity caused by multiple factors. Local seeds are fundamental to guaranteeing yield stability and crop security in the face of pests, diseases and unfavourable environments.

FW: Actually, although we have remained a niche discourse, a showcase of pride, we have brought prestige to the country with our activities. We are a recognised national institute that has been able to attract a lot of funds, including international funds, implemented several projects with the recognition of the Ministry of Agriculture, but our donors are mainly foreigners and this is very sad, hybrid or improved crops cannot replace the country's treasure trove of biodiversity, so agro-ecologically diverse, and then the social value, you are an anthropologist, you should know this very well! We suffer from the shortage of structural funding. It is other institutions and realities

that gobble up resources, I am talking about **REDD**+,[139] they are the evil, and they are also powerful. You can tell the geography of funding by where the offices are located. We have a nice office, we are here in the middle of the foreign embassies[140], instead **REDD+** is based inside what used to be Commission, now Authority. We can also sit with them, but we are too different, we demand different things from the country, and resources, and people. They [REDD+] are everywhere the same, our business is to create different community seed banks, but in connection. EBI has been distributing local crop varieties from the national gene bank to farmers' fields in drought and famine areas, areas from which the arms and legs of the green revolution, of agribusiness, flee.

VA: I am actually not so sure, that even extreme poverty is not an occasion for exploitation.

FW: In the highlands there is no more fertility, unmanaged soils in the past and then fertilisers have caused micro-organisms to be lost, an idea supported by academics, not politicians, this is the problem, this is the degraded environment, biological and physical part, it is not just deforestation.

As we have seen among the inputs, great importance is attached to the increasing spread of hybrid and improved seeds, but as agroecology argues, food sovereignty passes through seed security. Yet as historian McCann (2011) is concerned and asks "Will seed selection by African farmers in the twenty-first century take place in an ideal free market of infinite choice or in real-world conditions fraught with uncertainty of supply, climate fluctuations and unintended consequences within complex local ecologies?"

It is a system that is increasingly at risk, the seeds of the Anthropocene (Brightman 2017,18), can be counted on the tips of one's fingers. The role of seeds within an agricultural system can be a valuable indicator of both social and natural time, as seed selections by farmers indicate both natural conditions - moisture, pests, soils - and the short-term, season-by-season decisions of the farm regarding labour, potential yield versus risk, and market potential.

In the immediate future, international donors and African governments are planning for African farmers to receive their seeds from a global political structure that anticipates, perhaps hopefully, economic and political stability. These expectations of development specialists are the ones that failed

[139] As we have already seen in the previous chapter, 'REDD' stands for 'Reducing emissions from deforestation and forest degradation in developing countries. The '+' stands for additional forest-related activities that protect the climate, namely sustainable management of forests and the conservation and enhancement of forest carbon stocks. This is a highly controversial project aimed at carbon capture, and involves planting fast-growing trees precisely to curb emissions.

[140] The location of the EBI centre in Addis Abeba city, in Yeka Sub-city.

at the end of the 20th century. Will seed selection by African farmers in the 21st century take place in an ideal free market of infinite choice or in real-world conditions fraught with supply uncertainty, climatic fluctuations and unintended consequences within complex local ecologies? (McCann 2011). The paroxysmal fertiliser crisis has brought to the surface a system that is in itself unsustainable, socially and ecologically abusive and to which one does not want to blame the causes of Ethiopian agriculture's problems in recent years. But it is necessary to realise the vertiginous growth that external inputs have had in the country, and especially to recent research that sees the Ethiopian system as a model for relaunching the green revolution on the continent. There is the need for political discourse, realising the approaching dangers and preparing new alliances, building alternatives among those already existing but silenced by the din of dominant paradigms. Preparing for the effects of climate change starts here.

Chapter 4. In the name of climate change, I hereby pronounce *just keep going*

"No, my son," the priest said. "I understand very little, but the Church understands everything". Perplexing things become simple in the Church, and I understand this thing you do," Father Angelo continued gently. "It is this way: The Devil has owned this country for many thousands of years, Christ for a very few. And as in a newly conquered nation, the old customs are practiced a long time, sometimes secretly and sometimes changing slightly to comply with the tenor of the new rule, so here, my son, come of the old habits perist, even under the domination of Christ."

Joseph said, "Thank you. The meat is ready now, I think".

Jonh Steinbeck, To a God unknown (1933)

In this final chapter, the aim is to review the planned adaptation projects that the Ethiopian state is implementing with the help of international donors. The two programmes, the Resilient Landscape and Livelihood Project (RLLP) and the Productive Safety Net Program (PSNP), whose histories and characteristics as programmes allow us to complete the circle opened in the first chapter under the banner of climate change *gattopardism*, are the focal point of this section.

We have already seen in the first chapter how, after an initial phase of concentrated discussions and efforts on climate change mitigation in the 1990s, mainly involving the countries of the global North, a growing recognition of the need for adaptation emerged in the early 2000s, especially in developing and least developed countries. Therefore, at COP 7 in Marakkesh, the Least Developed Countries Fund (LDCF) was established to support National Adaptation Programmes of Action (NAPAs) and the Strategic Priority on Adaptation under the Global Environment Facility**,** to strengthen research and development, to "integrate climate change considerations into sustainable development planning", and to strengthen capacity, including "institutional capacity".

The final consecration took place in Cancun in 2010 (COP 16) and Durban in 2011 (COP 17), where Parties agreed that National Adaptation Plans (NAPs) should "enable all developing and developed country Parties to assess their vulnerability, mainstream climate change risks and address adaptation". Developed countries were urged to provide financial support to LDCs through the LDCF, and developing countries (other than the listed LDCs) were invited to use the NAP guidelines to formulate their own plans (C.Taylor 2013). The Ethiopian government, always in tune with the spirit of the times in climate governance, calls adaptation to climate change a *ditkat* for the country (GTP I 2010-2015).

The subject of this discussion is the planned adaptation programmes initiated by the state to cope with climate change. Several activities fall into this category, complementing the structural, capillary activities of the Ministry of Agriculture, assisted by the ATA, analysed in the previous chapter.

«It is important to stress that both the set of adaptation strategies and the drivers of adaptation (such as extension services) identified in this paper have been traditional components of rural development programs» argue Salvatore Di Falco and Marcella Veronesi (2013, 758). The problem, the authors continue, and rightly so, is that «the faciliting adaptation to climate change may also address development and poverty reduction. Raising the awerness of farmers regarding climate change imply increasing the opportunity of development». The problem, as we have seen so far, is that they want to address the challenges of climate change to real resilience with the same unsustainable tools that have become increasingly popular. This is also the case with planned adaptation plans, whose limitations as a discourse and process have already been demonstrated by political ecology. The construction and implementation of such plans by the Ethiopian government is no exception.

In the case of climate change mitigation projects, two projects, the Resilient Landscape and Livelihood Project (RLLP) and the Productive Safety Net Program (PSNP), are somewhat complementary, indeed they share the centrality of soil and water conservation activities and their regenerative role of power rather than land and livelihood of farmers.

The problem of environmental degradation on the one hand, and increasing food insecurity on the other, are old issues in the country, and are now being addressed globally in the light of the intensification caused by climate change.

1. Resilient Landscapes and Livelihoods Project

The Resilient Landscapes and Livelihoods Project (RLLP) is a five-year programme and will be implemented over the period 2019-2024. It builds on the achievements of the Sustainable Land Management Projects I and II (SLMP-I and SLMP-II) and introduces measures to address risks associated with climate change and variability, maximise GHG emission reductions and improve the livelihoods of vulnerable smallholder farmers in order to meet the country's GTP and CRGE targets. This will be achieved by reducing land degradation and improving land productivity of smallholder farmers.

The project is financed by the World Bank together with other development partners such as the International Development Association (IDA), Norwey, Canada, Germany, GEF, Least Development Countries Fund (LDFC), Federal Ministry of Agriculture. It is being implemented in 135 existing SLMP II *woreda* and 57 new ones in six regional states: Amhara, Oromia, Tigray, Gambela, SNNPRS and Benishangul Gumuz, aiming to reach 3.2 million people, 645,000 rural households living on and facing degraded land (FDRE 2019). Two of the *woreda* where I conducted the research are among those where the project has been implemented since the SLMP I phase: Enibse and Basketo.

The brief lines of introduction and contextualization of the Project call into question the concept of land degradation and that of SLM.

«Land degradation problem is a global issue and almost it affected the whole earth though variation exists in intensity, in the form of soil carbon loss is estimated to have been ongoing for at least 12,000 years, but increased exponentially in the last 200 years» (Shukla et al. 2019, 381).

The process covers the various forms of soil degradation, including erosion and fertility decline, already discussed in the previous chapter, and far less expensive to prevent land degradation via the application of good management based on both cultural and scientific knowledge than to rehabilitate degraded land.

In this context, the Project «SLM is a unifying framework for addressing land degradation and can be defined as the stewardship and use of land resources, including oils, water, animals and plants, to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions. It is a comprehensive approach comprising technologies combined with social, economic and political enabling conditions» (Shukla et al. 2019, 381). Some typical SLM practices include physical soil and water conservation practices; flood control and drainage practices; water harvesting and runoff management for multiple use practices; soil fertility management and biological soil conservation practices; agro-forestry, forage development and forestry practices; and gully control practices.

The relation between land degradation, land use e climate change represents a complex web of causality. One important impact of climate change on land degradation is that increasing global temperatures intensify the hydrological cycle, resulting in more intense rainfall, which is an important driver of soil erosion. Soil erosion has been regarded as the most serious and wide-spread forms of land degradation, and itself a cause of fertility decline, through removal of organic matter and nutrients driving food insecurity that at the root of this degradation are the harmful agricultural practices of a large rural population.

1.1 Ethiopia and soil erosion curse

Soil erosion is an ancient and inexorable phenomenon, resulting from the movement and redeposition of soil by wind, rain and river systems. This “natural” process has been pathologized, particularly in the case of developing countries, for the survival of the land, in Africa for the age and density of its population, and considered as a curse for its highlands and midlands, half of which are concentrated in the regions of Ethiopia and Eritrea.

Indeed, «Ethiopia's highlands contain one of the largest areas of ecological degradation in Africa. From 1981 to 2003, 296812 km (29.7 million ha) of land was degraded, affecting a population of 20.65 million people» (MoA 2019, 48). Hence, soil erosion has long been recognised in the literature as a major constraint to economic growth and the occurrence of famine in Ethiopia, and efforts have been made to address the problem, especially in the last quarter of the 20th century.

The focus of reporting on the issue, the country's agricultural institutions and most of the scientific literature has been on population growth and in their mismanagement of land (Haregeweyn et al. 2015). Their thesis is that population growth has led to the expansion of cultivated land, even on the steepest slopes, and land scarcity has led to over-exploitation of land, from the Amhara (Philor 2011) to the SNNPR (Assefa and Bork 2016).

However, there is analysis showing that «high population density is not necessarily associated with land degradation; it is what a population does with the land and the regulatory frameworks put in place that determine the extent of degradation» (Lemenih and Kassa 2014). People can be an important resource in reversing the trend of degradation. Indeed, Keyzer and Sonneveld (2001) attempted a detailed national assessment of land degradation in Ethiopia. Their study showed that land degradation affects soils with lower fertility and where population density is low.

Therefore, the overpopulation hypothesis is difficult to validate, as low population densities existed throughout the historical period of the 19th and early 20th centuries when land degradation occurred. Nevertheless, the neo-Malthusian explanations referred to extensively in the first chapter have been used to explain land degradation in Ethiopia as elsewhere, particularly in the Global South, and are often presented sensationally (Lanckriet et al. 2015).

Indeed, as the historian James C. McCann claims «It is less accurate to say that Africa is losing soil than that the soils move and redeposit themselves. In placing the emphasis on soil loss, standard calculations of erosion rates, which have been grossly exaggerated for places like the Ethiopian highlands, have underestimated the historical effects of soil movement and new soil formation. Over time, farmers have adopted planting strategies and chosen crops to suit Africa's variegated soil landscapes» (McCann 2005,14).

McCann has been one of the most influential scholars against the exaggerated view of both soil erosion and deforestation in Ethiopia. Indeed, the informational discourses produced and circulated about Africa on this issue have had an impact in the country.

In the words of James Keeley and Ian Scoones (2003), there is a narrative about the continent's soil, authenticated by international institutions and agencies, in which soil erosion has become the stage

for catastrophic Malthusian visions in environmental matters, conceived as the first problem to be answered by hegemonic conservation practices.

In fact, the problem of soil erosion is a recurring one, according to the farmers who live in the midlands and highlands from the North (Meseret 2016), where the phenomenon has been traditionally studied to the South of the country (Chanie et al. 2020; Assefa and Hans-Rudolf 2021).

In particular, in both regions farmers claim that heavy rains cause landslides and destruction[141]. But they themselves, accused, as we have seen, of misusing fertilisers and certified seeds, are singled out as *victims and villains* responsible for poor land management: their population pressure, their free-grazing practices, their planting on the steepest soils and their failure to follow 'modern' soil and water conservation technologies (Stocking 1995).

