



## **CLIMATE JUSTICE**

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#### Climate justice

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Report authors: Kajsa Johansson and Åsa Ljusenius Coordinators: Måns Stenberg, Åsa Ljusenius and Malin von Strauss Interviews: Onyango Ayany

Production and illustrations: Kölare Design.

Vi Agroforestry, Box 11175, SE-100 61 Stockholm. Phone: 08-120 372 70 Web: www.viagroforestry.org

We Effect, Box 111 48, SE-100 61 Stockholm. Phone: 08-120 371 20 Web: www.weeffect.org

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## JUSTICE LEAVES NO ONE BEHIND

As you wander around the maize fields of Southern Africa, the talk is always about the weather. When the maize is a vibrant, healthy yellow, it means the rain came at the right time. Then you know that food stocks will last until the next harvest, and there will be enough money to send the children to school and buy household necessities. If the plants are short, brown and withered, the maize has dried out or rotted, because of disease or because the rain never came. And that means hunger.

I remember a meeting with a group of women in a village outside Shurugwi in central Zimbabwe. The year was 2007 and there was a severe drought in the country, which led to a food crisis and hyperinflation. It was also election time: opposition was growing, and Robert Mugabe's government managed the distribution of food aid to secure loyalty. Hunger spread, as did political violence. The women outside of Shurugwi had come together to talk about farming: they were part of a study circle on climate change, and this week they were meeting at the home of Janet Sihlahla. Discussions were lively. I couldn't quite keep up, but the message was crystal clear: the weather is changing, and if our children are to eat then we have to grow other crops. The group had already started to diversify. Janet Sihlahla pointed to her pumpkins, others spoke of sweet potato and cassava, which are both resilient and nutritious. The meeting with the women was inspirational. Times were extremely tough in Zimbabwe, and these women were doing what they always do: actively looking for solutions, and working together. The difference this time was knowledge. The study circle was organised by a farmers' organisation, with support from We Effect.

More than 15 years have passed since we wandered around the fields of Shurugwi. When I think back, it is almost as if these women were ahead of their time. But in fact, it is the other way around – far too many others are left behind.

Our partner organisations report that the changing climate has a fundamental impact on their farming and their lives. Harvests are decreasing; hunger is on the rise. Yet they get little or no support from their governments to adapt to the consequences.

The corona crisis has intensified the situation, where smallholder farmers have been hit hard by locked down markets and broken food systems. For the first time in decades, poverty is increasing. To top this off, the war in Ukraine is driving record high food prices and increasing global hunger. This is the time to stand up for a strong and stable international official development assistance. And to make sure climate finance reaches those who need it most, especially smallholder farmers – and particularly women and children. Climate justice is about the women in Shurugwi – and of all people's equal right to food.



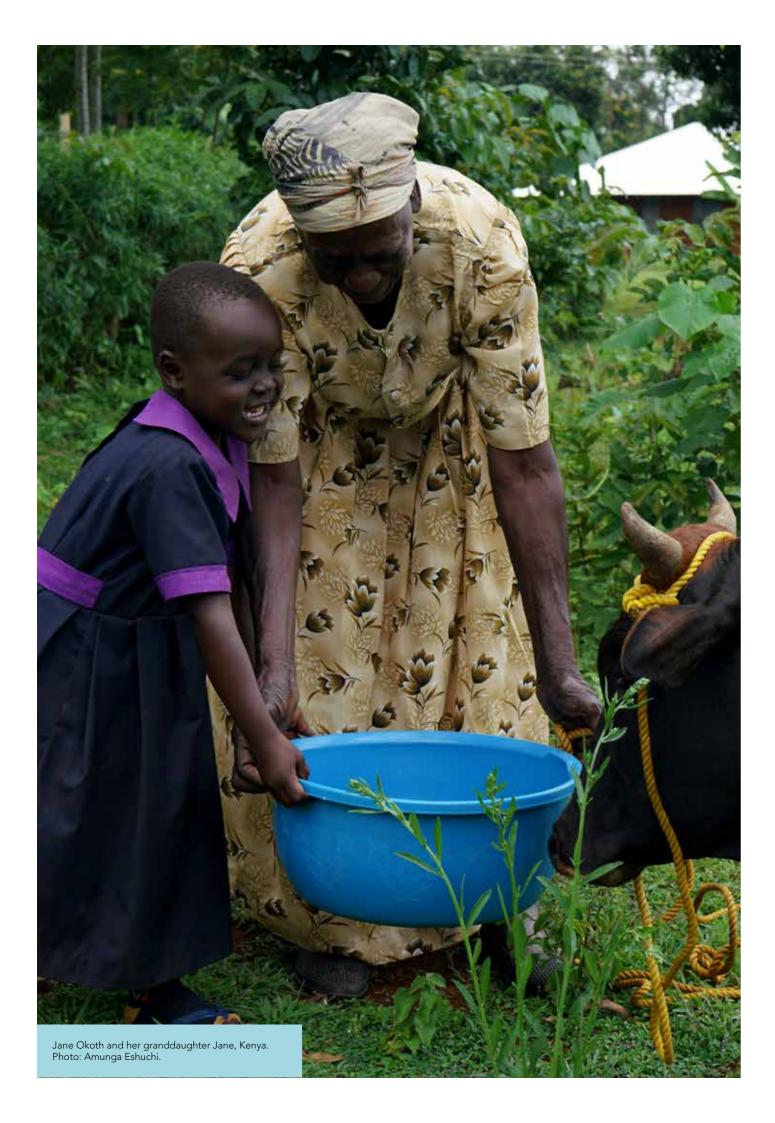
Anna Tibblin Secretary General Vi Agroforestry and We Effect

"Food and agriculture are at the heart of the 2030 Agenda for Sustainable Development: from fighting poverty and eliminating hunger to work on climate change and management of our natural resources."

"Those who will suffer the most from the climate and environmental crisis are the ones who are already the most vulnerable, socially and financially. And that tends to be women living in the global south. We cannot have climate justice without gender equality."

Tanzania. Photo: Katie O'Sullivan.

Greta Thunberg, 8 March 2020



## RIGHT TO FOOD, LIVELIHOOD AND CLIMATE

World hunger is on the rise. According to the UN, almost one in three people (2.37 billion) lacked access to adequate food in 2020. That's an increase of almost 320 million people in just one year. It is worth noting that food insecurity has been slowly rising worldwide ever since 2014, but when the coronavirus pandemic began, figures started to rocket. The increase in 2020 was as much as the increase in the previous five years put together. But while the COVID-19 crisis certainly exacerbates the hunger situation, the trend was already negative before the pandemic. This is despite the fact that in 2015, the UN member states adopted the global Sustainable Development Goals, aiming amongst other things to eliminate hunger by 2030.

In 2020, the UN reported that human development is declining for the first time since measurements began in

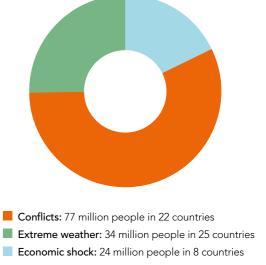
1990. This means that global development is moving in the wrong direction in terms of life expectancy, level of education and income.<sup>3</sup>

Hunger is closely linked to poverty, inequality and unfair distribution – something We Effect and Vi Agroforestry have high on the agenda. Climate change and associated extreme weather conditions exacerbate the situation. This report focuses on climate issues in relation to food security and the right to food. The UN's World Food Programme (WFP) indicates that conflicts, extreme weather and economic shocks from e.g. financial crises are important reasons why people face food insecurity. Figure 1 shows how the WFP estimates the various drivers behind the global increase in acute food insecurity.

#### **FOOD SECURITY IN FIGURES**

80 per cent of those who live in extreme poverty live in rural areas, and have agriculture as one of their sources of livelihood. Smallholder farmers with less than two hectares of farmland account for roughly 30 per cent of the world's food production. Women are over-represented among the world's poor and also bear the greatest responsibility in the household for feeding the family. 60 per cent of people facing food insecurity are women. According to UN Women, women run a 27 per cent higher risk than men of ending up in severe food insecurity. Indigenous people comprise about 5 per cent of the global population, yet account for 15 per cent of all people living in poverty.

Figure 1: Number of people globally living with acute food insecurity, by primary cause



<sup>&</sup>lt;sup>1</sup> FAO, IFAD, UNICEF, WFP and WHO 2021

Hunger is measured by the UN as the Prevalence of Undernourishment, PoU.
 UNDP 2020a and UNDP 2020b.

<sup>4</sup> Castañeda et al. 2016.

<sup>&</sup>lt;sup>5</sup> Riccardi et al. 2018.

<sup>&</sup>lt;sup>6</sup> WFP undated.

<sup>&</sup>lt;sup>7</sup> UN Women et al. 2020.

<sup>&</sup>lt;sup>8</sup> The World Bank undated.

<sup>&</sup>lt;sup>9</sup> Vi Agroforestry and We Effect 2020.

<sup>&</sup>lt;sup>10</sup> FSIN 2020 page 3.

It is also important to look at how conflicts and climate change interact. Violent conflicts are ongoing in 12 of the 20 countries hardest hit by climate change. This does not necessarily mean that there is a direct link between climate change and conflict. The point is that countries with protracted conflict are less able to cope with and adapt to climate change.11

According to the WFP, extreme weather conditions have put five million more people into hunger than in 2018.12 The United Nations Environment Programme (UNEP) estimates the cost for loss and damage to life and property at USD 50 billion per year in countries with the greatest poverty, as calculated for 2020. These costs are expected to rise dramatically if temperatures increase as forecast.<sup>13</sup>

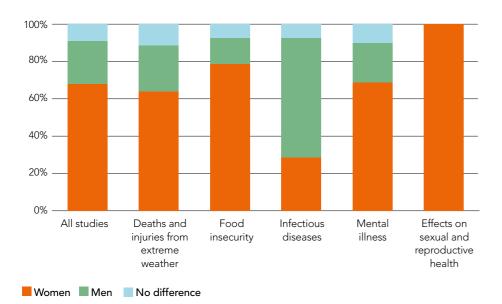
Women are often hit harder by climate change and extreme weather than men. A research review has looked at 130 studies and found that according to these studies, women are affected more seriously in several perspectives, as shown in Figure 2.14 The figure shows for instance that 79 per cent

of the studies found that women are at greater risk of food insecurity than men. The study also shows that extreme weather increases the risk of gender-based violence.