Described by Amsalu Aklilu and Jan Graaff (2006) as a conventional Western approach to land conservation, this has been introduced 'recently' in Ethiopia compared to other East African countries or to South Africa[142], although there is a long local tradition of soil erosion control and management practices in the field, from the South, particularly with the Konso Zone terraces[143] case (Wassie 2020; Gashure and Wana 2023), to the North with the *daget* system[144] case in Tigray (Lanckriet et al. 2015).

The neglect of indigenous practices, as Dessalegn Rahmato (2009) reports, has meant that no one has noticed that farmers are intervening and ensuring soil conservation since the first report on the subject by American lecturers at Alemaya College, written before any of them had the chance to seriously examine existing agricultural practices, states: «The problem of soil erosion in Ethiopia is easily recognised by soil scientists but the average farmers either does not understand what erosion is, or else refuses to believe that it can and does exist in this country (IECAMA 1953:153)[145]» (Rahmato 2009, 33).

In Ethiopia, prior to the RLLP and SLM I and II, soil and water conservation practices had been structurally implemented since the 1980s, specifically in 1981 with the Soil Conservation Research

[141] Interestingly, while all farmers in East Gojjam woreda and Demba gofa spoke of soil erosion, the situation in the Basketo kebeles was much more varied. In Sassa kebele in particular, the farmers interviewed during the FGDs stated that soil erosion was not a major concern for them, whereas the preliminary study conducted by the SNNPR Regional Agricultural Office prior to the Task Force, which took place in the same weeks as my fieldwork, identified Sassa kebele as a target for their soil and water conservation interventions due to high rates of soil erosion.

[142] South Africa was a point of reference in the broader debates on soil erosion, considering that 'The South African Soil Erosion Conference' was held in 1929, and the creation of a 'Soil Erosion Council in the Union', led to the implementation of anti-erosion schemes by 1933 and the 'Soil Conservation Act' was enacted in 1946.

[143] Konso Cultural Landscape is a 55km^2 arid property of stone walled terraces and fortified settlements in the Konso highlands of Ethiopia and it was registered by UNESCO as World heritage center as of June 27, 2011.

[144] Since feudal times, the *daget* system required extensive conservation measures (such as enclosures and stone walls) to prevent soil erosion.

[145] Imperial Ethiopian Collage of Agriculture and Mechanical Arts (IECAMA) 1953. [First Annual Report]. NPP quoted in Rahmato 2009.

Project (SCRP) led by the Swiss geographer Hans Hurni. This was followed in 1983 by the Ethiopian Highlands Reclamation Study (EHRS), a joint FAO/Ethiopian Ministry of Agriculture project funded by the World Bank (Project 2488).

It was the largest of its kind in Africa, employing 300 person-months over a two-year period from mid-1983 to 1985, and employing between 1.5 and 2 million farmers annually at its peak (Ayana et al. 2013; Crummey 2018). The project included terracing, bunding, road construction, hillside fencing and mass tree planting. Such interventions had already been recommended in the 1950s by the FAO's governmental advisor on forestry, W.C. Bosshard, who warned that it would take a hundred years to reforest 25 per cent of the Ethiopian highlands with 'the help of all the people'. And this vision was realised in the 1980s. But with the collapse of the Derg regime, between 1990 and 1991, as Dessalegn Rahmato (2001) explains the massive reforestation programmes known as the Green Campaign, based mainly on eucalyptus, up to two-thirds of the planted forests may have been illegally harvested in 1990 and 1991.

Interest and attention to the phenomenon of conservation was consecrated at the international level by the United Nations Conference on Desertification[146], convened in Nairobi from 29 August to 9 September 1977.

> [United Nations Conference on Desertification] blamed environmental degradation, leading to desertification, on the 'overexploitation' of the land by farmers, pastoralists and loggers. In Africa, according to the narrative, this process had led to the inexorable expansion of the Sahara. In the case of Ethiopia, this became the preferred explanation of politicians, international advisors and aid workers to justify the drought and famine of the early 1970s, and its grip on the official mindset only intensified with the return of famine in the 1980s (Crummey 2018, 66).

It is necessary to clarify another aspect of the context in which Project 2488's goal of conservation agriculture was set, namely that of the Cold War, in which, on the one hand, it was convenient for the Western donor community and NGOs because it allowed aid to be channelled directly to the 'intended beneficiaries' rather than through the Soviet-backed government[147]. On the other hand, at the time of the great famines, which were largely political in nature and considered as another case of "politics of starvation"[148], the narrative of environmental degradation on which Project 2488 was based usefully shifted the blame for food insecurity and the devasting effect from the state to the 'backward'

[146] This idea was also confirmed in the 1980 World Conservation Strategy by the International Union for the Conservation of Nature (IUCN).

[147] It should also be remembered that in those years, in the mid-1980s, world public opinion was shocked by the scale of the famine in Ethiopia, whose request for international aid through the Ethiopian Relief and Rehabilitation Commission started very late, only after the celebration of the tenth anniversary of the 1974 revolution that had brought the Derg to power. It was a 'media famine' (Markakis 1988) that became the first mass media famine with the organisation of the Live Aid rock concert on two continents to raise money for Ethiopia's famine victims.

[148] The reference is Jack Sheperd *The politics of starvation* (1975).

agricultural practices of the rural population (Hoben 1995, Keeley and Scoones, 2003; Tenzing and Conway 2022).

Through the discourse and operational devices of international agencies with "knowledge" and funding, land degradation was opened up «legitimised a strong central State's control over natural resources and a large, multi-ethnic, dispersed population» (Tenzing and Conway 2022, 1). In fact, these practices were supported by a related scientific production that was categorically expressed, as can be seen in the title *Soil Erosion, Real Cause of Ethiopian Famine* by Robert Lamb and Milas Seifulaziz in 1983. In the bleak picture of human and livestock deaths caused by the 1984 famine, which was reminiscent of the 1974 famine that hit Tigray, Wollo and Gondar, the two authors attributed the causes of the fatal vulnerability to famine to recurrence drought, to lack of rainfall and land degraded, eroded and deforested caused by 'Too many people and livestock', as the second paragraph puts it.

However, this perception has not changed if we consider that in such absolute terms, leaving no consideration for the complexity of the factors at play, land degradation continues to be presented as «The major economic and environmental threat in Ethiopia» (Assefa and Hans-Rudolf 2016, 1552), or «a major cause of the chronic food insecurity widely experienced by the country's largely rural population» (Adane et al. 2021, 61).

The origins of land conservation practices of Ethiopian state eco-governmentality and its perpetuation allow us to understand how conservation is control (Robbins 2012, 176). Indeed, this related operation become one of the tools of the state to intervene in people's daily lives.

In the post-famine era, Project 2488 did not stop, but rather grew, attempting to adapt to the time-consuming constraints of implementation, from logistical ones to delays in payments to the failure to take into account pre-existing local varieties in land conservation activities, but never questioning the validity or appropriateness of the underlying environmental narrative. And since the fall of the Derg, the EPRDF-led state has continued to address environmental problems with the same orthodox conservation logic. The new government had mobilised community-based farmers to carry out terracing and reforestation, and national documents emphasised attention to agro-ecological specificities and the aspect of bottom-up participation, correcting the top-down method disliked by the local population (Hoben 1995). The dissatisfaction with such mobilisations of soil and water conservation had led to episodes of eco-violence immediately after the fall of the socialist regime, aimed at destroying and reappropriating the land subjected to state environmental interventions (Rahmato 2001). The same approach was taken by the EPRDF government in the name of development, as reported by Eva Poluha (2002).

> Again, people's daily lives are slowly being more and more interfered with. These renewed state interventions seem inevitable since the government also has different types of development activities on its agenda for which the plans have already been designed. One such area is soil and water conservation. To organise the activities designed to conserve the soil, development agents from the Bureau of Agriculture are told to make land-use plans together with the peasants. The peasants have to decide how many metres of protection walls they will be able to dig and how many trees they can plant in a year. These figures then travel through the administrative hierarchy, level by level, from lower bodies to higher, and are all the time added to. When finally they come back to the peasant association, they are nowhere near those which the peasants themselves put forward. Nevertheless, since everybody has to implement orders which come from above, the peasants go out and dig the required conservation belts, spending much more time on this than they find relevant. This approach, called 'popular participation' in today's political parlance and 'mobilisation' under the Derg, implies the same thing; namely, that each and every peasant is given a number of workdays, a quota, when they have to work for their community on a project defined and decided upon by government representatives. Very often the peasants do not believe in these activities and talk of them as forced labour. In some areas, although not yet in Ashena, fines have been introduced by the administration for those who do not fulfil their quotas (Poluha 2002, 126).

Subsequently, the state's confidence in the appropriateness and expediency of these practices was such that the legitimacy of these interventions, especially reforestation (*zamacha*), was maintained in the name of climate change (Lefort 2012,694). In 2011, with the GTP I, 60 days -between January and February- of free campaign work on land and water conservation activities were established, in which every farmer in every household had to participate, regardless of gender and age (Mersha and van Laerhoven 2018).

The complaints of the population in this regard had not abated at all since the socialist period, and were not dictated by laziness or listlessness, according to the official narrative of the officials, but by impatience with a top-down approach, but because they were forced to set aside their own activities. And it did not matter if these activities were scheduled at a time of year when agricultural activity was less intense, because in reality there was the work of caring for the animals, which could not be neglected and which represented an additional workload for the women involved.

In addition, two aspects should be emphasised, together with eminent authors: «There is no doubt that soil erosion causes severe problems of decreased agricultural productivity for millions of farmers worldwide. But it is not clear how far addressing "erosion" per se can alleviate these problems, or how far the assumptions made about erosion in development projects are applicable to all locations and farmers' practices (Morse and Stocking, 1995[149]; Stocking, 1996)[150]» (Forsyth 2003, 28).

And even earlier, how our understanding of the drivers of this phenomenon remains fragmented due to high levels of regional variability and insufficient data availability and reliability. As early as 1989, Blaikie's political ecology approach, especially for sub-Saharan Africa and in the case of Ethiopia in

[149] Morse, S. and Stocking, M. (eds) (1995) People and Environment, London: UCL Press in Forsyth 2003.

[150] Stocking, M. (1996) "Soil erosion: breaking new ground," in Leach, M. and Mearns, R. (eds) *The Lie of the Land: Challenging Received Wisdom on the African Environment*, Oxford: Currey, pp. 140–154 in Forsyth 2003.

particular, emphasised the need for accurate data to produce models and forecasts through better measurement and refined methodology. Recent studies show the need for in-depth, empirical studies and analyses that do not indulge in simplistic generalisations because, after almost forty years, the phenomenon is still extremely complex and far from being understood in all its components and implications (Wuepper et al. 2020; Borelli et al. 2021).

At its core, soil erosion is a phenomenon that affects the thin layer of soil that goes from the top of the vegetation to the bottom of the superficial aquifers, which at the beginning of the 21st century US researchers called a critical zone because it is fundamental to our existence but can be devastated by poor land management (Provenzale 2021,112).

Critical zones. The Science and Politics of Landing on Earth is also the title of the volume edited by Bruno Latour and Peter Weilbel (2020), 'critical' has many meanings. Each scientist has a different take on it: far from thermodynamic equilibrium, fragile, interface, under threat, very heterogenous and porous medium composed of primary and altered minerals (clays and oxides), living organisms and dead organic matter in decomposition, a living skin of Earth, in fact, which despite the great effort to find solutions, in reality remains *terra incognita*, so complex because of the interactions that affect it and pass through it, that it requires the study and reflections of different disciplines.

Moreover, as seen in the work of Blaikie 1989, data on land erosion and fertility loss (Keeley and Scoones 2003) suffered from a lack of scientifically based data and overestimates were common on the continent (Stocking 1995). However, the narrative of environmental degradation was extremely powerful and difficult to break, it had its roots in the 1930s, it was extremely fertile in authorising the intervention of states, first colonial, later national, and also of the development apparatus, aid donors and NGOs, which provided a source of legitimacy for researchers, experts, technicians, an intervention that clearly has not yet stopped.

1.2 Soil erosion: the persistence of some anxieties from colonialism to environmentalism

The theme of soil erosion, and the degradation narrative in general, gives more historical depth to the discourse of green governmentality, allowing us to close the circle and show how current discourses have ancient, colonial roots and how they are still strong in their political meanings. Indeed, Africa is a perfect stage, both in its dichotomous vision as a land of resources, of extraordinary wealth that must be defended and preserved, and in its drought and famine, explained by the deterministic mechanisms and Malthusian principles of overpopulation, overgrazing and deforestation against the limited resources and low carrying capacity of the environment.

Even before the debates of the 1960s and 1970s, before the Cold War and the establishment of the sustainable development regime, environmental governmentality emerged during colonialism, a time when ecology was also established as colonial knowledge, as well analysed in *Ecology and Empire: Environmental History of Settler Societies* (1997) by Tom Griffiths and Libby Robin. This book, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (1986) by the famous historian Alfred Crosby.

As Carl Death points out: «For generations of colonial scientists and administrators and postcolonial bureaucrats and aid workers the inefficiency of multitudes of African peasants scratching away at the thin red soil has encapsulated the continent's ever looming environmental tragedy» (Death 2016, 116).