The effects of climate change are palpable in all the countries where We Effect and Vi Agroforestry operate. Women and girls, people in rural and urban areas, and other marginalised groups are disproportionately affected by the climate crisis. Impact assessments for our development cooperation initiatives show that insecure access to water affected women most based on the difficulties it entails in agriculture, a greater burden of care in the home, and health risks.

Climate change undermines people's right to food as it weakens or breaks supply chains, has an adverse effect on soil and cattle, and leads to failed harvests. Women are often hit harder by the climate-related hazards such as drought, landslides, floods and hurricanes. This has a negative impact on their ability to take part in activities in society, such as organisations, associations and education.

Figure 2: Women are hit harder by climate change and extreme weather than men



Source: Dunne 2020. Note that the bars show how many studies specified that women, men or neither were more affected. They do not, therefore, specify how seriously women and men are affected.

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13 UNEP 2014

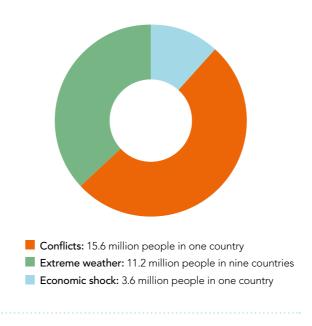
11 ICRC 2020. 12 FSIN 2020

Moreover, women's freedom of movement is limited by the demands placed on them in their households, demands that increase in times of crisis or disaster.<sup>15</sup>

Southern Africa is exposed to reoccurring natural hazards and extreme weather on an annual basis. The region is characterised by drought, tropical cyclones and flooding, and has had just two favourable growing seasons since 2012.

Figure 3 shows the primary drivers behind acute food insecurity in Angola, Democratic Republic of the Congo, Eswatini, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe. 16

Figure 3: Number of people in Southern Africa living with acute food insecurity, by primary cause



In March and April 2019, the southern African coast was hit by two tropical cyclones, Idai and Kenneth. It was the first time ever that two cyclones had hit the area, and in this case

primarily Mozambique, in such a short period. The cyclones caused massive destruction and, along with the resulting flooding, are estimated to have affected 3.8 million people. The cyclones occurred at harvest time and destroyed the people's entire harvest, the majority of them smallholder farmers.<sup>17</sup> The area hit by Idai was struck by another cyclone in early 2021, the somewhat weaker Eloise. Some 100,000 people are still living in temporary camps and substandard settlements in the area due to cyclones Idai, Kenneth and Eloise.<sup>18</sup>

In the same year that Idai and Kenneth struck, 2019, neighbouring Zimbabwe was hit by the worst hunger crisis in a decade. After Idai had caused floods and landslides in Zimbabwe, the country was subjected to the worst drought in several decades, with temperatures reaching almost 50 degrees Celsius in some regions. Zimbabwe has only had one year of normal rainfall in the past five years. Extreme poverty in Zimbabwe is estimated to have risen from 29 per cent in 2018 to 34 per cent in 2019, which equates to 5.7 million people. When it comes to the staple commodity maize, production in 2018/2019 was more than 40 per cent lower than the five-year average. 19

In Latin America and the Caribbean too, climate change has a palpable effect on the production of food, especially in countries in the dry corridor in Central America, which includes El Salvador, Guatemala, Honduras and Nicaragua. Drought is the factor that has had the biggest impact on food production. In Guatemala, maize production in 2018 was as much as 1.7 million tonnes below the average due to drought.20

The snapshots above are examples which clearly illustrate that climate change will continue to lead to decreasing harvests for staples such as rice, maize and wheat. This hits smallholder farmers hard, as their ability to grow and sell staples is vital if they, their families and local communities are to have secure access to food and income.

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<sup>&</sup>lt;sup>14</sup> Dunne 2020

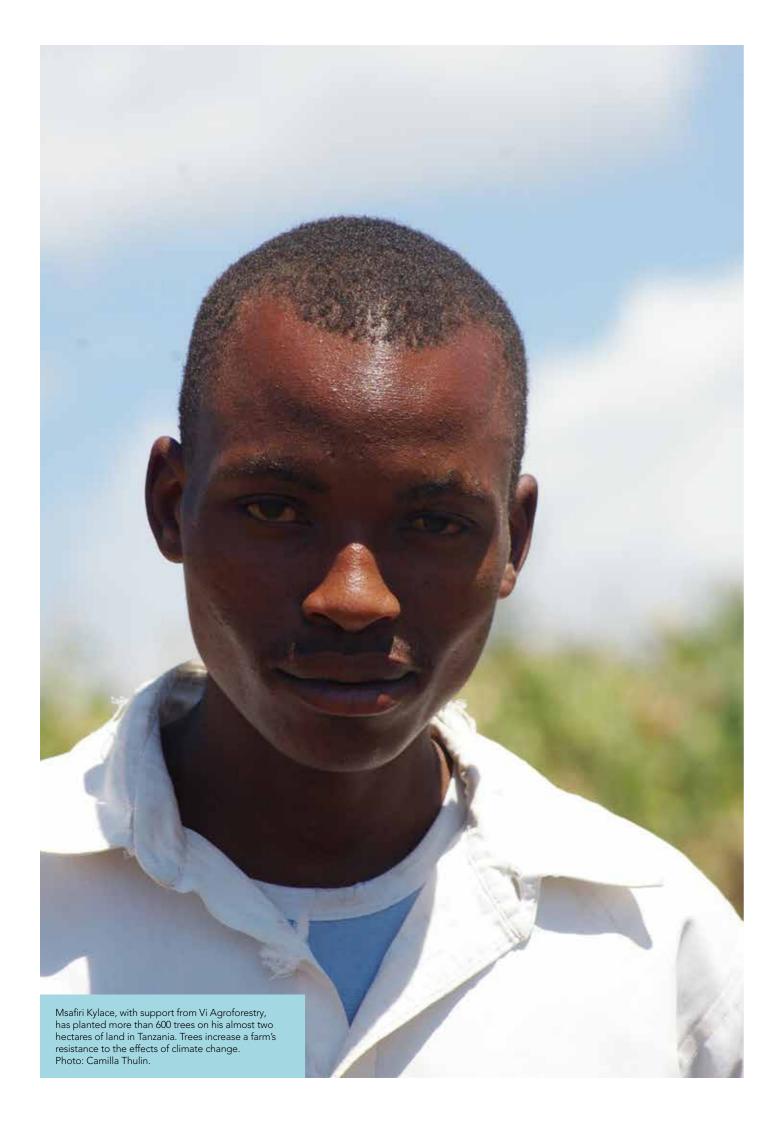
<sup>15</sup> We Effect undated.

<sup>16</sup> FSIN 2020 page 35

<sup>17</sup> FSIN 2020.

<sup>19</sup> FSIN 2020

<sup>20</sup> FSIN 2020.



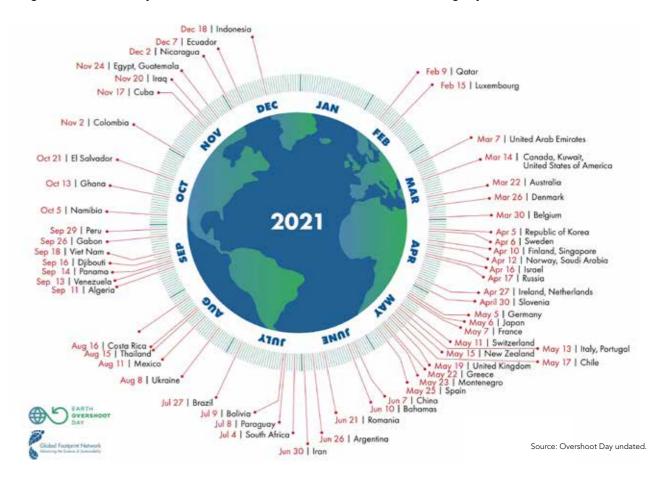
# THE FOOD SYSTEM AND CLIMATE JUSTICE

Only a tiny fraction of the products consumed in Sweden are Swedish, in the sense that they are completely independent of any imported good somewhere along the production chain. A fully Swedish diet, i.e. a diet based exclusively on products in which Sweden is self-sufficient, would consist entirely of grain, carrots and sugar. Consequently, when we think about the climate impact of our food, we need to consider its climate impact in the places it is imported from. The global food system includes all the services, stakeholders, institutions, regulations and policies that are part not only of production, but also the

refinement, processing, distribution and sale of food. For the foods we consume, 90 per cent of the water use, 46 per cent of the greenhouse gas emissions and 51 per cent of the exploited agricultural land are outside of Sweden's borders.<sup>22</sup>

One illustration of the need for a transition in high-income countries is Overshoot Day, see Figure 4.<sup>23</sup> The model shows the date when humanity's demand for ecological resources and services in a given year exceeds what the earth can regenerate in that year, assuming everyone lived as in that country. For Sweden, the date in 2021 was 6 April.

Figure 4: Overshoot Days 2021 - the dates on which different countries start living beyond their resources



<sup>&</sup>lt;sup>21</sup> We Effect 2021. <sup>22</sup> Wood 2020.

<sup>21. &</sup>lt;sup>23</sup> Overshoot Day undated.

For several of the countries that We Effect and Vi Agroforestry work with, such as Guatemala, the date is towards the end of the year. To illustrate climate injustice, Guatemala is one of the Latin American countries hardest hit by climate change, while it has only a modest impact on climate compared to Sweden. It is important to bear in mind that there are large differences also within countries when it comes to

### THE CLIMATE IMPACT OF AGRICULTURE AND FORESTRY – IN FIGURES

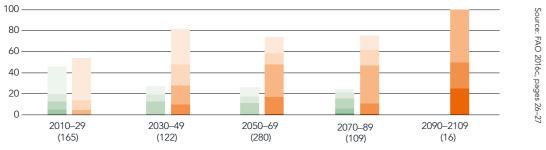
Globally, agriculture and forestry account for between 20 and 30 per cent of greenhouse gas emissions. <sup>24</sup> Livestock farming in agriculture represents two-third of the sector's greenhouse gas emissions, and almost 80 per cent of its methane emissions. <sup>25</sup> In addition, agriculture represents about 70 per cent of water use globally, and has a significant impact on land, forest, ecosystem services and nature's contribution to people. <sup>26</sup> Every year, around 10 million hectares of forest are cleared for conversion to other land use. <sup>27</sup> Deforestation has a serious adverse impact on the climate, since it accounts for major global emissions of greenhouse gases.

climate change. Generally speaking, people with a lower income have lower climate impact than those with high incomes, regardless of country. Studies show that the total emissions of the wealthiest 1 per cent of the global population exceed the total emissions of the poorest 50 per cent.<sup>28</sup>

So what does climate change mean for the world's agriculture? The general trend is that agriculture in developing countries will be severely impacted. The bar charts in Figures 5 and 6 below show a forecast of how harvest size could be affected by climate change in developing countries (Figure 5) and all countries worldwide (Figure 6) between 2010 and 2109. The green bars show a positive development, i.e. bigger harvests. The deeper the green, the bigger the harvest. Conversely, the orange bars show a negative development and smaller harvests. The deeper the orange, the smaller the harvest.<sup>29</sup> This is where the subject of climate justice comes into play. There are many different definitions of climate justice, but fundamentally they are all based on the idea of rights and responsibilities: since high-income countries have historically been responsible for greenhouse gas emissions that cause climate change, these countries should bear the main responsibility for the consequences. Climate justice also includes shared responsibility, but based on the different capabilities of each nation.

Figure 5: Predicted changes in harvests in developing countries as a result of climate change

### PERCENTAGE OF FORECAST HARVEST (n=692)



#### **EXTENT OF CHANGE IN HARVEST**



NB: The number of estimates in change in harvest is given in parenthesis. Developing countries include all observations from sites in developing nations in Africa, Latin America, Oceania and all of Asia barring Central Asia.

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This is one of the principles on which the United Nations Framework Convention on Climate Change, UNFCCC, is based. Some advocates of climate justice, especially those from low-income countries, link the term to the right to development: that low-income countries must have the possibility to develop without facing the same emission-reduction requirements as nations that have historically had the highest emissions. Opinions on how to achieve this differs among climate justice advocates, but many of them agree

## CLIMATE JUSTICE ACCORDING TO WE EFFECT AND VI AGROFORESTRY

Climate justice starts from the equal rights of all people, and is based on the knowledge that the climate crisis hits those already vulnerable the hardest; that those who have contributed the least to climate change suffer the most. The climate crisis exposes and reinforces injustices between poor and rich, women and men. Climate justice also starts from the insight that those who caused the crisis bear the main responsibility for it – but that we need to work together, worldwide, both women and men, to solve the climate crisis.

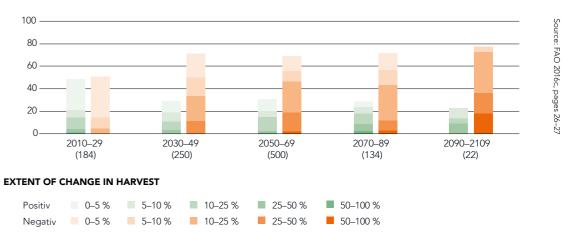
that a system change is needed. Another key to success is to adopt a feminist perspective to climate justice. As outlined previously, climate change affects women and men differently. This is why a strong gender equality perspective is needed, combined with a transformative perspective in efforts to achieve climate justice. Gender-blind climate initiatives risk disregarding women's needs and cementing or reinforcing existing gender inequalities and traditional gender norms. Moreover, as agents of change, women are important for successful environmental and climate efforts, and invaluable in the fight for the right to food, not only in families and local communities, but also at the national and international level. Women-led organisations, women's rights organisations, and democratic and cooperative organisations with a focus on gender equality are pivotal in the work for a sustainable food system founded on gender equality and climate justice.<sup>30</sup>

"Studies show that the total emissions of the wealthiest 1 per cent of the global population exceed the total emissions of the poorest 50 per cent."

Figure 6: Predicted changes in harvests globally as a result of climate change

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#### PERCENTAGE OF FORECAST HARVEST (n=1090)



NB: The number of estimates in change in harvest is given in parenthesis.

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<sup>&</sup>lt;sup>24</sup> Agroforestry Network 2019; Colombo et al. 2016.

<sup>&</sup>lt;sup>25</sup> FAO 2016b

<sup>&</sup>lt;sup>26</sup> "Ecosystem services are all the products and services that the ecosystem provides for humankind and that contribute to our welfare and quality of life. [...] The term 'nature's contribution to people' is sometimes used

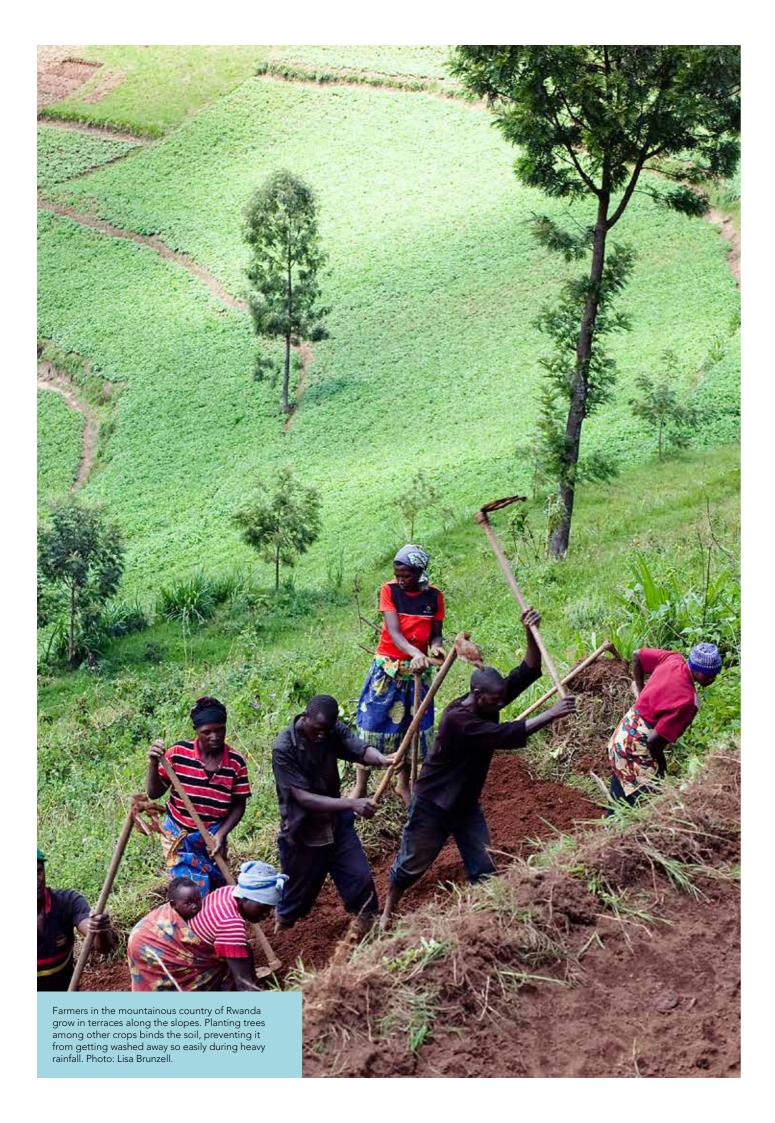
instead as a broader concept." Quote from the Swedish EPA (in translation)

<sup>&</sup>lt;sup>27</sup> FAO and UNEP 2020.

<sup>&</sup>lt;sup>28</sup> Briggs 2020.

<sup>&</sup>lt;sup>29</sup> FAO 2016c, pages 26–27.

<sup>30</sup> CONCORD Sweden 2020a



# AGRICULTURE – CLIMATE VILLAIN OR HERO?

The previous section looked at agriculture's negative impacts on the climate. However, the matter needs to be broken down so that we can also see the opportunities that agriculture presents. Not all kinds of agriculture have the same negative impact on the climate and biodiversity. It is estimated that, globally, there are 10,000 species of flora and at least 2,500 species of fauna that we could eat, alongside fungi and algae, for example. Yet 75 per cent of all the food in the world comes from 12 plants species and 5 animal species. This is largely due to consumption patterns in the Western world, and in urban centres in low-income countries. People living in rural areas in many low-income countries have a far more varied diet. Sustainable agriculture and forestry are fundamental in fighting climate change, as stated for instance in the 2030 Agenda including the UN's global Sustainable Development Goals (SDGs).<sup>31</sup> Agriculture offers opportunities to capture and sequester carbon dioxide, and the sector is crucial to the production of renewable energy and raw materials for fuel. In this section, we will look more closely at two different cultivation systems, and techniques that reduce the climate impact of agriculture in different ways, while also making agriculture less vulnerable to climate change and extreme weather conditions.<sup>32</sup>

### AGROECOLOGY – A NEW WAY OF THINKING ABOUT OUR FOOD SYSTEM

Agroecology is a way of growing, planning and managing agriculture based on local conditions, biodiversity and circular thinking. Agroecology builds on the knowledge, experience and farming practices of indigenous peoples. The indigenous people of the world number almost 370 million. Although they make up less than 5 per cent of the world's population, they represent 15 per cent of the world's poor. In many countries, they are the poorest of the poor and their situation is not improving as fast as it should, especially given that approximately 80 per cent of the world's biodiversity is housed in areas predominantly inhabited by

indigenous people.<sup>33</sup> While research and innovation have been and remain necessary to increase and diversify productivity, science has often excluded and undermined the traditional knowledge possessed by smallholder farmers.<sup>34</sup>

Advocates of agroecology believe that we should strive to imitate natural ecosystems. According to scientists, a sustainable food system is one that recognises the entire holistic system of food, feed and fibre production in balance with the environment, social equality and economic sustainability in all sectors of society, in all countries.<sup>35</sup> While there is extensive research into agroecology as a system for food production, there is a social movement for change that is founded on scientific research.<sup>36</sup> Note that organic farming can be included in agroecology, but it is not the same thing. To support agroecological practices there is a need for structural, political, sociocultural and economic changes, which help to bring about a new way of thinking about our food system.