In colonial times, before a certain environmentalism identified the human polluter agency within modern, developed and industrialised civilisations, «[…] humans were seen as a destructive agent». Maano Ramutsindela (2003) adds in a review of McCann's book *Green Land, Brown Land, Black Land: An Environmental History of Africa, 1800-1990* (1999), acknowledges the author's importance in challenging such assumptions:

> And African environments became one of the most useful laboratories in which the destruction of the natural environment by humans was to be continuously demonstrated. There are many reasons why Africa became an easy choice. Principal among them was, and still is, the widely-held assumption that Africans are incapable of, or unable to, protect the natural environment around them - in part because they had been considered closer to nature than their western counterparts. Their poverty, too, has become a common explanation of their lack of concern for long-term environmental consequences. In recent years, poverty in Africa has been used to maintain that logic through arguments that seek to establish the link between poverty and environmental degradation. In other words, perceptions of Africans run parallel with those of the environments on which they live (Ramutsindela 2003, 244).

Even the concept of 'land degradation' itself, as Stephanie Foot shows how

> like other key terms in environmental discourses, has both technical and cultural meanings. It can describe a biological process (all organic matter decays and breaks down); a chemical process (all inorganic materials deteriorate under the right conditions); as well as an unwelcome mechanical effect (technological and mechanical systems will ultimately lose their efficiency). But "degradation" does not merely refer to a predictable decay or deterioration. It is a politically and morally charged term. [...] Degradation does not merely measure deliberate ecological damage, nor does it only describe the human cost of that damage. Rather, it is both a process and a narrative, for degradation happens-often unpredictably in different temporal and spatial registers. […] In such narrative, degradation coordinates different orders of knowledge and experience, different scales of place and time in a global order that can often seems as though it seeks to standardize and homogenize them (Foot 2016, 56-56).

This homogenisation began with the discourse of land erosion, even though «Colonial concern about the destruction of natural resources in southern Africa did not begin in the 20th century» (Beinart 1984,54). This discourse has been in focus since the 1920s on the continent and ended up creating a

canvas around which bureaucratic research and development apparatuses could be built, following the sandstorms that erupted in the 1930s, not in Africa but in the United States, which went down in history as the Dust Bowl. Such events are the setting and theme of John Steinbeck's novel, *The Grapes of Wrath*, which vividly captured the tragedy of the seemingly sudden and unstoppable erosion and its impact on poor Oklahoma farmers. As they were immortalised in the words of the writer James Agee and in the photographs of Walker Evans in *Let Us Now Praise Famous Men* (1941), with which they witnessed the dramatic effects of the summer of 1936 through touching encounters with three Alabama families (Severi 2019, 185).

With the Dust Bowl, soil erosion was not only seen as a serious national problem, but became the major global environmental issue (Anderson 1984). However, in those years, i.e. in 1933, Arthur Mortimer Champion, a surveyor and administrator of British Kenya, wrote an article entitled *Soil erosion in Africa* for the Royal Geographical Society, in which he argued that «It is not surprising to find that Africa as a whole is suffering more than any other continent in the world from accelerating land erosion» (Champion 1933, 132).

The causes of the Dust Bowl were far from being found in human behaviour *tout court*, in poor land care and lack of adequate irrigation, as the official narrative would have it and as can still be found (Severi 2019, 222). These dust storms were rather the result of the intensification and expansion of agricultural production based on the use of new chemicals and the interruption of crop rotation, which caused land erosion. Therefore, the Dust Bowl is an expression of the socio-ecological crisis that originated in the primary sector of capitalism (Torre 2023, 33).

In the 1930s, images of the Dust Bowl, seen as the devastation of once fertile and rich land caused by soil erosion, spread before the political and economic hegemony of the United States emerged from the Second World War, through newspaper and magazine reports (Anderson 1984) in East Africa (Tanganyika, Kenya, Uganda) and South Africa through an the international information exchange routes maintained by congress and academic researchers (Phillips 1999) and also in West Africa (Adams 2001).

In fact, by the late 1920s there was already copious and well-established literature emanating directly from the Soil Conservation Service of the US Department of Agriculture, the most famous of which is Bennett and Chapline's popular 1928 study, *Soil Erosion, a National Menace*. It warned of the possible dangers of over-exploitation of land and this terrible prophecy had been fulfilled by the Dust Bowl. The great magnitude of the problem was illustrated in articles that appeared in trade journals and agricultural periodicals throughout the 1930s, with evocative titles such as *Erosion and the*

Empire and *Soil Erosion in Tropical Africa*, and especially in Jacks and Whyte's book The *rape of the Earth*. *A world survey of soil erosion*» (Anderson 1984, 326).

Moreover, the Dust Bowl became a case study and an educational subject, entering the colonial bureaucratic system from the moment that agricultural officials throughout British Africa were exhorted to examine their localities for signs of this menace. «In a sense, it became fashionable to be aware of land erosion» (Anderson 1984, 327). But even more interesting is this passage, reconstructed by Anderson, which sheds light on how narratives, practices and patents of expertise are constructed:

> Afterwards, colonial administrators were sent directly to the US to see the devastation at first hand and, more importantly, to view the anti-erosion measures being applied by the United States Soil Conservation Service. […] But the Americans, for all their efforts to deal with the problem, were barely worth their acknowledged status of 'experts' on soil conservation. Having created one of the most serious single environmental disasters known to man they simply had to set about trying to solve it. In a sense, there were no 'experts'; only those who were doing something. More of necessity was being done in North America than elsewhere, and so it was primarily from this pool of experience that the Colonial Office drew its ideas (Anderson 1984, 328).

The Dust Bowl had given global proportions to the environmental phenomenon of soil erosion and turned environmental protection, an international issue, into a paradigmatic solution whose cost was spectacularly measured in kilos of land lost per person and square metres of topsoil washed away for hundreds of kilometres across the country.

A practice of observing and reproducing purely technical solutions that took no account of the economic and political forces that caused erosion, and in which, in a great homogenisation project (Stott and Sullivan 2000), peasants were uniformly blamed by colonial officials for erosion because of their inadequate technology, poor environmental management and overpopulation (Grossman 1997, 355).

As seen in Eva Poluha's analysis, historian David Anderson also comments on how «voluntary labour cost the colonial administration nothing, but was a heavy burden on the farmer, who opposed this interventionist policy, however well-intentioned it might have been» (Anderson 1984, 342).

However, American influence has encouraged East African administrations to address the problem of land degradation.

Since colonial times, the prevention of land erosion has had to be a primary justification for intervention in East Africa's customary land use patterns, with settler community plans, the conservation lobby and sugar farming. «And because conservationism addressed the very basis of the relationship between farmers and the land, it was intertwined with, and underlay, discussion of other issues. Although an assessment of the actual extent of soil erosion at any given time was avoided, it cannot be said that the official concern was without foundation» (Beinart 1984, 82).

Hence, with such roots in colonialism's bureaucratic systems of knowledge production and distribution, «Soil conservation became a fundamental issue because it lay at the very heart of the strategies that emerged for African development» (Anderson 1984, 343).

It is from the perspective of promoting development that the FAO, the WB landed in Ethiopia with all this apparatus of legitimised knowledge and practices, forgetting that the symptoms of the pathology did not originate in rural Africa but in the heart of the USA, transformed by the forces of capitalism, and also not taking into account, as Paul Robbins (2012, 67) points out, the small-scale, long-term and detailed study of local ecologies using the more sophisticated methods of historical ecology. Indeed, it is evident how a dominant/hegemonic discourse has been created in this regard, the story of soil erosion and conservation, and how this normalises certain behaviours as a way of knowing the world and a network of power relations (Arts and Buizer 2009, 341-342).

In this context, it is worth noting that the IPCC 2019 report continues to report on the extreme land degradation in the US Midwest during the Dust Bowl, defining it as «an important wake-up call for agriculture and agricultural research and development, from which we can still learn much in order to adapt to ongoing and future climate change» (Shukla et al. 2019, 381).

The IPCC's warning shows how such events still hold sway over the global imagination and governance, in what is perceived as one of the worst ecological blunders in history, but in the anthropogenic nature of the disaster there is nothing like Donald Worster's analysis in his *Dust Bowl: the Southern Plains in the 1930s* (1979).

The historian illuminates the naturalness of the Dust Bowl and reconstructs aspects of the unnaturalness of American agriculture, that is, the capitalist agriculture that had caused this phenomenon (Armiero and Barca 2004, 40), whose work in *Critical Environmental History* is recognised by Robbins (2012, 66) as the studies that helped shape the spirit, the lens of political ecology.

Political ecology corrected the gaze and the narrative of soil erosion, a shift in perspective that allowed, among other things, the birth of political ecology, while remaining a classic subject of study. In his pioneering work in political economy, or more accurately the political economy of development (Watts 2015, 33), *The Political Economy of Soil Erosion in Developing Countries*, Piers Blaikie (1985) explored why soil degradation and social marginalisation often go together, opening up studies into the «political, social, and economic content of seemingly physical and 'apolitical' measures» (Blaikie and Brookfield, 1987, xix).

Political ecology did not confine itself to explaining land erosion from a Malthusian perspective of too many people, too many animals and their resistance to change and ignorance, but identified social

relations of production and the nature of the state as key factors in explaining environmental transformations, analysed through the neo-Marxist lens that had come back into vogue in the 1960s through agrarian political economy and peasant studies (Blaikie 1985; Blaikie and Brookfield 1987). Land degradation, first treated as a social issue in "*Land degradation and Society*", edited by Blaikie and Harold Brookfield (1987), adopts a broadly structuralist explanation through reference to the forces of capitalism or repressive state policies and their impact on local populations and the environment, which are extremely prevalent in non-Western contexts.

The handling of the same issue is later influenced by post-structuralist approaches to the social sciences, which instead focus on historical and cultural influences on the development of concepts of environmental change and degradation as linguistic and political forces in their own right, as can be seen throughout these pages with the frequent references to Foucault' s philosophy. In any case, a sense of social justice for environmental explanation and development remains constant in the treatment of political ecology researchers (Forsyth 2003, 8).

A recent political ecology study, *The Political Morphology of Drainage. How Gully Formation Links to State Formation in the Choke Mountains of Ethiopia* (Smit et al. 2017), diligently applies political ecology methodology to a typical Ethiopian context of 'unsustainable agriculture', where land scarcity leads to soil nutrient depletion and many young people remain landless.

The authors show how a hill is produced in a socio-ecological process, i.e. it is constantly transformed by technology, labour, which is linked to social relations of production and the nature of the state, and the mobilisations it imposes to conserve land and water and to build terraces to maintain control over the local population. On a purely technical level, «In terms of climate change, terraces are a form of adaptation that helps in cases where rainfall is increasing or intensifying (by reducing slope gradient and the hydrological connectivity), and where rainfall is decreasing (by increasing infiltration and reducing runoff» (Shukla et al. 2019, 383). However, the case study cited shows how products within a state mobilisation can create obstacles that can trigger flooding, which landowners convert into drainage channels. Drainage flows are diverted to the sharecropping plots of landless households.

Soil and water conservation practices and the ways in which they are implemented represent the ideologies of groups of persons and institutions (Grossman 1997, 355) and end up benefiting some people or groups to the detriment of others, very often the weakest and poorest within the kebele. The purpose of this long excursus is to show that land degradation is not an 'undisputed fact' (Stott and Sullivan 2000), and that 'environmental orthodoxies' used to describe common explanations of environmental problems are seen as simplistic and inaccurate. Some authors have even called them 'myths'.

> The degradation of the environment per se is not in dispute. It is rather the meaning and direction of changes in the physical landscapes that need clarification. The direction of change is important not least because the dynamism of landscapes defies most of the simple, unilinear explanations that have hitherto been offered. There are multiple factors behind changes in the landscape! At issue is how and why we extrapolate the human - African - factor from a complex web of other factors, and how we determine which factor is more critical than others (Ramutsindela 2003, 244).

But in the specific case of Ethiopia, as it turns out despite decades of implementation recorded by many qualitative field studies, government reports continue to denounce how in practice, the achievement, measured in hectares subtracted from soil degradation, is below what was anticipated. And without questioning the system, the approach is revised by making it more participatory, in a manner that has punctuated the changes in the extension workers system's facade, and to enhance and scale it up, the RLLP is planned. Indeed, it reads:

> Within Sub-Saharan Africa, Ethiopia is considered as one of the countries seriously affected by different forms of land degradation and struggling to cope with and reverse the situation. […] Despite the efforts to reverse environmental degradation in the past many years, rampant degradation of natural resources continued to be a serious environmental problem in the country distressing land/agricultural productivity and slowing down economic progress. […] The country committed itself to renewed national efforts towards the reversal of land and natural resources degradation and this process attracted donor interest at the same time (MoA 2019, 1-2).

In such a complex scenario, how is it possible to outline targeted and scalable interventions in the name of climate change? And how is it possible to create concrete conversations? What is the role of the NGO CVM, for example, as a development actor? It also organises training courses on land and water conservation.