Steve Gliessman, Professor (now Emeritus) of Agroecology at the University of California Santa Cruz, highlights five important factors for an alternative and more sustainable food system:

- 1. Food production and consumption must be founded on local conditions.
- 2. The food chain should be shortened.
- **3.** Farmers, consumers, purchasers, distributors and other actors form an interlinked community and have an opportunity to establish real relations.
- There are opportunities to exchange knowledge and information between everyone involved in the food system.
- 5. The advantages and drawbacks of the food system are experienced equally by everyone in that system.<sup>37</sup>

<sup>&</sup>lt;sup>31</sup> FAO 2016a.

<sup>&</sup>lt;sup>32</sup> Note that there are many more techniques and cultivation systems that protect the climate, biodiversity and sustainability. The High Level Panel of Experts on Food Security and Nutrition (HLPE), part of the UN Committee on World Food Security (CFS), describes several of them in its HLPE Report 2019 – Agroecological and other innovative approaches.

<sup>33</sup> IFAD 2013

<sup>&</sup>lt;sup>34</sup> Petersen et al. 2002.

<sup>35</sup> Gliessman 2007; HLPE 2019.

<sup>&</sup>lt;sup>36</sup> Gliessman 2011; HLPE 2019.

<sup>37</sup> Gliessman 2015

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Agroecology is an alternative to the large-scale industrial farms that are highly intensified and specialised, that use a lot of synthetic fertilisers and chemical pesticides. Agroecology is not only beneficial for producing food in a way that's easy on nature. But agroecological methods are also very effective. By working with nature rather than against it, farmers can realise better returns and produce more food.

Agroecology also potentially entails greater equality in agriculture. As mentioned previously, women carry a heavy responsibility in agriculture, and are particularly vulnerable to the effects of climate change. Through well-functioning agroecology implementation, women farmers can develop higher levels of autonomy through knowledge, independence of raw materials and social empowerment, as well as

a higher degree of commercialisation. At the same time, women's empowerment is crucial if agroecology is to work and expand.<sup>38</sup> It is worth noting that agroecology is not just a farming system and a movement for smallholders: today there are examples of major food producers who apply agroecological principles.<sup>39</sup> Locally based agricultural innovations need to be highlighted and also combined with research to get the maximum spread. In order to develop the methods, farmers' experience needs to be combined with scientific research.<sup>40</sup>

## AGROFORESTRY – GROWING CROPS AND TREES TOGETHER

Agroforestry is a farming system within the scope of agroecology that combines growing crops with trees, sometimes

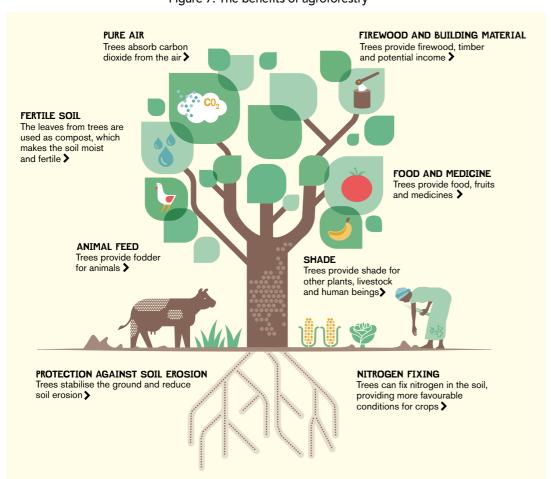


Figure 7: The benefits of agroforestry



alongside livestock farming. By emulating natural ecosystems, agroforestry has the potential to provide many co-benefits besides the harvest itself.

Agroforestry contributes multiple benefits, both environmental and socio-economic. The trees contribute to soil fertility and moisture, and have a cooling effect on hot days. A diverse agroecology contributes to land improvement, increases resilience against pests, and counters the effects of drought and flooding. The method helps to increase biodiversity in the farming landscape – which is often crucial to the survival of animal and plant species. It also provides an important habitat for different species of flora and fauna, creating ecological corridors where species can spread through the landscape. The biodiversity of flora and fauna, including wild animals and plants, obviously thrives best in unspoiled nature. Compared to monocropping where one or a few plants are grown, agroforestry is a far better option for the protection of biodiversity.

Agroforestry also helps people to counter and adapt to the effects of climate change. Cautious estimates show that agro-

forestry has the potential to sequester approximately  $27.2 \pm 13.5$  tonnes of carbon dioxide equivalents per hectare per year, which is far more than many other farming practices. <sup>42</sup> The benefits of agroforestry in sequestering greenhouse gases have been highlighted by the UN IPCC, for example. <sup>43</sup> In addition to sequestering carbon from the atmosphere, the convenience of having trees close by also decreases the pressure on natural forests, thus decreasing deforestation which is also an effective measure against climate change.

For the farmer, the trees provide firewood, timber, protection against the wind and shade for more sensitive crops, leaves to feed cattle or add to compost, flowers for bees in hives, fruit, seeds and other edibles, as well as medicines from bark, roots and other parts of certain trees (see Figure 7).<sup>41</sup>

A diversified, multifaceted agricultural system like agroforestry is advocated and used around the world to combat poverty and secure people's access to food. Being dependent on just one or two crops leads to vulnerability, and a risk of food shortage should the harvest fail. This is a risk especially for smallholder farmers, who tend not to have insurance or

43 IPCC 2019.

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<sup>&</sup>lt;sup>38</sup> AWID 2011.

<sup>&</sup>lt;sup>39</sup> The Swedish Society for Nature Conservation 2021.

<sup>&</sup>lt;sup>40</sup> CFS HLPE has prepared 10 elements/aspects and 13 principles for agroecology. Read them in HLPE (2019), or in summary form at the European Association for Agroecology (undated).

<sup>&</sup>lt;sup>41</sup> Vi Agroforestry 2020, page 4.

<sup>&</sup>lt;sup>42</sup> Agroforestry Network and Vi Agroforestry 2018.

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other sources of income. By contrast, a diversified farm provides several food and income sources from crops, trees and livestock farming, which reduces vulnerability and the risk of falling into poverty and starvation. Smallholder farmers who change from growing one or two crops to agroforestry generally spend less on synthetic fertilisers and pesticides, they receive higher yields, and have a richer variety of crops for their food provision and for selling from their existing farmland. Their cows and goats also produce more milk when they eat the nutritious leaves from the trees. This reduces poverty and increases the family's food security, both on an everyday basis and during crises such as the COVID-19 pandemic.

It is hard to estimate figures for how many people earn a living from agroforestry. In 2004, however, the World Bank estimated that 1.2 billion people use agroforestry to maintain a productive farm and have an income. 44 Having said that, the Food and Agriculture Organization of the United Nations has recently indicated that this figure is probably out of date, and that there are no reliable means of measuring this. 45 It is certain, however, that people most vulnerable to food insecurity benefit from the ecosystem services by having trees on and close to their land. Agroforestry makes a tangible contribution to the UN's global goals to combat poverty, hunger and climate change, and promote biodiversity.

#### AGRICULTURE - A POTENTIAL FOUR-FOLD HERO

Based on the examples of agroecology and agroforestry, it is clear that agriculture could be a potential climate hero – if we do it right. We have also seen that we are facing tremendous challenges with increased hunger, with climate change as a driving force. Agricultural investments need to assist both in mitigating climate change and in adapting to the effects of climate change.

The transition must take place all around the world. Lowincome countries need support, so that they can deal with a problem they suffer greatly from, but which they did very little to cause. Evidently, agriculture is an important sector in the low-income economies. Smallholder farmers and the rural population contribute immensely to the global food

<sup>14</sup> The World Bank 2004. 45 FAO and UNEP 2020.

46 The World Bank 2020

47 Hårsmar 2010.

system, yet they are disproportionately affected by hunger and are among the poorest people in the world.

Investments in agriculture are estimated to be up to four times as effective in reducing poverty, compared to investments in other areas, according to the World Bank. 46 Some scientists claim that growth in agriculture could be more than five times as effective in reducing poverty among the worst off in low-income countries.<sup>47</sup> Investments in smallholder farming mean greater food security, as well as access to jobs and income. If the investments also consider gender equality and ensure that women farmers are included, the effects will be even greater. This is because traditional gender roles and cultural norms are some of the most important drivers of hunger, undernourishment and unhealthy diets, especially for women and children. 48 The role of smallholder farmers, especially women and their organisations, as agents of change cannot be overstated, as they are leading the fight for food security. The FAO, among others, stresses the importance of domestic food production to guarantee food security. But without a stable domestic agricultural sector, important cornerstones of food security such as availability and access are very hard to bring about.



#### AGRICULTURE AS THE KEY TO ACHIEVING THE 2030 AGENDA

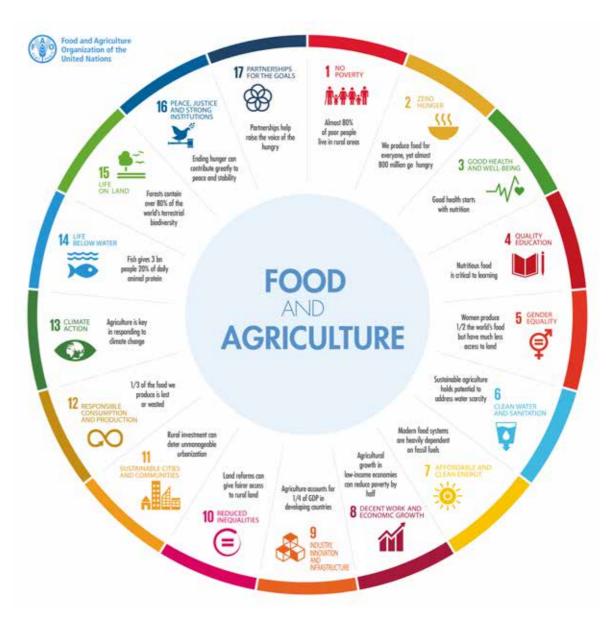
Investments in agriculture are crucial if we are to achieve the 2030 Agenda in its entirety. Figure 8 below shows the role of agriculture for each goal.49

Agriculture and the food we eat can be described as the most fundamental link between humans and our planet, and is one important key in achieving all of the 2030 Agenda. Nutritious food leads to healthy children who can fully access education and contribute to their community's future. With sustainable, gender-equal agriculture, we make sure that the planet can provide food and other resources also

for future generations. By making agriculture an attractive livelihood for youth and future generations, with equal opportunities for women and men, rural life can develop and rural-urban migration can be slowed down.<sup>50</sup>

Small-scale farming thus has the potential to be a four-fold hero, fighting poverty, hunger, gender inequality and climate

Figure 8: Agriculture's role in achieving the UN global Sustainable Development Goals



<sup>&</sup>lt;sup>50</sup> For further information, see FAO 2018, page 71, which has a table showing how different initiatives in agriculture and natural resource manage

ment contribute to the fulfilment of the 17 Agenda 2030 goals in different ways and to varying degrees

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 $<sup>^{\</sup>rm 49}$  FAO undated. Note that the symbol for Goal 10 has been updated since the figure was published, although no newer figure illustrating the role of agriculture for each goal could be found for this report.

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change. This does, however, presuppose that investments aim to change the structure of the food system and transform unequal relations between women and men, and that they are underscored by the principle of climate justice. A lot of resources are required if this is to come true. In the next section, we look at international climate finance and how agriculture is supported in this context.

#### BAROMETER: THE CLIMATE CRISIS IS HITTING SMALLHOLDER FARMERS – AND THEY LACK SUPPORT

Bondebarometern, the 'Farmer Barometer' conducted for the first time in 2021, presents smallholders farmers in developing countries' views on climate change and their ability to cope. Thirty-eight organisations with a total of 3.4 million smallholder members took part in the study.

"Even lower incomes and more difficulty paying for schooling and healthcare.

Smallholder farmers in developing countries are hit hard by the climate crisis, but they get little or no support from their governments to deal with the effects of the crisis.

The situation is especially challenging for women. This is all clear from Bondebarometern, We Effect and Vi Agroforestry's new global 'Farmer Barometer' study."

All 38 of the organisations that responded say that they have seen changes in the climate over the past 15 years. They say it has become increasingly difficult to predict when the all-important rains will come or how intense they will be. Predictable rains are fundamental to agriculture, and when they fail to materialise as they should the farmers experience increasingly long periods of drought and more floods.

Climate change is a very serious problem for smallholder farmers. All the farmers' organisations that responded to the survey say they have seen decreasing yields and poorer quality of the harvest. The result is that the farmers' already very limited incomes are further reduced as the harvests become smaller and decrease in quality. Almost all (33 out of 38) of the organisations say their members have, or have previously had, a lack of food, even though they themselves are farmers. Many also say that their members are being forced to leave their families to work somewhere else, and they are finding it harder to pay for schooling and healthcare.



The barometer shows that the smallholder farmers – and the farmers' organisations that support them – do not have sufficient knowledge and capacity to deal with the effects of climate change. In particular, women's opportunities to deal with the impacts of climate change are adversely affected by limited rights regarding owning and cultivating land. The majority (25 out of 38) of the organisations also said that they or their members do not receive any climate support from the government of their country.

Figure 9: Changes in climate in the past 15 years according to the Bondebarometern survey

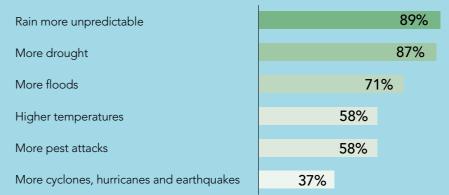
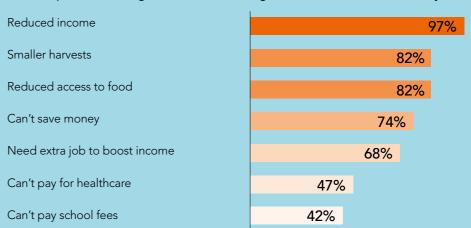


Figure 10: Consequences of changes in climate according to the Bondebarometern survey



The organisations identified measures to reduce and manage the effects of climate change, such as switching from conventional farming to agroforestry and other sustainable farming methods. Such methods can protect the soil during floods, improve growing conditions despite long periods of drought, and increase the yield from farms to boost earnings.

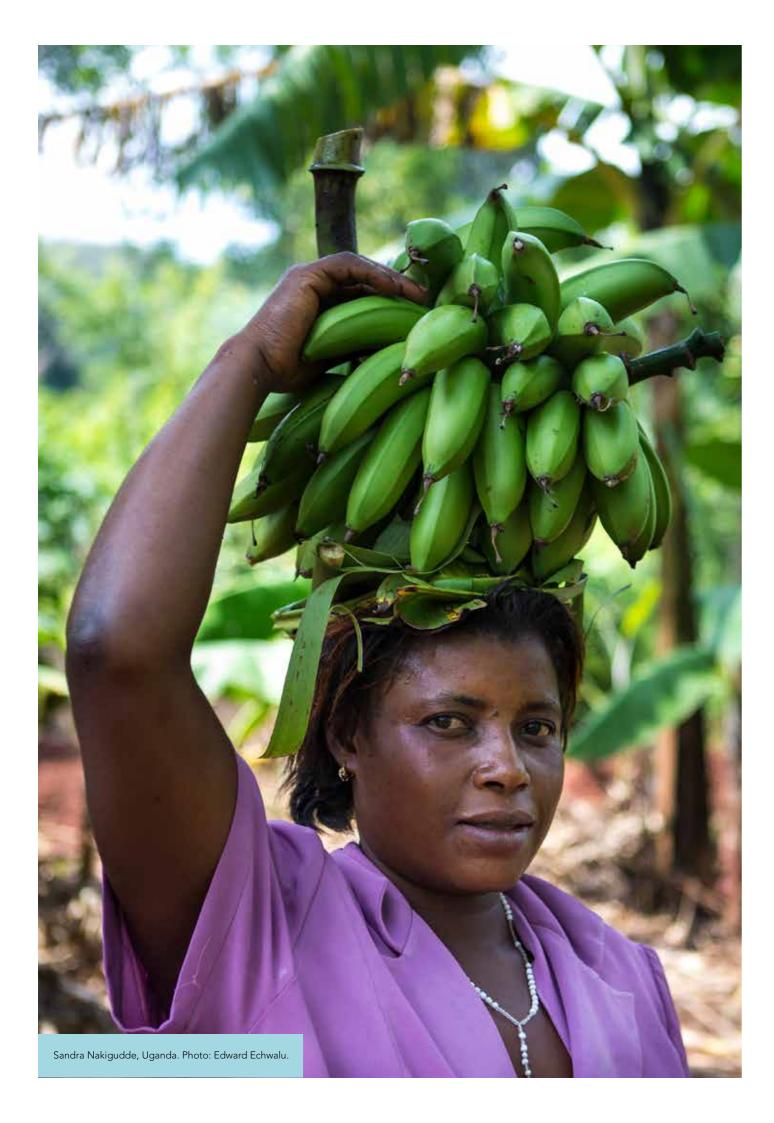
Another important measure that was highlighted was to support farmers in starting savings and loan groups, whereby farmers who have been refused credit by regular banks can save and lend money to each other. These groups can increase farmers'

access to capital, and can support them in diversifying their income by investing in new projects outside of farming, for example. This is a particularly important action for women, who have the most trouble borrowing money.

#### HOW BONDEBAROMETERN WAS CONDUCTED:

In May and June 2021, We Effect and Vi Agroforestry sent out a survey to member-based farmers' organisations in Africa, Asia and Latin America. All the organisations work with either We Effect or Vi Agroforestry, and 38 of them responded, encompassing a total of 3.4 million smallholder farmers in 20 countries.

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## INTERNATIONAL CLIMATE FINANCE – OR A LACK OF MONEY



As has been made clear, climate change is in itself unjust — the very insight that led the world's nations to draw up the Paris Agreement. Tackling injustice is also a pivotal aspect of the UN's Sustainable Development Goal (SDG) 13, combating climate change and its impacts. As part of the Paris Agreement, and SDG Target 13.a, high-income nations have promised to mobilise USD 100 billion a year in climate finance for developing countries starting in 2020. According to the UN Framework Convention on Climate Change (UNFCCC), this climate finance will constitute "new and additional financial resources", i.e. funds over and above what has already been promised in the form of e.g. aid, and will come from both public and private sources. According to the Paris Agreement, the climate finance should be in addition to previous commitments. It should

#### WHAT IS CLIMATE FINANCE?

The UNFCCC defines climate finance as: "Finance that aims at reducing emissions, and enhancing sinks of greenhouse gases and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts." (CPI and IFAD 2020). Some parties, however, use different definitions of climate finance.

be a balanced way of supporting emission reduction and adaptation to the effects of climate change.