1.3 Ethnography of a training

During my first fieldwork, in April 2021, I attended the CVM training for community leaders on soil and water conservation in the town of Debrewerq, at the Prosperity Party venue, the largest and most suitable to accommodate so many participants for the three theoretical days. These came from three *kebele* of Enarj -Enawuga *woreda* (Dejiagamina, Diyateba, Bushtkogna and several water schemes built by CVM), a total of 49 trainees and 2 resource persons, Officials from the agricultural Office of Enarji woreda.

Training is always a ritualisation of hierarchies. The trainers used PowerPoint presentations of the area or region, showing the kebele people, pictures of terracing, bench, level fanyajuu, stone faced earth bund, stone bund, bench terracing and hillside terracing done in the Gondar area or elsewhere

in the region, with a view to sharing best practices or reusing the material received in their training by higher levels.

The participants from the target *kebele* were identified among five specific categories, the *kebele* administrators, one Development Agent, the representative of the Women & Youth affairs charge, a position within the *kebele* usually held by a woman and involved especially to ensure that there was adequate representation of women participants among the participants, two representatives of the Developmental army.

The latter are part of a system set up from 2011: A system of surveillance and propaganda called 'one to five' was put in place. For every five households, one man was in charge of gathering his neighbours to inform them about the latest government programmes, advise them on how to use the right farming techniques or encourage them to attend meetings. He also made regular reports to the *kebele* (Labzaé and Planel 2021,84).

«The overall aim of the training program», explained in the concept note prepared by CVM social coordinator and resources persons, «is to strengthening capacity on community based soil and water conservation and climate change adaptation for the local communities' members, especially, for the target community of the CVM Project; and to promote soil and water conservation measures as part of the farmer's normal agricultural activities in a way that increases farm productivity, food production and family income; while, at the same time, assisting with controlling erosion and land degradation». The training started by answering the question about «what is soil conservation and what does it focus on? And why is soil and water conservation important? ». To then list and show types of conservation measures and soil conservation practices, according to the approach of the Manual of Soil and water conservation, a gospel of the development agents (DAs), released with a new edition in 2016, after that the first was published in 1986, to which 26 new techniques are added, whose preface is a whole programme, i.e. it states how much more there is to do, proposing to use the same means:

> soil and water conservation measures are not only socially accepted and integrated in most farming systems; they are also economically viable from a 30-year perspective, as a detailed study on the economics of land degradation in the Ethiopian Highlands has shown (Kaspar Hurni et al. 2015). Despite all the successes observed, however, *only about 18% of the rainfed croplands have so far been treated with soil and water conservation measures*. If we consider that 77% of the rainfed croplands have slopes steeper than 8%, there is a need to further apply measures on nearly 60% of all croplands, i.e. nearly 12 million hectares still have to be treated. It is for these activities that this book is being reprinted, enhanced by complementary information based on more recent experiences (FDRE 2016,9), [italic is mine].

These theoretical days were followed by the two days of practical training in the field, which corresponded to the first achievement of the training, measured in terms of the number of hectares subtracted from land degradation, as a demonstration that they had understood and learned the

techniques of soil and water conservation. After almost forty years of the programme being part of the state machinery - and it is almost ten years now - a situation confirmed to me by them themselves, who were obviously fully aware of the contents, when I asked if these concepts were new to anyone, a few of them raised their hands, only to be exposed by the rest of the group as "eager of perdiem", because if they claimed not to know, they could receive other types of training like this. By the way, most of them, with a few exceptions, experts or institutions were farmers or land holders themselves, were there to learn and then to be trainers in turn, so they answered the questions in the same way as they had or would later do on several occasions with *woreda*, area and regional officials, i.e. by talking about the farmers as different and different from them.

Among the challenges to their mobilisation, the participants mentioned the lack of budget, technology and support to carry out certain activities, the impossibility of providing the human and economic resources of the *kebele* to carry out any kind of intervention that would be sustainable. This is because the sustainability of the stone and branch structures that have been put in place requires constant maintenance, especially as the structures do not seem to be able to withstand the increasingly destructive rains.

Participants also reported how difficult it was to convince farmers, due to a lack of budget, interest or time. These positions are much more nuanced, but still in keeping with the paternalism or blame that officials at various levels, or prosecutors, often reserve for farmers for their inadequate attention to land preparation and the environment. The traditional proverb "those who do not prepare their land well will end up harvesting weeds" is often used to point to the responsibility of farmers for degrading the environment, planting eucalyptus trees, misusing fertiliser, not respecting seed generations, not thinking about the future and resisting change in favour of immediate gain. «They're poor, they don't understand», you often hear, or «they're pure, but». This approach makes the concept of partnership between farmers and the state difficult. It «does not sit comfortably in official minds, though it may be expressed in public records for donor consumption» (Rahmato 2009,261).

The narrative and descriptive mechanisms that permeate colonial literature continue to feed the development machine, which has changed neither the means nor the paradigm. Hence, the institutions continue to invoke the 'tragedy of the commons' and the need to study the psychology of farmers, a knowledge that should act as a "Trojan horse" to better penetrate their minds and teach them what to do (Interview with the Director of the Seeds and Horticulture Department of the Amhara Agricultural Bureau and the Director of the Reddplus Section for the Amhara Region, 20 May 2002).

For their part, the farmers themselves identify soil erosion and loss of fertility -a different but equally important issue- as the structural problems of their situation -they recognise how various measures

have been taken for degraded soils-, even before erratic rainfall and rising temperatures, having incorporated such discourses into thirty years of compulsory training and activities.

They list and specify the techniques and works they carry out to protect the soil and water, and have a clear opinion about them: «We do everything, we cover the riverbed, terracing, small dams, but with branches, leaves and a few stones it's all useless when the rain comes suddenly» (Interview with farmer, March 2021, Enibse ser Midir, kebele). Two farmers from Doma 08, Enibse, met during a maintenance inspection in April 2021: «We have repeatedly asked the woreda for help, but they told us that we have to manage on our own, that they have no budget for this year, in fact they said the same thing the year before. But these are not jobs we can do ourselves. We have tried many times to do it ourselves, but it is difficult to do it with our budget, we are hopeless».

This is not to say that these conservation measures are not useful in some way, or that the practices or non-practices adopted by farmers are always and entirely correct because they are naturally sustainable. It is also true that farmers may carry out actions that contribute to land degradation, driven by subsistence needs, as seen in the previous chapter in the account of the farmer who planted fruit trees on the steep land near a water source in order to diversify his agricultural production.

In addition, the farmers, like the training participants at the end of the practical day, do not say that damming rivers with branches and stones is useless, but that more durable, more useful constructions and technologies are needed, such as gabions, as hydraulic defences, “done right”, not as they would do it, which is expensive, and not reduced to political mobilisation and a waste of their energy and labour. Farmers claim to know the importance of reforestation, of not exploiting degraded land etc etc, we are beyond capacity building, we need concrete alternatives. And it is curious that in a review of McCann’s book by Ramutsindela (2003) it is said that these are now acquired concepts by the insiders and that there is already a risk that the role of the climate change label will lead to further perpetuation rather than rethinking.

There is a willingness and recognition on the part of institutions that farmers’ awareness of environmental protection and care have recently increased (Bewket 2012), but their blame for deviating from good environmental practices, for their unsustainable agency, is still dominant. And it was in 2001 that Dessalegn Rahmato programmatically declared in the collection of essays that he was tired of farmers being accused of being too many or too ignorant, in essence of being the cause of the environmental degradation that seemed to be plaguing the country and the cause of all its problems.

The system believes it has identified what is needed to control and mitigate land erosion and increase its fertility, the goodness of the paradigm, further legitimised by climate change, is not questioned,

the farmers alone are to blame, as we have seen in the aforementioned article (Smith et al. 2017). The limitation, however, lies in the proposed solutions, which are not ecological and invisible to farmers due to their coercive nature.

In this way, the CVM perpetuates the idea of the donor- and government-supported agricultural extension apparatus, which is geared towards supporting the image of the farmer in need of land protection assistance. «This analysis does have some relevance to the period since 1960. Not only do the problems of soil erosion persist, but also the methods of dealing with them. Though the content of 'development' has been much broadened, colonial ideas and techniques have remained an important part of the developer's baggage. (Officials them- selves sometimes stayed on.) » (Beinart 1984,83). Thus, CVM's training on land erosion, which, along with its project activities, must be inscribed in the development policies and plans of the recipient country, is not merely an overlap with the actions carried out by the RLLP, but a clear positioning in favour of the practices of governance, state-building and population control on the one hand, and development on the other. That is, it fits into that litany of initiatives (Death 2016,118) that reiterate the stereotype of farmers, beneficiaries as 'lacking', irrational, environmentally degrading and 'in need' of resilience, investing in its scalability in the name of climate change and 'narratives of degradation' that originated in the colonial period. Whether in the context of desertification, deforestation or soil erosion. McCann wants to avoid what he calls a simple 'neo-Malthusian' argument. Proponents of this perspective, which include both academics and politicians, believe that rapid population growth combined with 'poor land management' in 'arguably fragile lands' has led to 'resource depletion' in many parts of the continent (Tilley 2002, 82).

The fact that this practice continues without the production of new alternative knowledge, new data and new techniques forces us to explore new ways and develop new models that complicate our understanding of environmental change (Van Aken 2020, 251). The lack of alternative knowledge production makes land erosion and degradation a contentious issue. Interestingly, the findings of Africa's carbon innocence have led to a reversal of the degradation agency, which had held the continent up as one of its most paradigmatic examples, where the recognition of farmers' influential footprint and culpability has not changed at all.

2. Multiple phases and faces of Productive Safety Net Program

In the list of agreements and plans made by the Ethiopian government, it was mentioned that in 2010, the National Climate Change Adaptation Programme required all sectors to issue their own adaptation programmes. And the Ministry of Agriculture responded with its own adaptation

programme, the Agriculture Sector Programme of Plan on Adaptation to Climate Change (ASPPACC). It incorporated existing programmes and interventions already in place in the agricultural sectors, of which the Productive Safety Net Programme (PSNP) stood out in terms of importance, size and resources allocated. As a result, the PSNP, which had previously been one of a number of food security programmes, became the main climate change adaptation plan in Ethiopia.
Since the introduction, we have seen how Safety Net has been a central element in my research, as a criterion for the selection of participants and for the programmatic choice made by CVM, of complementarity with the PSNP intervention, defined in the WASH UP project description as «identification of needs, analysis of responses, risks and mitigation measures», «with the aim of increasing resilience to shocks and improving food and nutrition security, while improving environmental management». Although it was not conceived as such, the government now refers to the PSNP as a central mechanism for responding to climate change in its update of *Ethiopia's NAP for a Climate Resilient Green Economy in 2020*. However, on the ground, among its grassroot actors there is no explicit reference to PSNP as a climate change adaptation programme, and there is no explicit link between it and climate action. My fieldwork revealed how it is perceived in the *kebele* and *woreda* as a thermometer of the severity of the situation they are experiencing and that is raging in the *akababi*.
At the *woreda* level, the project is managed by the Food Security Department under the Agricultural Office. And in general, the PSNP is mentioned, as is much of the related literature, both as a food security programme, established in 2005, and as a social protection programme, as reconfigured by the 2015 Act. In between, however, Safety Net had become a smart climate resilience programme by 2010 (Tenzing and Conway 2022). How did a project that was presented just another specific rural development programme» (Chinigó 2022, 93) become the largest climate change adaptation plan in the country, starting with 260 *woreda* in 2005 and a target of 5 million people, growing to 7.8 million people in 390 *woreda* in 2010, reaching 10 million people in the third phase, increasing the number of beneficiaries by a third in the fourth phase, with a huge increase for the current fifth phase, which started in 2020?

2.1 PSNP: a technocratic programme not only for the poor

As analysing the origins and operation of the RLLP was crucial to grasping its implications for climate action, it is equally important to explain how the PSNP came about, how it was implemented and what its purposes were.

The programme was created in response to an emergency and was never intended to last as long as it did, with five phases, however complex the orchestration by the Meles Zenawi government and the many donors involved in funding it from the outset. The donors include the United Kingdom's Department for International Development, Irish Aid, the European Union, Canadian International Development Agency, Swedish International Development Agency, the Netherlands, Danish International Development Agency, the United States Agency for International Development, UN Children's Fund, the World Food Program and the World Bank. The latter in particular played a crucial role in the design of the PSNP, which also included specific elements of Ethiopia' s drought and famine relief. A crucial moment in the planning of the safety net was the terrible drought of 2002-2003.

This led to donor pressure on the EPRDF government to intervene in the chronic food insecurity and rampant poverty, rejecting any proposal from the political establishment to engage in resettlement projects whose precedents under the Derg regime had been very negative and controversial (Lavers 2016). But at the same time, the idea of social protection promoted by international donors was deeply at odds with the anti-assistance vision of the government, which, as seen in the previous pages, had been pushing the concept of growth since the PASDEP economic plan (2000-2005).

The strategy, as we have seen, aimed to increase agricultural productivity through greater use of improved agricultural inputs, a pro-poor strategy that would ensure pro-poor growth (MoFED 2002, 28 quoted in Lavers 2016, 3). Rather than a Western welfare idea, the EPRDF preferred the minimalist approach and productivist view of social protection policy of East Asian developing states such as Korea and Taiwan.

By the end of 2003, however, the coalition realised that food security had become a national security issue that threatened the resilience and survival of its own government. The fallout from the previous severe droughts and famines of 1973 and 1984-85, which had contributed to the downfall of the imperial and Derg regimes, respectively, which were blamed for mismanaging the situation, and which could not be blamed solely on adverse climatic conditions, was a clear warning to Meles and his technocrats.

Indeed, as the PSNP was designed to be more proactive by providing medium-term predictable transfers, it is described by Jan-Gerrit van Uffelen (2013) as a 'de-disasterisation' of responses compared to previous interventions.

However, the government continued to fear economic and social paralysis by providing subsidies to healthy men and women of working age. Therefore, in line with its strategy of 'productive' rural development, it decreed that, except in the case of the sick, elderly and disable, the distribution of

money and food to the physically capable had to take place following public works. These are the activities we have come to know very well: supporting land restoration, restoring soil fertility, improving water management and expanding irrigated areas - in short, providing a whole range of ecosystem services that were in danger of being lost. At the same time, however, the Ethiopian government made it clear that donor assistance should not be conditional on the on the state's ability to organise public works. In this regard, an expression from an interview with a PSNP consultant quoted by Tom Lovers (2016) is relevant to highlight the clash of perspectives on PSNP planning: «'Humanitarian people would say – you can't ask someone who is starving to dig holes, but the government said, yes of course, they must do something' (int. respondent EC4)» (Lovers 2016, 6).
This is what makes the PSNP different from other food security and social protection projects in Africa.
Partly as a result of the break with the more left-wing wing of the TPLF, which disapproved of the deviation from socialist doctrine, the government had decided to implement the food security project on a large scale rather than as a gradual and small-scale pilot intervention, while at the same time planning for rapid socio-economic progress as essential for the survival of the party and the country. However, the adoption of the programme, even though it was the 'Ethiopian version' of a standard food security and social protection initiative, represented an epistemological shift of enormous proportions for the EPRDF (Chinigò 2022, 60): the most vulnerable households of the rural population, the unit of measurement of the project, were for a moment the target of ad hoc measures and cornered in the construction of national development.
In any case, the PSNP was initially developed as an integrated, temporary, non-structural food security strategy, linking multi-year humanitarian and development discourses, based on the idea of chronic poverty, from which it was possible to gradually emerge, hopefully in the five-year phase[151].
In February 2005, when the PSNP was launched, the focus was on addressing the emergency and reducing dependence on foreign aid.
Together with the Resettlement and Other Food Security Programme (OFSP), the Safety Net Programme became part of the Poverty Reduction Strategy Programme (PRSP-1) to support chronically food insecure households in rural areas. The Safety Net Programme also aimed to mitigate

[151] «The support given through this program to the chronically food insecure 8.29 million people will be continued until 2009/10. As the development component of the food security program succeeds, the population covered under the program will be reduced. The total resource required to implement the program including support given in kind (food) is estimated at 2.5 billion Birr per annum. Most of the support given is going to be in cash")» (FDRE 2006,XXX).

the effects of the crisis and drought on households and to build community assets to generate income to avoid undermining the country's economic growth.

But since its inception, before the PSNP was institutionalised as a key component of the social protection programme through the Social Protection Policy Act of November 2014, which replaced the Developmental Social Welfare Policy (DSWP) of 1996, it has had a number of bottlenecks/problems that have not been resolved, indeed never been addressed, despite countless studies by researchers from different disciplines and using different methodologies, and impact analysis and evaluation by experts.

All these issues are related to the political dimension/politicization of the programme, which not only has to do with its origin, but continues to be manifested in its operating mechanisms, from the selection of regions, the targeting of priority woredas and households as beneficiaries/clients, to the eventual declaration of graduation.

Politicisation was implicit in the perfect timing of its inauguration. The launch of the PSNP coincided with the campaign for the 2005 parliamentary elections. As a result, many local administrators were more concerned with campaigning and monitoring the elections than overseeing the launch of the PSNP, which was obviously used as a political resource both before and after the votes.

Families were promised by some ruling party cadres that the programme would benefit all households. In some areas, it was also claimed that those who did not support the government would not benefit. The PSNP was also used by opposition parties to gain electoral advantage by encouraging people not to contribute to public works (Kay Sharp et al. 2006, 50).

It was also clear from the words of the farmers interviewed that PSNP meetings are moments when experts and officials do policy making, «During Safety Net meetings they talk about climate change, the fertiliser problem, the drought, but also about the Prosperity Party» (FGD, Aprile 2022, Lotte *kebele*, Demba Gofa *woreda*).

In fact, as was seen for the extensive construction of the work of the Agricultural Transformation Agency in the previous chapter, the implementation of the PSNP takes place by means of governance structures from the national down to the local level. Such a conduct cannot but have implications and significances. Local management of the PSNP is entrusted to the *woreda*, the Department of Food Security, which works with the Water Office, Health Office, Woreda Administration and Disaster Risk Management and Emergency Response, supported by development agents. In fact, the state is not only the main financier of the project, but is also 'providing' existing government systems and staff at all levels for the management and implementation of the programme, rather than creating separate structures, an element praised by donors. In Demba Gofa *woreda*, however, this aspect of safety net

management by the local institutions themselves was seen as a limitation by the Administration Office, where I was in April 2022 to carry out an agreement with CVM staff. And an official from the Administration Office says of the PSNP: «Donors should come and do these things themselves, there are too many interests and too many issues that have nothing to do with the farmers. They fill reports, but the reports lie».

It is precisely the maximisation of benefits by the Ethiopian state that has made PSNP structural. At the same time, *Mengist* has been able to secure donor support by rebranding the PSNP itself to the point where it has become the quintessential climate change adaptation plan, without changing any of the programme's features. A perfect example of *gattopardism* that has ensured its longevity (Tenzing and Conway 2022).

From being a plan to respond to the drought emergency, which was severe in the *woreda* where I conducted my research, it became increasingly structural, and the formula for achieving this was found and built on continuity with state environmentalism practices.

In fact, we can read in the GTP I (2010-2015) «since it is also a program that can *solve the natural resources degradation problem***,** *which in turn is also the cause of the food insecurity problem*, and since it can enable to build community asset, efforts will be to effectively implement the program and meet its objective. By targeting those safety net beneficiaries who are involved in the household asset building component and by giving them support for business plan preparation, training, technology supply, credit and extension they will be able to ensure them food security», italic is mine, (FDRE 2011, 23).

In other words, the importance of the PSNP's structural measures is thereby seen precisely in the perspective of soil and water conservation measures, in order to solve land degradation, which is clearly presented as the cause of food insecurity, the fault of farmers and their mismanagement, and which they are therefore called upon to remedy.

Moreover, this economic plan states that «the formulation and the implementation of a climatic change adaptation programme is a *dictate* of Ethiopia's survival» (FDRE 2011, 77). The basic assumption has always been that droughts and famines occur because farmers are unable or unwilling to take care of their environment, that they are the cause of its degradation and therefore need the intervention of the 'green' state and equally "greened" donors.

The GTP II also praises the PSNP for its achievements in contributing directly and indirectly to poverty reduction. More importantly, it is put on an equal footing with the land policy, the agriculture and rural development strategy, the industrial development strategy, the social development

programmes, and the infrastructure development programmes, which are pro-growth and pro-poor strategies, have continued to be implemented during the GTP I period[152] (FDRE 2016, 113).

This growth-oriented approach, although present from the outset, will finally be legitimised when the PSNP becomes a social protection project in 2014/2015. Ten years after its inception, it is no longer designed as a "stopgap" but as part of the first National Social Protection Policy (NSPP). The NSPP gives it, for the first time, permanence as a mechanism for maintaining social welfare in the broadest sense in the country, programmatically as an instrument for poverty reduction and economic growth, an aspect that has not disappeared with the rhetorical configuration, since from an institutional point of view it was already there as an instrument for adapting to climate change.

Despite these shifts, the functioning of the PSNP has not changed, especially in terms of its limitations, criticisms and political implications. Along with soil erosion, the PSNP is one of the most studied topics in Ethiopia, the programme that has been vividly researched over the course of almost twenty years, given its re-labelling, at the national level, in its local declinations, from its impact on gender, poverty alleviation, child nutrition, compared to social protection programmes across Africa, and as an example of state policy aimed at reducing CO_2 emissions while protecting workers' rights along high- and middle-income countries. Over the years there have been many insights, including the over six hundred page book edited by three insightful experts on Ethiopia Rahmato, Pankhrust and van Uffelen (2013) which, in a choral work, analyses and contextualises many aspects of the safety net that have remained equally critical and unresolved.

In this regard, a detailed explanation of the PSNP mechanism is required. Its challenges lie primarily in the direct selection of beneficiaries/clients at the kebele level, i.e. to a specially appointed committee whose task is to target, register and exclude households recipients of Public Works (PW) and Direct Support (DS).

The distinction between these two categories is not always as clear-cut as it might seem. As we have seen, the PSNP has two components: Public Works (PW) for vulnerable households with able-bodied members and Direct Support (DS). To these is added the category of Temporary Support (TS), those who move from the former to the latter for a limited period of time. The former, who make up 90 per cent of the programme's 'beneficiaries', are considered to be adults who are able-bodied but food insecure and unable to generate income through their own work.

[152] Finally, the PSNP with GTP II was also extended to cities to enable food insecure and venerable urban communities to generate their own income and improve their living conditions in the short term and on a permanent basis.

According to the requirements of the programme, which often remain only on papers, PW cash is paid for up to five-six days of work per month for each family member, for six months of the year, from July to December, to avoid conflicts with agricultural activities, and only from the male perspective, until the beneficiary families graduate from the programme by accumulating a level of income that allows them to meet 12 months of food needs and withstand modest shocks. The public works component simultaneously contributes to social protection and climate resilience by investing in community asset creation to reverse severe watershed degradation and provide a more reliable water supply in different climatic conditions, in addition to social service infrastructure activities such as school construction and roads. However, about 60 per cent of the PSNP public works sub-projects are related to soil and water conservation, thus strengthening both livelihoods and resilience to the impacts of variable rainfall.

The Direct Support (DS) component provided social protection to groups that are generally very vulnerable due to age, illness or disability, i.e. those who would not be able to produce enough food even in non-shock periods. These are orphans, persons with disabilities, the elderly, the chronically ill, and female-headed households that are labour-poor (i.e. do not have the time, mobility or members to work on project sites), cannot provide labour for public works, and receive an unconditional transfer of money or food of an equivalent value to that received by households that provide labour. The last category, temporary direct support, is for pregnant and lactating women.

If the conditions of DSs are in most cases irreversible, it is the PWs who are looked to while they achieve a level of food and economic self-sufficiency that ensures their exit from the Safety Net through graduation. The number of graduates is a measure of PSNP's success, hence the authorities' insistence on such statements, although this view is not always agreed by households.

One of the analyses that best emphasises the complexity of holding together the various components and ideas of the PSNP is *Learning from the PSNP: The influence of Ethiopia's Social Protection Experience in Sub-Saharan Africa and Beyond* by Rachel Slater and Anna McCord (2013). They highlight two main points. The first concerns the experience of public works programming, in particular the challenges of combining welfare and asset creation objectives in a single programme, the difficulties of deciding on wage rates and target groups, and the problems of measuring the impact of public works. The second relates to the challenges of graduation, in particular the need to combine interventions in agriculture and social protection, to jointly address shocks faced by vulnerable households in both the domestic and productive spheres, and to link approaches to poverty reduction in the productive and social sectors, especially in the context of climate change and global financial instability.

In the nearly two decades since its implementation, it has become clear that the PSNP, through its very institutionalisation, has failed to address vulnerabilities and increase the capacity to make clients resilient to shocks, but more importantly, it has not even reduced dependence on annual international emergency food aid, as the technocrats had hoped from the outset (Cochrane and Dejene 2020, 60). This 'failure' in relation to the EPRDF's productivist forecasts is partly due to the fact that the construction of alternative activities has remained marginal in government and donor efforts compared to the distribution of food and money, which was so important from the outset. But this discrepancy cannot be attributed solely to the gap between the original programme design and practical difficulties. In the words of Logan Cochrane and Y. Tamiru (2016), the discrepancy can be explained by the fact that there is no interest in removing logistical and implementation constraints, because divergences are used to benefit the government and strengthen its power and control in rural areas throughout the country (Cochrane and Tamiru 2016). That is, by inserting itself into this mechanism, a matter of life and death for many, as the farmers say, the state causes its own power to be strengthened rather than challenged, according to the same mechanism of creating dependence on fertiliser and improved seeds that it has created in the country. And this is where the concept of governmentality used by Cochrane and Tamiru (2016) comes in handy, namely a means of exploring how power is asserted and control exercised' through institutions, procedures, calculations and tactics.