According to the latest OECD reports, in 2019 the high-income countries mobilised USD 79.6 billion in climate finance.<sup>51</sup> It is, however, hard to determine how much of this money was additional, partly because different countries use different definitions.<sup>52</sup> The coronavirus crisis has led to changes in priorities among the donor nations, and it appears that the promised finance of USD 100 billion will not materialise. The Paris Agreement states that accountability is required and the funding for climate change actions needs to be provided. Despite this, the existing climate funding is not nearly enough.<sup>53</sup> In other words, the countries that are hit hardest by increased storms, drought and loss of biodiversity caused by climate change are currently paying the bill themselves.

In the upcoming paragraphs we will look more closely at how the climate finance is allocated based on three aspects: how much goes to agriculture, how much targets women, and finally how much climate finance goes to low-income countries.

#### CLIMATE FINANCE FOR AGRICULTURE

Despite the vulnerability of agriculture to climate change and the climate's impact on hunger and poverty, only 3 per cent of the global climate finance went to agriculture in 2017/2018. Roughly half of that finance went to small-holder farmers, if one includes finance for stakeholders that provide farmers with services, including commercial enterprises close to the farmers, and sustainable energy, transport and water. The illustration in Figure 11 shows the kind of activities the finance was used for.<sup>54</sup>

<sup>&</sup>lt;sup>51</sup> OECD 2021.

<sup>52</sup> Act Alliance EU 2021

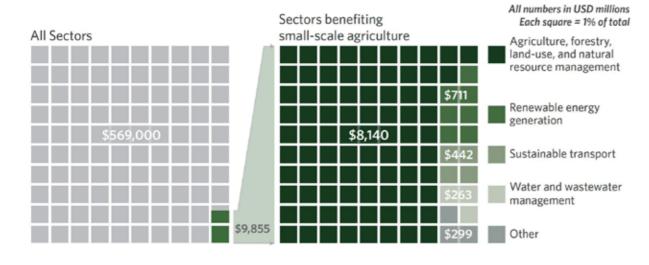
<sup>&</sup>lt;sup>3</sup> UN 2015.

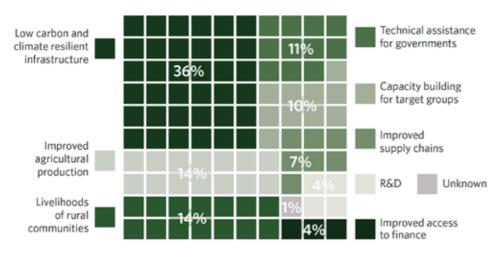
 $<sup>^{54}</sup>$  CPI and IFAD 2020 page 21 and page 25.

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Figure 11: Activities to which global climate finance is channelled

Percentage of annual climate finance to smallholder farming in relation to other climate finance 2017/2018 rounded off, mUSD.





Source: CPI and IFAD 2020 page 21 and page 25

Fifty per cent of the climate finance for agriculture was subsidies. Subsidised loans (or 'concessional debt') and standard loans represented 33 and 16 per cent respectively. Thirty-six per cent of the total climate finance went to Sub-Saharan Africa, 20 per cent to East Asia and the Pacific, and 16 per cent to South Asia. The United Nations International Fund for Agricultural Development (IFAD) and think

tank Climate Policy Initiative (CPI) emphasise that climate finance for smallholder farming is disproportionately low considering the importance of agriculture and its contribution to economic development, as well as the number of people working in the sector – especially in Sub-Saharan Africa and Southeast Asia.<sup>55</sup>

## CLIMATE FINANCE FOR WOMEN, AND WITH A GENDER EQUALITY FOCUS

We observed previously that women are over-represented among the world's poor, and that both climate change and hunger affect them disproportionately.<sup>56</sup> Since 2012, the gender equality aspect of climate change has been a constant on the UN agenda. The annual Conference of the Parties (COP) for signatories of the UNFCCC have anchored gender equality and the empowerment of women

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Silpa Ajuang, Kenya. Photo: Elin Larsson.

<sup>&</sup>lt;sup>55</sup> CPI and IFAD 2020.

<sup>&</sup>lt;sup>56</sup> CONCORD Sweden 2020a; Dunne 2020.

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as a core principle in the Paris Agreement's pre-amble.<sup>57</sup> At COP25 in December 2019, the participating nations adopted a Gender Action Plan (GAP).<sup>58</sup> The plan establishes that women's participation must increase, and that women's rights and equality must be integrated into the implementation of the Paris Agreement.

At the time of writing, however, the plan has yet to be put into practice. Although there has been some change in certain funds, most of the international climate funds contain no gender equality perspective. Due to the structure of the funds, the finance primarily goes to projects that favour men, and makes it hard for female-dominated sectors and organisations to access the finance.<sup>59</sup> One aspect that undermines women's influence over local climate work is that they often don't own land. In many places women have no formal right to own land, or even to cultivate land. This in turn can lead to women being excluded from e.g. climate finance and loans for land-owning smallholder farmers.

The Green Climate Fund is the primary multilateral climate fund for implementing the Paris Agreement. It was created after the UN Conference of Parties in Copenhagen in 2009 (COP15), and its job is to support developing countries through initiatives for climate adaptation and reduction of greenhouse gas emissions. From the very beginning, the fund had a mandate to integrate a gender equality perspective,

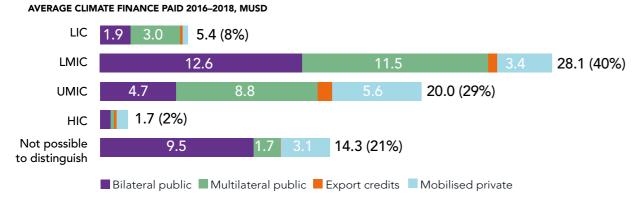
from policy documents to finance. Other progress has also been made that has integrated the gender equality perspective in decision-making and the implementation of projects. The Global Environment Facility (GEF) is the oldest international climate fund, and a policy to integrate a gender equality perspective into it was decided on in 2011. It states that all GEF institutions – primarily multilateral development banks and UN bodies - should be assessed based on their gender equality work, and that there should be strategies for the gender equality work, including goals and indictors divided by gender.

In 2017, there was an evaluation of gender equality integration in GEF collaborations. It noted that almost half of the analysed projects did not have a gender equality focus, but were "blind" to gender aspects. Only 5 per cent were deemed to have integrated gender equality in a successful way. Three years later, the GEF noted in its report on its own gender equality strategy that only 55 per cent of the GEF projects report on gender equality, and that the ones that do often provide limited information and weak analyses.<sup>60</sup>

#### CLIMATE FINANCE FOR THE POOREST COUNTRIES

According to the OECD, only around 14 per cent of climate finance in 2016-18 went to the least developed countries, and 2 per cent to minor island states. Middleincome countries received two-thirds of the climate finance

Figure 12: Distribution of climate finance between low-, middle- and high-income countries



Source: OECD 2020. LIC = low-income countries, LMIC = lower-middle income countries, UMIC = upper-middle income countries, HIC = high-income countries.

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in the period 2016–2018. The distribution between different categories of country is shown in the bar chart in Figure 12.61

In 2019, 71 per cent of public climate finance was loans.<sup>62</sup> Because such a high percentage of the finance was loans, this means that the world's lower-middle income countries (LMIC) have now taken on debt to combat the effects of climate change - effects to which they have not even contributed to any great extent.

#### CLIMATE FINANCE - SUMMARY

There are as yet no statistics encompassing all three aspects of climate finance, i.e. agriculture, women and the least developed countries. What the statistics do show us, however, is that each aspect accounts for a very limited proportion of climate finance overall. Meanwhile, this report shows that it is at the very point of intersection between these three aspects that funding is most needed - and it is also here that the focus must be from a climate justice perspective.

62 OECD 2021

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<sup>57</sup> Schalatek 2020.

<sup>58</sup> UN 2019.

<sup>59</sup> Schalatek 2020.

<sup>60</sup> Schalatek 2020.

<sup>&</sup>lt;sup>61</sup> OECD 2020 page 25. No data for climate finance distribution between low-, middle- and high-income countries for 2019 were found, but the OECD (2021) states that climate finance to the least developed countries increased to USD 15.4 billion in 2019.

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#### **EXAMPLE: CLIMATE FINANCE IN KENYA**

Kenya in Eastern Africa has been a middle-income country for the last few years, even though one-third of its population are counted as poor.<sup>63</sup> Climate-sensitive sectors including agriculture, water, energy and tourism are important pillars of its economy.<sup>64</sup> Kenya represents less than 0.1 per cent of global greenhouse gas emissions, with per capita emissions less than half the global average. Despite this, the country struggles hugely with the effects of climate change and is ill equipped to increase resilience to important hazards such as drought and flooding.<sup>65</sup>

Roughly half of all Kenyans earn their living from agriculture. Agriculture is largely dependent on rain, which makes the farmers vulnerable in times of unpredictable rainfall and extensive drought. One measure of how climate change has affected Kenya is how often it is hit by drought. According to the Kenyan government, drought occurred about every 20 years between 1964 and 1984. More recently however (2007–2012), drought has hit Kenya virtually every year. Severe drought in 2011, for example, caused damage to a value of just over USD 11 billion.

Not long after that, in 2014–2018, drought pushed 3.4 million people into food insecurity.

This was closely followed by floods in 2018 that destroyed huge tracts of farmland, drowned thousands of cattle, and caused hundreds of thousands

of people to lose their homes. The natural hazard induced disasters in turn create a breeding ground for conflicts over the limited resources that are left afterwards.<sup>68</sup>

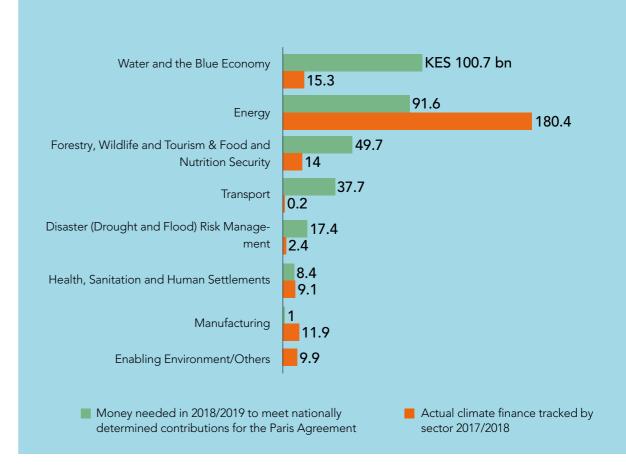
Kenya has signed the UNFCCC and the Paris
Agreement, and has thereby agreed to reduce its
greenhouse gas emissions and combat climate
change. In 2015 Kenya set an ambitious goal to
reduce its greenhouse gas emissions by 30 per
cent, compared to a business-as-usual scenario. In
2020 the goal was raised to 32 per cent. The Kenyan
government has outlined a plan to the UNFCCC
for necessary investments,<sup>69</sup> and estimates that
USD 62–65 billion will be needed in the period
2020–2030 to implement the plan.<sup>70</sup>

It is worth noting that implementing Kenya's plan presupposes that international partnerships account for the majority (87 per cent) of the costs, while the Kenyan government covers the rest. 71 As mentioned previously, it is far from given that Kenya will see this money from abroad. A fresh report has shown that USD 2.4 billion went to climate-related investments in Kenya in 2018. This is less than half of the finance the country is deemed to need annually to achieve its set climate goals. Most (79 per cent) of the international public climate finance for Kenya was provided in the form of loans that have to be repaid. The report also showed that the finance has been awarded disproportionately. 72

Figure 13 shows how much money needs to be spent per sector (the green bars) and how much has actually been spent on each sector (the orange bars).<sup>73</sup> The green bars, which show the needs, are what the Kenyan state has specified to the UNFCCC. When it comes to private climate investments in Kenya, by far the majority are investments

in renewable energy. The energy sector is essentially over-financed relative to the goals and needs that have been set, while several other sectors are under-financed. One of the heavily under-financed sectors, from an apparently low goal, is forestry, wildlife and tourism & food and nutrition security.<sup>74</sup>





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<sup>63</sup> The World Bank 2015

<sup>&</sup>lt;sup>64</sup> Ministry of Environment and Natural Resources 2016.

<sup>65</sup> The Guardian 2021.

<sup>66</sup> The World Bank 2019

<sup>67</sup> Ministry of Environment and Natural Resources 2016. Note that the source does not specify the severity or geographic scope of drought observed annually 2007–2012. Other sources indicate that severe drought hits Kenya in two- to three-year cycles in modern times.

 $<sup>^{68}</sup>$  Ministry of Environment and Forestry 2020. Also see The Guardian 2021.

<sup>69</sup> Nationally Determined Contributions (NDC) are national plans for climate

action, including climate-related goals for reducing greenhouse gas emissions, which the state promises to implement in order to achieve the goals set out in the Paris Agreement. Many countries have conditional NDC, which means they can only carry out the measures if they receive help with finance. <sup>70</sup> Ministry of Environment and Forestry (2020) gives the figure USD 62 billion in a letter to the UNFCCC. The source CPI 2021 gives un updated estimate of USD 65 billion.

<sup>&</sup>lt;sup>71</sup> Ministry of Environment and Forestry 2020.

<sup>72</sup> CPI 2021

<sup>&</sup>lt;sup>73</sup> CPI 2021 page 9. <sup>74</sup> CPI 2021.

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#### CLIMATE JUSTICE

## BASKETS AND COOPERATION IN THE CLIMATE STRUGGLE



At present, Agnes Matheka's farm largely comprises unproductive land. Photo: Onyango Ayany.

The climate crisis and the coronavirus pandemic represent a heavy blow to people already under huge strain in rural Kenya. With support from We Effect, a group of women have turned to baskets and cooperation for help in creating hope, jobs and protection against crises.

The only way to get to the town of Machakos is a 90-minute drive along gravel tracks and nature trails. All around, the land looks a little too dry. Blossoming trees are few and far between, and the vegetation decreases along the way. Once in Machakos, we are met by women from We Effect's local partner organisation, the Machakos Cooperative Union (MCU). They have come to talk about the various We Effect projects in the area and the impact they have had. Many of them are relatively old: the older members of this locality have the heavy burden of supporting the family while the younger ones head off to the city seeking other opportunities. As we talk, a few of the women are weaving baskets. The colour of their sisal hemp matches the beige shades of the surroundings. Lack of water is a widespread problem here.

The land on Agnes Matheka's farm is at present largely unproductive – not for lack of hard work, but because of the water shortage. Previous initiatives to deal with the problem have failed. For example, Agnes has had to pay a lot of money for an artificial water channel, which was supposed to lead water from the river to her farm. But when the river dried out, the channel served mainly as a reminder of the ruthless effects of climate change.

It is common for older women like Agnes to be struggling to support the family, which is why We Effect is working to engage more women in farming in Machakos, and ensure that they have the knowledge and resources to help make agriculture more profitable and better adapted to the climate

Despite the dry land, Agnes is hopeful. The way she sees it, anything is possible. There are living examples among her neighbours that it is possible to find ways of using the land despite the shortage of water. Agnes's view is that if they can do it, so can I.

The Machakos Cooperative Union (MCU) started a basic savings and loan group back in 2002. Each member makes an earnings-based contribution, and can then borrow from the group when they need to. We Effect and the MCU have also supported the farmers in the cooperative to bring in extra income. Current chairperson Mary Munyoli was not involved right from the start, but when the MCU began teaching women how to weave baskets she decided to join and learn.

#### Despite the dry land, Agnes is hopeful. The way she sees it, anything is possible.

The basket making is a result of climate change. When the women in the cooperative were unable to grow or sell their crops as usual, they needed to do something else to cover the loss of income.



Mary Munyoli, Chairperson of the Machakos Cooperative Union (MCU) is one of the people who has begun weaving baskets to secure extra income as climate change threatens harvests. Photo: Onyango Ayany.

The baskets are mainly made for export, but unfortunately the pandemic with its border closures has presented obstacles. A basket that used to sell for around 10 US dollars now sells for only two. But the problems faced by Machakos farmers extend beyond the pandemic: the area is suffering from a severe lack of rainfall. There is barely a drop of water to drink, or farm with.

"Walking to the well is a lot of work. You have to go with

two other people. One has to go down into the well and fill up with water, another passes the water containers up through the well, and a third has to stand at the top and take them. And you have to go late in the evening, as everyone else is there during the day. But that late in the evening, you're never sure what's going to happen," says Mary.

Mary says that one of the few options left is to buy water. But buying 20 litres of water costs 30 Kenyan shillings (about €0.23), which is a large daily outlay for a poor family. There was not much rain in Machakos last year, and this year it's even worse. The water shortage turns the crops yellow and dries them out. The drought has knock-on effects in the shape of plant diseases, insects and pests such as locusts.

The meagre harvests also mean there is no food for the cows, which forces some people to sell theirs. Mary says that some people have sold cows for the same price as goats because they're unable to feed them. The result is a vicious circle: sell the cows and there are no animals to pull the ploughs, don't sell them and they might die from starvation and dehydration. Another problem to add to the already gloomy list is the risk of fire in the dry climate, which can burn down the houses.

This is the reality of life in the town. Currently the cooperative, supported by We Effect, is setting up a sisal plantation, since sisal is relatively resistant to drought. From the plantations, the women can then take the fibres they need to weave baskets.

Another important measure is to install energy-saving jikos (traditional wood-fired stoves), which means that people can get by with less coal than usual for cooking – an important consideration in an environment without many trees. We Effect has also contributed banana plants, drought-hardy seeds and training in new farming techniques.

"We learnt how to make kitchen gardens, by planting in confined spaces using sacks or netting and pouring the water in right there. You don't need to add much water, it can just be what's left over from washing up.

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## TREES INCREASE A FARM'S RESILIENCE TO THE EFFECTS OF CLIMATE CHANGE



Beatrice Wamalwa has gone from being a housewife to a businesswoman, as she herself puts it. With the right knowledge and farming techniques, her maize fields are producing bigger harvests than ever. Photo: Onyango Ayany.

In Siaya, Kisumu and Bungoma in western Kenya, Vi Agroforestry is working with partner organisations to teach new, sustainable farming methods that produce bigger harvests. The project is a collaboration with 30,000 small-holder farmers, to promote sustainable farming methods on 54,000 acres (22,000 hectares) of land. The aim of the project is to boost the farmers' resilience to the impacts of climate change, increase productivity and agricultural crops, raise farmers' incomes and reduce greenhouse gas emissions from agriculture. The project began in 2009.

Vi Agroforestry has trained local farmers in e.g. composting, crop rotation and drip irrigation. The latter is a technique that increases the amount of water that plants can use. Planting trees on a farm decreases evaporation and increases the availability of water for the plants. Trees offer all kinds of benefits for farms, including protecting crops from drought and heavy rains. The result is bigger harvests, and this in turn puts more food on the table, brings in more money and reduces poverty. The farmers in the area can now save money, and have joined saving and loan groups with support from Vi Agroforestry.

Mother of six Beatrice Wamalwa has been a housewife since 1981. Her husband, a now-retired teacher and head master, used to be the main provider. They used to grow

In Siaya, Kisumu and Bungoma in western Kenya, Vi Agroforestry is working with partner organisations to teach
new, sustainable farming methods that produce bigger
harvests. The project is a collaboration with 30,000 small-

Things started happening in 2010 when the Tembelela Women's Group was created, and different experts came along to educate members in sustainable farming methods. In 2011, Vi Agroforestry began teaching local people how to compost, remove weeds, and how to combine crops to maximise growth. In 2012, Beatrice was able to harvest nine sacks of maize per acre. And in 2018 she was up to an impressive 60 sacks. Furthermore, Beatrice has since started adding different crops.