2.2 Unpacking a non-transformative climate change adaptation plan

From the brief description above, it is easy to see the tense situations that can occur within the *kebele* community when defining the difference between a wage and a subsidy – distinguishing PW or DS, the social construction of the category of disability, and the clash between the personal view of one's condition and that of the kebele committee. «They say, Safety Net is for the poorest of the poor, I'm not poor, I can't work, I'm sick», Gash Abdu tried to clarify during the April FGD in Demba Gofa, Lote *kebele*. Being a DS exempts them from public works that cause suffering to the population, such as land and water conservation work, road construction, infrastructure and reforestation, the workload of which is increasing for PWs as the environment is perceived by the population and experts as increasingly degraded and difficult to manage and deal.

«They are asking us to devote more days to public works because it is not raining anyway and it is useless to be in the fields because we can not do anything, but we do not think it is fair» (FGD, Wojen, Enibse, May 2022). In essence, the farmers were asked to continue with public works because the rains were delayed, and all agricultural activities were on standby, unable to continue with sowing because of the lack of fertiliser. It was the same response from the population as in the past, forcing

them to go beyond what was due and agreed for the sake of the environment and the sustainability of their livelihoods.

This vicious circle of dependence on artificial and natural inputs for the farmers was being punished, and in addition, during the period of my research, wage/subsidy payments were being delayed, a situation they told me was perfectly normal, but still unacceptable. The farmers complained that they had provided the documents and even the passport photos required to open the bank account, given that with each phase of the PSNP the method of payment also changed[153]. The implementation of the PSNP therefore promises to be complex, starting with the selection of beneficiaries.

The problem lies in the procedure followed by the Kebele Security Task Force and the Kebele Council Administration. As emphasised by many interlocutors, in a reality of widespread poverty, of subsistence economy, the differences between families are marginal and the applicability of the objective criteria established by the World Bank PSNP manual, which regulate, direct, predict in an ahistorical, apolitical way is very difficult (Cochrane and Tamiru 2016; Lavers 2019; Cochrane and Dejene 2020). Although the Safety Net, now in its fifth phase, has grown in size and coverage over the years, it remains a piecemeal intervention, not covering the whole of Ethiopia, as it is activated in *woreda*, *kebele* and within them for families whose survival is threatened.

This state of affairs was clearly evident in the case of Basketo, the only one of the four *woreda* where Safety Net was not yet in place, because just before my fieldwork there had been a visit by regional and government officials who had come to carry out assessments and identify target kebele for the fifth, future PSNP phase, also in this particular *woreda*, in view of the worsening situation in the area. The official from the Food Security Department of the Agriculture Office in Basketo Special Woreda told me in April 2022: «The experts from the region and the national government came to assess the candidature of our *woreda* (Basketo) for the safety net programme, they asked us to prepare a list of *kebele*, they plan to start with 4 of them for a pilot project. They are also developing their own list of *kebele* after their visits according to their criteria, we will see what they decide. For example, among the *kebele* you mentioned, we suggest Bunobasa and Awrasosta, but we don't know if they will agree». These discontinuities are within the woreda itself, between the *kebele* - usually the excluded are those closer to the city, with better access to infrastructure and thus to alternative constraints - and within the *kebele* itself, where a special committee is set up to identify the beneficiaries *got* by *got*.

[153] In the kebele of Yeguch in Shebel Berenta, the farmers reported how they hoped that belonging to the PSNP would give them greater guarantees of access to fertiliser, or that the contact persons would be able to intercede on their behalf.

But the mechanisms for selecting these households, constructing the eligibility profiles, are, according to the farmers interviewed, a matter of corruption[154].

And this is clear from their words: «There is so much corruption. They didn't accept my application because I'm not from here, I'm from Gondar, they said the deadline had expired but that's not true because after me others asked to be put on the lists and they did» (FGD Enebse *woreda*, May 2022). «When the names of the beneficiaries are announced, chaos breaks out, they say I didn't have the right, but that's not true, I don't have anything» (FGD Shebel Berenta, May 2022).

I cannot gauge the depth of the rupture in the community, but from Ubabarè *kebele* in Demba Gofa woreda, they tell me that in time, when the final list of beneficiaries has been drawn up, the rift in the community can be said to have been mended. The *kebele* leader in Lotte, Demba Gofa, showed me the large files of complaints from households, and yet people are not convinced by the criteria used and are not resigned to being excluded. Indeed, in the days leading up to the distribution of the first tranche of the delayed wage subsidy in the Eastern Gojjam as well, many expressed their disagreement and disappointment with the decisions of the kebele committee.

How this corruption plays out could not be explored ethnographically, beyond the somewhat sketchy descriptions that emerged during the FGDs concerning the choice as beneficiaries of people defined now as close to the task force members, now as "tocative persons", understood as politically committed. In the literature, given its importance the dimension of corruption and its implications are often examined, to the extent that those close to the party, to the elite receive a series of benefits, as well as on the other hand those who defy it, or do not obey, are threatened or disadvantaged (Lefort 2012; Planel 2014).

But this is a very common situation, not specific of Ethiopian Safety Net: «Large-scale programmes such as the PSNP are political as well as economic and social resources. In all countries whether developing or industrialised, safety net and social welfare programmes are subject to political promises and campaigns. Moreover, programmes through which resources such as credit, fertiliser, land, food or cash are allocated can be used as mechanisms for rewarding political supporters or punishing detractors».

[154] Moreover, geographical discontinuity had already marked the programme's choice of starting regions. In any case, the omission of the Afar and Somali regions from the PSNP-I, which have been identified as priority areas for food security interventions, is an significant indication of the government's focus: «Ethiopia's flagship social protection program was not implemented in all regions (nor was the coverage aligned with the areas of most need of such a program), reflective of systemic marginalization of livelihoods, geographies and ethno-linguistic identities», This was done through the distribution of goods and services that reproduced the same relations between state and society (Cochrane and Dejene 2021, 50).

After all, these are contexts in which «Safety Net is the only hope and answer» (FGD Yeguch, Shebel Berenta, May 2022). Another symbolic definition is «Safety Net is the payment for our freedom» (FGD Lotte, Demba Gofa, Aprll 2022). These are the two most common answers during FGDs to my question about the PSNP. Paying in cash guarantees a minimum of liquidity/cash that allows them to pay their taxes, fertiliser, seeds and other basic purchases. And the distribution of food, although not always of good quality, is a relief in the darkest of times. None of the farmers I met, men or women, said that the PSNP enabled them to engage in income-generating activities.

Most of the farmers benefiting from the PSNP, with the exception of older women and men, had only entered the social protection net with the extension of coverage during the current or previous phase. In the FGDs conducted in Safety Net's seven target *kebele* in three different *woreda*, the women who had volunteered to participate in the FGD were very often PSNP beneficiaries, and in half of the cases as female heads of household, two older widowed women and one young woman who had divorced her husband. The programme has made gender inclusivity as well as disability sensitivity a flagship, but several analyses of the former aspect of gender have revealed some criticism (Paterson and Osgood 2016; Mersha and van Laerhoven 2018). Prioritizing of women as target of PSNP-PW may not always result in general positive outcomes due to their disadvantaged position in relation to local gendered norms and power asymmetry.

There is a gendered division of labour on farms. According to the farmers I interviewed, ploughing is an exclusively male task, while women are involved in harvesting, weeding and storage.

Married women can help their husbands with ploughing and sowing, but for widowed or single women it is taboo, it is forbidden. This social prohibition makes female-headed households in the ox-plough system, even if they own the land, dependent on hiring male labour in exchange for money. While still dependent, the casuistry is varied and women can opt to exchange their oxen for ploughing labour, share the land and get a lower production, rent the oxen or the plot, or leave the land unploughed with consequences for the whole production process (Akpalu and Bezabih 2015). In any case, gender relations in access to land, rather than simply its inheritance or certified ownership, make female-headed households poorer and more insecure than male-headed households, especially in the face of eroding livelihood opportunities and the intensifying impacts of climate change.

In the SNNPR, however, there is a different system of farming, as evidenced by the fact that, particularly in Basketo *woreda*, when I asked women during the FGD what crops they were planting, they asked me to specify where I meant, whether in the garden or on the farm. In the *enset* culture-farming complex, *enset* tree is considered a women's tree because of the many treatments and benefits they can obtain from its resources (Peveri 2012). And in general, access to and management of the

garden, as well documented in the literature and revealed in some passages of the FGDs, is the prerogative of women: «My duties are in the garden, my husband takes care of the farm». In any case, such words should not be taken as an explanation of a dichotomous division, since even in southern Ethiopia women work on farms. And here, as in East Gojjam, women suffer more from tenure insecurity than men, which is why many female-headed households are supported by the programme as beneficiaries of the Productive Safety Net Programme (PSNP).

Given that the counting of public works days is done per family and not per single person, regardless of the size of the household, it is clear that for families with only one adult and children who are not of working age, i.e. who have not reached the age of 15, having to comply with the 5-6 days "expected" by Safety Net represents a significant workload. Cochrane and Tamiru (2016) report how this condition due to the focus on families with a female household head during target selection occurs especially in this case. For women, public works end up being an additional burden both in the case that they have a parcel of land or other small off-farming activities such as the preparation of alcoholic or non-alcoholic beverages, and of course in comparison to the already complex and burdensome domestic and care work.

However, all the farmers interviewed, clients of the PSNP, saw the idea of graduation as distant, impossible in the material conditions of the time, but desirable.

The issue of graduation, which is the mechanism by which the achievement of economic self-sufficiency is assessed, is undoubtedly particularly sensitive and is obviously the core, the objective of the programme. Officials are much more willing to talk about it. From the Demba Gofa and Enibse food security departments, whose officials were particularly cooperative, I gathered the same information that is circulating in the project reports and in the literature because it is one of the most studied topic: «Farmers try to hide their achievements in order to stay in PSNP». In Demba Gofa, however, although the head of the food security department was discouraged by the graduation trend, as many as 68 families in the entire woreda had achieved graduation before the end of Phase IV of the PSNP.

Some of the most important aspects of the policy and function of the PSNP show how it has many constraints in its transformation from a medium-term to a long-term programme, and even in the former how it has succeeded in alleviating poverty, ensuring to address the emergency drought and preventing famine, but not in marking a way out of chronic poverty.

Moreover, since 2005, the PSNP has only attempted to expand its coverage to include more and more beneficiaries, until it has become one of the largest institutionalised social protection and climate

change adaptation programmes on the continent, while remaining within the logic of 'de-disasterisation' (van Uffelen 2013).

Having described these mechanisms, one might ask: how does this programme increase climate resilience? But after the pages dedicated to soil erosion and land degradation, and the quote from the Grow Transformation Plan, the answer seems obvious: in PW's work on soil and water conservation. This can be as a prelude to green jobs in the country (Saget et al. 2021). The PSNP's contribution to CRGE is now measured in terms of the «percentage of land covered by improved watershed and rangeland management structures and practices, and greenhouse gas emissions sequestered in watersheds supported by public works» (Tenzing and Conway 2022, 6). And for example, public works conducted under PSNP has been associated with a 3.8% increase in tree cover between 2005 and 2019 in target *woreda* in the Ethiopian Highlands (Hirvoven et al. 2022).

But, more than 85 per cent of these funds, which come from various multilateral and bilateral donors, notably the World Bank and the Ethiopian government, as we have seen, are allocated to food and cash transfers (CARE 2020,27).

In fact, while it is possible to analyse how land and water conservation practices contribute to climate change mitigation through the tree planting works also envisaged in the NDP, it is not as easy to argue how the main outcomes and drivers of public works relate to and impact on people's adaptation to climate change. Similarly, it cannot be argued to what extent the transfer of money and food substantially increases adaptive capacity or reduces vulnerability to persistent drought.

In this regard, it is important to report how in the minds of the officials themselves, especially in the woreda of Demba Gofa whose Food Security officials were particularly scrupulous in providing me with the data, they do not relate PSNP action to interventions beyond saving people from starvation. «Here, the number of beneficiaries has increased from 14,000 in Phase IV to 25,000 households. 5%-10% of the population is in high poverty, food insecurity, they depend on Safety Net not only for money, but also for grain and oil distributions. The region has its own criteria for choosing, they are various, I cannot list them all, the most important in theory should be on the basis of the fertility of the land, the number of the population, the severity of the droughts, the land fragmentation, which in this woreda is between 3-5%. If you look at the data of the beneficiaries of Safety Net in Southern Nation[155], you will see that this is the woreda in the worst situation, especially in the kebele furthest from Sawla, because of the corn affected by sun, teff damaged by too much and too violent rainfall, and the infestation of insects, primarily American Fall armyworm, as it is called. The Americans are

[155] Unfortunately, although I went to the Regional Agricultural Bureau in Hawassa (SNNPR) and searched the latest grey literature publications, I was unable to retrieve the number of beneficiaries of the current Phase V of the PSNP.

a problem in many ways [the reference was to American interference in national politics, with respect to the war in Tigray and the disapproval of Dr Abiy's policy]» the words of the Department of Food Security official in Demba Gofa.

Although the rebranding of the PSNP as a climate adaptation plan preceded its declaration as a social protection plan, it has been much less studied. In recent years, however, several works have appeared with this perspective Wolf 2018; Ulrichs et al. 2019; Norton et al. 2020; Dasgupta and Robinson 2021; Hirvenet et al. 2022; Tenzin and Conwey 2022. Moreover, it is an inescapable commitment for researchers considering that the government refers to the PSNP as a «key response mechanism to climate change» (FDRE 2020, 41).

The safety net, therefore, the only hope for many to survive without risking prison per debt or starvation, is a complex arena. It is a multi-purpose programme of the kind the international donor likes, which in some ways has a definite food security component, but is struggling to create the conditions to face the climate crisis. On the one hand, PSNP has the merit of trying to integrate two concepts, poverty reduction and climate change adaptation, which are often treated as two different issues by many scholars, policymakers and practitioners, even if poverty and inequality are the «most salient of the conditions that shape climate-related vulnerability» (Yimer 2016,1).

On the other hand, while Safety Net attempts to construct such a nexus architecturally and rhetorically, it fails to be transformative, confirming precisely the idea of maintaining the business as usual and leading to the intrinsic characteristic of adaptation conceived within a restoration of old practices.

The environmental protection and management component of Safety Net public works has also been an important part of other projects in the past (Ayana et al. 2013), indeed they have made history in post-imperial state natural resource control in the country.

The PSNP's 'climate-smart' programme label (Tenzing and Conway 2022) is linked to the goal of creating a productive safety net, contributing to economic growth by addressing some of the underlying causes of food insecurity, improving resource health, and acquiring know-how that can also be transferred and applied to farmers' land (Saget et al. 2021). In other words, it means addressing historical issues and conditions that have been intensified by climate change, to which it simply offers a new appeal, with old tools that have proven insufficient in the past, with little or no impact. Safety Net's actions go no further than calming the consequences, dragging out emergencies and without any possibility of transformation, resolution and emancipation from a decades-old and increasingly worn-out ***status quo*.**

The lack of transformative approach of the PSNP and its depoliticisation of vulnerability in the face of a political programme in all its components is highlighted and criticised both as a social protection plan and as a climate change adaptation plan.

In fact, as a social protection system, the safety net did not lead to a transformative system in the first place, not because of a systemic deficiency, but because it functioned to maintain population control (Cochrane and Tamira 2016), an often highlighted feature of social protection systems, namely to be used as a political tool to entrench dominant power.

On this topic, see what James Ferguson writes in his *Give a man a fish: reflection on the new politics of distribution* (2015).

> Instead, what he terms an "anti- poverty consensus" has settled on a depoliticized understanding of poverty as a simple lack experienced by individuals and households rather than an aspect of a social structure that has to be understood as a system of relations. The result is a framing of poverty that tends to sidestep the social clashes and vested interests that are integral to its production and "a process of depoliticizing poverty and disconnecting it from questions of social conflict, inequality and antagonism". The danger here, as Akhil Gupta has pointed out in his analysis of Indian anti-poverty programs, is that programs of limited redistribution, if disconnected from more far-reaching pro cesses of political mobilization and economic transformation, may only "shore up the legitimacy of ruling regimes" without posing any fundamental challenge to the entrenched inequalities to which the programs are supposed to be a response. Indeed, he asks whether it might even be the case that programs that prevent the very worst outcomes for the poor may have as their main effect to "inoculate us to the politi cal possibility of their death becoming a scandal" (2012, 278)[156] (Ferguson 2015, 173)).

Indeed, Logan Cochrane and Melisew Dejene 2020, point out precisely how the construction of this system of social protection was useful for state-building purposes at a particular time when social protection was not a problem in itself: «As the state expanded its distribution of goods and services as a means of securing broader political stability, local level implementation often entrenched other forms of political power and control, both of which the donors supporting and funding these initiatives either implicitly supported or were selectively silent about» (Cochrane and Dejene 2020, 61).

The same kind of critical scrutiny must be directed at the PSNP as a climate change adaptation plan, for which it is inadequate if alongside improving the incomes and material wellbeing of poor and vulnerable peoples, it merely offers a series of 'ecosystem services', the restoration of which was previously imposed in the name of impending droughts and famines, now because these are intensified by climate change.

We can say that the peculiarity of the Ethiopian Safety Net lies in the fact that adaptation regimes in themselves are «intrinsically a technocratic politics that seeks to contain the perceived threats posed by climate change within existing institutional parameters» (M. Taylor 2015, xii). Moreover, in the

[156] Gupta, Akhil. 2012. Red Tape: Bureaucracy, Structural Violence, and Poverty in India. Durham,NC: Duke University Press.

case of Ethiopia, this relies on the technocratic plan par excellence, designed to secure the state, and secure the hold of the government, while continuing to push a differentiated economic policy that on the one hand pushed model and commercial farmers towards economic growth, and on the other hand entrusted the increasingly micro-holder farmers towards the social safety net, with an incredible increase in inequality.

On the contrary, increased coverage, as seen, on the one hand prevents an increasing number of people from starving, but on the other shows how the plethora of those who are food insecure is increasing (Deveraux 2006). And this reality clashes with the aim of making commercial – model farmers investors, a category of people who in the face of an increase in chronically underfed households.

Moreover, scrutinising and unpacking the de-politicised factors may not be enough and invoking a transformative adaptation plan may mean the birth of a new buzzword (Klepp and Chavez-Rodriguez 2018, 23). Nevertheless, climate change, not as the ultimate challenge, but as the main opportunity to rethink the whole system may represent. I like the image, so material, provided by Marcus Taylor, «how meteorological processes are embedded within hierarchically ordered social relationships in ways that produce strikingly uneven and often deeply fragile landscapes» (M. Taylor 2015, xiii).

The implementation of the Safety Net under the climate label shows how, at the grassroots level, Ethiopia's response to climate change does not seem to add anything new to the land and environmental protection that had been put in place in previous decades in response to the constant threat of famine and the looming danger of flooding, but at the level of climate governance efforts, Ethiopia has continued to claim its leading role among developing countries. In this sense, the PSNP is precisely such a 'clumsy solution' (Oliver-Smith 2017,215), failing to address and take a comprehensive and integrated view of the multiple perspectives on the causes, impacts, adaptations, resilience, and vulnerabilities associated with climate change.

If, as the farmers explained, the PSNP allows them not to starve in the midst of logistical and operational constraints and lack of coverage, it is a buffer but not a solution, because that is what the food security paradigm and mechanism, the antipodes of the food sovereignty paradigm, does. The food sovereignty goal that Ethiopian smallholder agriculture, with its dependence on external and expensive inputs, is far from achieving. Food sovereignty, by contrast, is transformative because it seeks to get to the root of food production mechanisms, which are not sufficient due to land degradation alone, as the institutional discourse supported by international donors emphasises and as the dialogue between ethnographic material and critical reference literature has hopefully clarified. The implementation of the PSNP lacks the opportunity to diversify activities, an objective that is

included in the programme on paper but is ignored, for which insufficient resources have been allocated and which would be the starting point for thinking and building change.

As Marcus Taylor points out in his political ecology analysis of climate change adaptation, the safety net is precisely a demonstration that adaptation processes are embedded in governance structures and are part of broader historical processes of agrarian transformation and forms of governance in rural areas (M. Taylor 2015, xiv).

Food sovereignty, on the contrary, is transformative because it seeks to get to the root of the mechanisms of food production, which are not sufficient due to land degradation alone, as the institutional discourse supported by international donors emphasises and as the dialogue between ethnographic material and critical reference literature has hopefully made clear. The implementation of the PSNP lacks the opportunity to diversify activities, an objective that is included in the programme on paper but is ignored, for which insufficient resources have been allocated and which would be the starting point for thinking and building change.

The PSNP has constantly reinvented itself from an emergency programme to respond to drought and avert a possible national crisis to a food security and social protection agenda through a climate-smart plan, a continuous reorientation or reinvention of its purposes. The fact that it was redefined and refocused as a climate adaptation programme meant that the increase in the number of beneficiaries was not seen as an increase in food insecurity conditions in the country, but as a positive action that demonstrated the joint efforts of the state and donors in the common cause of climate change. However, this view has not filtered down to the local level, where participation in the PSNP instead means being certified and relieved of food insecurity.

Nevertheless, it leads climate change adaptation programme in Africa, contributing to climate change mitigation, land restoration and reforestation.

The archaeology of these projects, the RLLP and the PSNP, and the common experience of soil and water conservation practice, highlights the fact that combining them with climate labelling and social protection efforts can be extremely dangerous, harmful and probably ineffective in addressing the structural dimensions of vulnerability to climate change (Tenzing and Conway 2022, 1).

But if in fact in these pages we have asserted the main criticisms of the PASDEP, it must be pointed out that Dr. Abiy's government, despite its willingness to distance itself from previous governments, has ended up, at least so far, by not particularly departing from the path traced by its predecessors. There is a continuation and intensification of the epistemological shift inaugurated by PASDEP, although the current prime minister no longer speaks of development, but of prosperity. His vision of prosperity postpones the construction of an egalitarian society to the not-so-near future, and thus

condemns a large part of the Ethiopian population to survival, even if in his estimations these are a segment, a group.

«This group is likely unable to benefit significantly from the ongoing agricultural transformation. For the segment of the Ethiopian population that cannot grow themselves out of poverty, there is a need for other protective measures, such as safety nets, cash transfers, and public work programs» (FDRE 2021, 14). These farmers are far from representing the 'uncaptured peasantry' of which Goran Hyden spoke in his work on the Ujamaa in Tanzania (1980), only partially included in the logic of the market economy and characterised by pre-capitalist social systems and production models, particularly in countries that adopted socialist-inspired policies after independence. On the contrary, these are farmers caught in the broader national prosperity vision, which, however, explicitly condemns them to take advantage of rapid economic growth only at a third moment, namely «the stage of ensuring an equitable distribution of the wealth», only after «creating the capacity to create wealth as pre-conditions, the stage of creating wealth itself».

In essence, farmers have to wait, because they need time to understand whether progress is going in the right direction. «However, it would not be possible to plan about an equitable distribution of wealth, a meaningful reduction of poverty, as well as quality economic growth that would ensure sustainable development and structural transformation within a short-term» (FDRE 2021, 14).

Moreover, in Ethiopia, the same emergency situation of severe drought that in the 1970s led to the use of reports already written, produced elsewhere, and based on colonial narratives to legitimise soil and water conservation interventions (Hoben 1995), now legitimises the state in the name of climate change, its narrative of emergency and managerialism, to continue with the PSNP intervention programme, to maintain donor attention and consensus, and to preserve control over the population and resources. Indeed, if as a social protection programme it would have come under heavy criticism, prompting the international community to monitor and evaluate what needs to be done, being placed under the umbrella of climate change allows it to continue to be implemented.

And this is why Alex de Waal in his *The Real Politics of the Horn of Africa: money, war and the business of power* (2015) invites donors, even before considering new practices, different channels to implement their projects, 'to think more critically', and to take politics, power and control into account first. «Regarding the politics and power in the Horn of Africa, Alex de Waal argues "very often, external actors fail to see how real politics functions" (2015, p. 13), and these technical advisors

believe that failures "could be remedied by advice and resources. This is not the case: these were elements of a successful political strategy" (2015, p. 102)[157]» (Cochrane and Tamiru 2016, 662).

Similarly, Nicole Peterson and Daniel Osgood, in the end of their own chapter devoted to an ethnographic study of some Safety net beneficiaries in Tigray, write «Although perhaps not able to offer concrete solutions for resolving these deeper issues of inequalities and distribution of resources and risks, anthropological and/or social science approaches clearly contribute much to our understanding of these dynamic relationships and is key to discern how non-climate-change drivers intersect with climate change and thereby how climate change adaptation projects might aid in improving efforts along these lines» (Peterson and Osgood 2016, 385).

And in the meantime, farmers, who will only at a later stage know about the redistribution of their acquired wealth, are asked to resist. A powerful and fascinating word that is often abused and misused, but which I would like to use here in the sense of resistance to hunger and various forms of destitution, and which evokes another important concept. It is Donna Haraway's concept of 'urgency'. «I name these things urgencies rather than emergencies because the latter word connotes something approaching apocalypse and its mythologies. Urgencies have other temporalities, and these times are ours. These are the times we must think; these are the times of urgencies that need stories» (Haraway 2016, 40). Indeed, while the anaesthetising emergency of climate change ensures that nothing must change in the name of change, continuing to reinforce its *gattopardism*, critical practices allow new stories to be captured and told, and new actions to be produced.

[157] De Waal, Alex. *The real politics of the Horn of Africa: Money, war and the business of power*. Polity Press: Malden, 2015.

Conclusion: *drawing the stork*?

The aim of my research, which I have tried to reconstruct in these pages, was to carry out a long assessment for the NGO CVM, in order to identify possible activities for future development cooperation projects in their areas of intervention in Ethiopia to counteract the effects of climate change on the poorer and more disadvantaged people, whose difficulties are greatly exacerbated by climate variability. The first step was to gather farmers' perceptions, concerns and difficulties about their situation, and then to understand how these could be translated into climate action based on existing national policies and plans. The idea was to involve farmers in identifying their needs and problems, setting priorities, evaluating alternative solutions or planning their implementation. In addition, the research commission was underpinned by the idea, widely held outside anthropology, of anthropological knowledge and methods as tools for accessing the "cultural", the visions, the deep meanings of communities that are intertwined with material and everyday life, and how these are being disrupted by climate change.

Obviously, the option of developing targeted interventions, which could be done with the tools of development practitioners, was left out of consideration. The failed scope of ad hoc interventions had already been effectively illustrated by the image of DDT, whose targeted use against pathogens, first condemned by the biologist Rachel Carson (1962), had ended up reproducing the deeper causes of the difficulties and, worse still, usually allowed those causes to strengthen and ally themselves. And it was precisely this example that Gregory Bateson used in one of the first works of applied anthropology on the environment and environmental security (1972).

However, this is the techno-managerial approach, designed for activities not limited to the world of development, which aims to transform an unsolvable problem into multiple, possibly manageable issues. In fact, this is the approach taken by climate governance, which has been shaping the world of the development/underdevelopment dichotomy as a narrative since 1972, the year of the publication of *The Limits to Growth* and the Stockholm Conference.

Hitherto, the world of climate governance has tried to solve the problems of climate change, considered not as a natural fact, but as a political-economic effect, a negative externality of capitalism, within the same logic and with the same apparatus with which they were created as is well demonstrated by the use of mitigation mechanisms as solution tools and dell'adaptation plan as tool to keep going with BAU practices.

It is an insistence on the capability and the imperative to develop solutions, with more or less commitment, counterbalanced by the words often heard from the peasants: «Our situation is a long

story without solution» (FGD, Punobasa, Basketo, April 2022). The reference is to their historical condition, to the small improvements that do not go beyond the list of new services available, the construction of the school, the health post, etc., however essential and fundamental they may be.

In this global process, the states of the Global South, like Ethiopia, have not been passive. They have acted not only by conforming to the global paradigm, because climate finance or aid is a lucrative arena, but also because climate change, terrible to experience, turns out to be a convenient disaster that allows technocrats to invoke carbon innocence in international contexts such as climate COPs.

But at the same time, in the name of the green economy and climate resilience, the state has left practices unchanged or worse, developing national policies aimed at mere economic growth, intensifying agricultural production under the performative label of green. Not only do such policies fail to reduce emissions, but they further accelerate the process of growth, the depletion of farmers' own resources, inequality and the expropriation of their productive capacities. In climate change, the state finds new opportunities for branding and strengthening its state-building process.

Two extremely important strands of research can be extracted from here: the first concerns the plight of farmers.

Since ever exposed to the vagaries of the weather, the farmers' current life condition is the embodiment of the climatic debt accumulated by the global North, and also subject to the yoke of destructive national economic policies.

In this sense, they are also increasingly dependent on fertilisers and external inputs for their agriculture, which, although subsistence, not commercial, not a model, can no longer do without them, given their penetration of the land. Here, the farmers' search for local views on climate change proved to be secondary to concerns about the lack and delay of fertiliser: «It may rain tomorrow, but we need fertiliser».

Having always been exposed to the vagaries of the weather, the current condition of farmers is also the embodiment of the climate debt accumulated by the global North at the detriment of the human and non-human populations of the global South. And then the farmers are subjected to the yoke of destructive national economic policies.

I soon realised, however, that in order to adequately analyse what was happening in the field and to adequately grasp its impulses, I had to make a shift, from the pursuit of the so-called cultural to the political.

In short, I was doing nothing more than bringing to fruition the Bixerian swan that had begun to emerge precisely with the applied nature of my research:

> Its is thus a constructive critical orientation that has obvious political implications, but which is not limited to using the usual language of politics (which is often a "shortened" language and explicitly oriented

> towards ideological approaches that are often hasty). The measure of the importance of applied anthropology, in other words, lies in its effectiveness, in its ability to modify the action plans of institutions; and not primarily in its capacity to judge, to stigmatise the errors or perversities of politics (Antonino Colajanni 2016, 184), my translation.

Looking at the environmental history of Ethiopia, it is possible to find the second strand of research mentioned above: a parallel between what happened in the 1980s with the institutionalisation of land and water conservation practices as a response to land degradation causing drought and poverty, and what is being legitimised in the name of climate change. It is as if the international community, with its knowledge, solutions and funding, has provided the Ethiopian state with the tools to validate its actions at the expense of the people, first in the name of drought prevention in the 1980s, and now in the name of climate emergencies.

This is the risk we run with climate change, where leaders attend COPs and demand funds and attention for their vulnerable countries, but where they commit resources to old projects, as RLLP and PSNP have well demonstrated, in a partnership of discourses and practices where climate change exacerbates all the historically and politically constructed environmental and social fragilities of the country.

CVM itself participates in this process by promoting training in land and water conservation, which is considered a priority in the country. These are interventions that John McCann (2001; 2005) and Desssalegn Rahmato (2001; 2009) and other authors had already shown the political side of in the 1990s (ADAMS 2001), hoping that their productions would help to «shift the focus of the debate away from the conventional approach» (Rahmato 2001, 103), which basically involved blaming farmers for being prolific, unruly and ignorant of land degradation and soil erosion.

If the complexity of global and national climate change is brought to light by the critique, by that making itself *hatchet* which is proper to political ecology (Robbins 2012), my applied research could not limit itself to a *pars destruens*, and not also become seed. There was a strong responsibility to provide feasible and concrete alternatives to the CVM for its projects, which in any case cannot act outside the lines drawn by the Ethiopian state.

In this sense, it was crucial to find the Ethiopian Biodiversity Institution (EBI) within Ethiopian institutions. Although marginal with respect to the country's green economy plans, it represents an important anchor of the national rhetoric and the exceptional nature of Ethiopian biodiversity, which is increasingly being emptied of meaning and reduced to an empty pride as it loses the seeds and genes of plants and animals, being reduced to an "empty pride" as Dr. Million Belay called it. On the other hand, it is crucial to build alliances within civil society, such as the agroecological practices of the Ethiopian NGO MELCA or the ASFA Network.

Only this work of researching and building alternatives from below can afford to think about breaking the panopticon of TINA (There is no alternative, the motto of Thatcher's and Regan's neo-liberalism). The acronym stands for *There is no alternative* to capitalism, pronounced by Thatcher and before her by Malthus, as Ian Angus pointed out in Too Many: «His goal was very different: to prove that most people will always be poor and that no social or political change could ever alter that. Nearly two hundred years before Margaret Thatcher declared that there is no alternative to capitalism, Malthus won the British ruling class to that very idea» (Angus and Butler 2011, 206).

On the contrary, anthropological practice is positioned as the translation of such critical visions into alternative practices. After all, this is the task, the mandate that political ecology has always given itself, as alternative, counterfactual and counter-hegemonic knowledge to studies of human-environment relations within power relations.

As Pepper notes, «radical scholars can be criticised either for not suggesting a coherent and feasible action programme, or, if they do have a programme, for being naive and/or anodyne about what could and should be done. This is partly because liberal-capitalist assumptions about the purpose of life and how to live it have gained such hegemony that any attempt to move towards a society based on alternative assumptions does seem either undesirable or futile» (Pepper 1993, 235).

In this sense, the actions of NGOs, the actors in the world of cooperation can play a fundamental role as we prepare to live in the era *beyond development* (Malighetti 2005). They can critically analyse their own positioning in relation to local institutions and inaugurate a critical rethinking, which fills the concept of sustainable development, following what Anna Tsing invites them to do: «"Sustainability" is the dream of passing a liveable earth to future generations, human and nonhuman. The term is also used to cover up destructive practices, and this use has become so prevalent that the word most often makes me laugh and cry. Still, there is reason to dream—and to object—and to fight for alternatives, […]. Rather than criticize the word, then, I'll take it seriously, repurposed as a radical argument in the face of hegemonic practice» (Tsing 2017, 51).

NGOs on the one hand, and applied anthropological research on the other, must make themselves the bearers of the capacity to construct "material alternatives in the present" (Ghelfi 2022, 20) by referring to those cultivation techniques, ways of life, understanding rurality and food that are supposed to belong to a farmer's past destined to pass away, and which instead must re-emerge as material alternatives in the present.

In this view, although generalisations should be avoided, but remaining within the realm of discourse, it is possible with Isabelle Stengers *In Catastrophic Times: Resisting the Coming Barbarism* (2015) to bring out both The agriculture of progress, the one that was able to put traditional seeds and small-

scale farmers out of business, after the European battle against GMOs no longer appeared so "rational", unlike the image of delusional farmers re-proposed by some officials that still persists (Stengers 2008).

The search for alternative partners and non-business-as-usual practices is a challenge to those dangerous alliances that are emerging in Ethiopia such as the one between the biopolitical implications of Abiy's green state construction and the policies of AGRA, whose president is former Ethiopian Prime Minister Haile Marian Dessalegn. Reversing Marx's (1852) warning at the bottom of the second chapter, we must be careful that the first time the green revolution may have been a farce, the second a tragedy for the country. Hence the imperative to pay attention to such processes, not only for the symbolic meanings, but because this implies understanding the allocation of resources and thus the possibilities of alternatives.

And in syndemic times, one can well hope that such alliances and rethinkings can be productive and contagious, with respect to civil society, still small in the country and tied to mainstream dynamics and visions, but still hopeful.

While we are indeed in danger of entering the 4 degrees, thus into what in climatology is called a new climate regime (Angus 2019), it is necessary to break down an *anciem regime* (Latour and Weibel 2020) of visions and approaches to climate change. First and foremost a systematic multidisciplinary, the study of soil, its properties and mechanisms are beyond my expertise.

Indeed, climate change is like the *hydra*, the mythological monster of Ancient Greece, whose head you cut off, seven more sprout. it is a titanic effort on one's own, a feeling that accompanied me during my research and that prompted me to network with the Italian Climate Network Association at the end of the fieldwork.

It was crucial for me to take action and network. I was for a long time with clear connections, but reduced to aphasia, and I was unable to reconstruct a theoretical framework that in reality had not been chosen *a priori*, but was built question by question. Climate change research, however incompatible with the time and commitments of doctoral fellowships and the cooperative world, requires more than ever a "slow scholarship" (Bergthaller et al. 2021, 35). My ethnographic research was a constant parade of succulent dishes, and having to leave the moment they were served.

From another point of view, an ethnographic *return* to these issues in the research areas would be desirable. It would be important to delve into the issue of gender from an eco-feminist perspective; how climate change is and will be framed within the framework of African religions; and finally, to analyse the black-market system of fertilisers and pesticides, and seeds that brings into the country quantities of old, obsolete and dangerous chemicals for the health of the earth, animals and humans.

Above all, I want to go back to the field to ask those questions that far from being rhetorical have meant that in two cases, both in the final stages of the research during FDG in Mojen and Wonije, where I had therefore achieved a greater mastery of the research, the farmers told me: «have you come to solve our problems?».

But as Nidhi Srinivas points out (2022): what to do after listening to the poor? The performative demand of hearing the poor was conflated here with a presumed efficacy in attaining development goals (regardless of theirs content) achieved through such listening (Nidhi Srinivas 2022, 251). And it continues:

> *That is, the goal of development was no longer to achieve the intentions of the state but those of the poor themselves. The poor knew the best way to reduce their poverty and only needed to be heard. State-led development had failed because it was deaf of the needs of those it claimed to help. "Official aid all too often strengthens governments whose policies and practices oppress the poor. It may support projects that provide the wrong service or that serve the wrong people, and may strengthen a development model to which equity and social justice are alien" […]. We needed to hear, who evidently knew what was required to reduce their poverty the poor? (Nidhi Srinivas 2022, 251).*

Finally, if «what is important is not what one finds in the research, but what one does, during and after the investigative effort»[158] (Colajanni 2023, 7), then anthropologists turn from data collectors to gardeners, according to a beautiful image used by Pietro Clemente.

Gardeners are experts in curation, so the first step is to maintain relationships and network built and made available to the NGO. Go back to the data analysis and collect all that remained residual in this research. Finally, through the exercise of care, and taking up Donna Haraway's quote at the end of the first chapter, it allows us to set ourselves against capital, the force of exploitation, and thus move away from the simplistic schemes of the Anthropocene, which are like filters that prevent us from being alert and look properly. Indeed, the slides used by the Trinity Test scientists to shield them from the disturbing vision of the exploding atomic bomb and its consequences will be of no use. Their new heroes were protecting themselves from Medusa, from a telluric force of the earth that would stare and petrify anyone who looked into her eyes after they got too close. Like the atomic bomb, climate change with all its social and environmental implications is advancing on us, increasingly unleashing itself in paroxysmal disasters and at the same time grafting itself into the mechanics as slow violence. It is time for us to take on, in open visio, a civil, political commitment not only to denounce, but to build with different forces and different knowledge of factual and practicable alternatives.

[158] Quote from Caufield M.D., 1979 «Participant observation or partisan participation?», in G. Huizer, B. Mannheim (eds), *The Politics of Anthropology. From Colonialism and Sexism Toward a View from Below*, Mouton, The Hague-Paris: 309-318 citato in Colajanni 2023, 7 in *Militanza, "impegno" e critica sociale dell'antropologia sulla base di intense etnografie. Le intenzioni trasformative e i giudizi politici dell'antropologo*, Archivio antropologico mediterraneo Anno XXVI, n. 25(1) | 2023).

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