All of this has been invaluable to Beatrice in paying her children's school fees. Today, she can pay for both upper secondary and college education. She has food on the table and money in her pocket.

"My husband sounds different these days when he calls me his wife. I'm the one looking after him," says Beatrice proudly.

Today the family also have dairy cows and chickens. They have been able to construct a brick house for their family, and install solar panels and electricity. They have also

purchased more land and taught their daughters to rear poultry. Beatrice herself says she has gone from being "a housewife to a businesswoman".

The women in the group have learnt to save together, unlike in previous loan carousels that never generated any money. They use the savings to buy seeds and fertiliser. Beatrice feels that her community has changed. People come together for training, to share seeds and help the environment. They understand that the work they do now will help coming generations.

"Food is the most important. You can't even study properly in school if there's no food at home," says Beatrice.

John Nyanja confesses that he came to farming by chance, without any real plan or knowledge of things like crop rotation, environmental protection, water saving or how to prevent soil erosion. Now, though, he is a member of a self-help group, which is learning agroforestry and other crop and livestock farming methods via Vi Agroforestry. As soon as he learnt to make his own compost, he stopped using synthetic fertiliser. Other smart methods John has learnt are growing cover crops and using the push-pull technique – i.e. planting a companion plant that keeps pests away. John's farm now has everything from maize and beans to bananas, passion fruit, avocado and sweet potatoes. He also has geese, goats, chickens and cows. He is delighted to say that he can get a long way today with just a little effort and little rain.

Jane Lusweti rears chickens in her back garden with her husband. She also uses the droppings as a fertiliser on her two-acre farm. They have stopped using shop-bought fertiliser. Using the resources they have available reduces their farming costs considerably. Old mattresses, for instance, keep newly hatched chicks warm.

When Jane first started farming, she produced less than a sack of maize per harvest. Learning about the fertility of the soil and techniques to resist climate change altered the way she farms, and she has been able to increase her yield to the extent that she can rest assured that her family will have food all year – and some to sell. Her kitchen garden ensures that she also has good access to nutritious vegetables. The family have learnt the importance of planting different crops at different times of year, and of using crops

that are particularly tolerant of drought. To help condition the soil Jane has many trees on her farm, and by growing different crops she gets maize stalks, which she uses to grow beans up after the maize harvest.



John Nyanja is better equipped against climate change thanks to learning agroforestry and other crop and livestock farming methods. Photo: Onyango Ayany.

She also says that Vi Agroforestry has contributed to a better gender distribution of work around the home. The women have learnt to chart their evolving roles in the household. Men and women alike can travel away to learn new farming techniques, and then come home and share their knowledge.

"I'm very free now. If I want to go to Nairobi for a week's course I can, and I'm welcomed back afterwards. My husband knows that everything I learn will come in useful in the home."

When it comes to leadership, Jane says that more and more women, herself included, have stepped up as leaders in their own right.

"Don't be a prisoner in your own home! You're not a beast of burden," she emphasises.

Jane would also like to start driving a car soon, so she can travel around and sell her chickens.

"Our finances keep on improving thanks to these farming methods," she concludes proudly. There is no hunger.

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# SWEDEN'S CONTRIBUTION TO CLIMATE FINANCE AND AID

#### SWEDEN'S CLIMATE FINANCE

The Swedish government has pledged to donate a total of SEK 8 billion to the Green Climate Fund over the period 2020–2023. This makes Sweden one of the biggest contributors to the fund per capita.<sup>75</sup> Sweden also makes multiyear contributions to other climate funds that support resilience and adaptation in low-income countries, including the Adaptation Fund and the Least Developed Countries Fund (LDCF). In 2019, Sweden's climate finance totalled SEK 7.5 billion, three times the amount in 2014.<sup>76</sup> Compared to other European countries, Sweden stands out as a positive role model. Sweden's contributions are primarily grants rather than loans.<sup>77</sup>

So while there are a lot of very positive things to say about Sweden's climate finance compared to that of other countries, the climate finance does not constitute new funding in addition to its existing aid budget, even though Sweden made this pledge in the UNFCCC and the Paris Agreement alongside other high-income countries. This point that climate finance should be new and additional, i.e. over and above the aid already in place, is pivotal in this context. The need for international development cooperation has certainly not decreased in recent years. In fact the trend is rather the opposite, with shrinking democratic space, increased hunger and gender inequality in the wake of the pandemic. This is why Sweden should stop redirecting funds from other important areas to climate funds and make additional funding available instead.

#### SWEDISH AID THE CLIMATE AND AGRICULTURE

Sweden's ambition is that a climate perspective should be a hallmark of all Swedish aid. In 2018 the government decided on a strategy for sustainable environment, sustainable climate and oceans, and sustainable utilisation of natural resources 2018–2022.<sup>79</sup> The strategy encompasses a total of

SEK 6.5 billion. Under the strategy, government development cooperation agency Sida should contribute to the following goals in climate-related sustainable development:

- Climate change mitigation, and reduction of greenhouse gas emissions and air pollution.
- Reduction of vulnerability among people living in poverty, and increased resilience in dealing with climate change and natural hazards.
- Sustainable energy systems based on renewable energy.

In the section on climate change, agriculture is not mentioned. In the area of sustainable environmental development and sustainable utilisation of natural resources, agriculture and forestry is mentioned once. The strategy does, however, have a clear gender equality and gender rights perspective, which continuously highlights the particularly vulnerable situation of women and girls in relation to e.g. climate change.

Sida has two policy markers for climate change: adaptation and mitigation. In 2019, just over 90 per cent of payments from Sida were focused on either of these markers. This broadly conveys the idea that climate permeates the portfolio as a whole. Climate change adaptation is an objective or primary objective for 88 per cent of the payments; the corresponding figure for mitigation is 67 per cent.

It is not fully clear how much of the climate work focuses on agriculture, but the strategy report for 2019 does mention a couple of initiatives. During autumn 2019, Sida decided on a new challenge fund called Water and Energy for Food. Sida also cooperates with the International Finance Corporation, the aim being to establish capacity and strengthen institutional conditions to issue

<sup>75</sup> Swedish Ministry for Foreign Affairs 2019.

<sup>76</sup> Swedish Ministry of the Environment 2020.

<sup>7</sup> Act Alliance EU 2021

<sup>&</sup>lt;sup>78</sup> CONCORD Sweden 2020b. The Left Party is the only party (disregarding separate motions from the Social Democrats and the Green Party)

to propose new and additional funds for climate aid over and above previously pledged aid.

<sup>&</sup>lt;sup>79</sup> Government Offices of Sweden 2018.

<sup>&</sup>lt;sup>80</sup> Sida 2020.

green bonds on growth markets. The portfolio also helps to increase capacity among developing countries to carry through on their climate convention commitments. The World Resources Institute has started an initiative called Partnering for green growth and the global goals 2030. It brings together companies, governments and NGOs in innovative public private partnerships. It offers advice and finance to help partnerships grow, and global models for sustainable solutions in food and agriculture, water, energy, cities and circular economy. The strategy for sustainable environment, sustainable climate and oceans, as well as sustainable utilisation of natural resources, presupposes close collaboration with the strategy for sustainable economic development. Such collaboration primarily involves the utilisation of natural resources, including agriculture, fishing and forestry, as well as land rights, sustainable enterprise/ green growth and the development of guarantees.

Zooming in on Sweden's international development assistance, Sida spent SEK 1.4 billion on agriculture and food security in 2019.81 This means that agriculture and food security comprised just 2.6 per cent of total Swedish aid in 2019. This is despite the central role of agriculture in reducing poverty, ensuring access to food and, as shown above, its vulnerability to climate change and its potential to combat it. Seventeen per cent of the aid for agriculture and food security has environmental sustainability as its main purpose, and 78 per cent as a significant purpose.82

Looking at gender equality, 20 per cent of total Swedish aid in 2019 had gender equality as its main focus.83 Of this, 4 per cent goes to agricultural aid. Both amounts and percentages increase if the definition is expanded to include aid that does not have gender equality as its primary purpose, but does have a gender equality perspective. This is where 68 per cent of all aid from Sweden is to be found. Of these funds, just 8 per cent goes to aid relating to agriculture, forestry and fishing.<sup>84</sup> Aid initiatives that combine a strong gender equality focus with agriculture, climate and environment therefore represent a very small proportion of total Swedish aid.

#### AGRICULTURE, SWEDEN'S CLIMATE FINANCE AND AID - SUMMARY

Sweden makes a relatively large contribution to global climate finance. We are, however, not living up to the pledges we made as regards additional funds for climate finance. Sweden's climate finance is channelled through the funds outlined previously in this report. As was evident, these funds have a very limited focus on agriculture, and a slight focus on gender equality. This is also reflected in Sweden's climate finance. When it comes to Swedish development assistance, it has a strong climate focus, but both climate-related aid and aid as a whole have a very limited focus on agriculture. Gender equality is, however, strongly integrated in Swedish aid.



<sup>&</sup>lt;sup>81</sup> Note that this figure is higher than the SEK 1.156 billion that went to agriculture in 2019 according to the OpenAid database. 82 Sida's Helpdesk for Environment and Climate Change 2020; Sida 2020.

<sup>83</sup> Sida 2019. Globally speaking, only 4 per cent of all donor countries' aid has gender equality specifically as its primary goal. Of this amount, around 10 per cent is in turn allocated to agriculture. See OECD 2019a.

## **RECOMMENDATIONS**

Today's level of climate finance, both public and private, is insufficient. In fact the latest IPCC report shows that current climate finance is 3–6 times lower than what is needed to stay within the 1.5°C target.

At the same time, international levels of Official Development Assistance (ODA) are too low and can absolutely not be decreased further. At a time of crisis, such as a pandemic, war or the ever-present climate crisis, direct support cannot be taken from current ODA.

Both international ODA and climate finance need a high level of funding, and the climate finance needs to be additional to current levels of ODA.

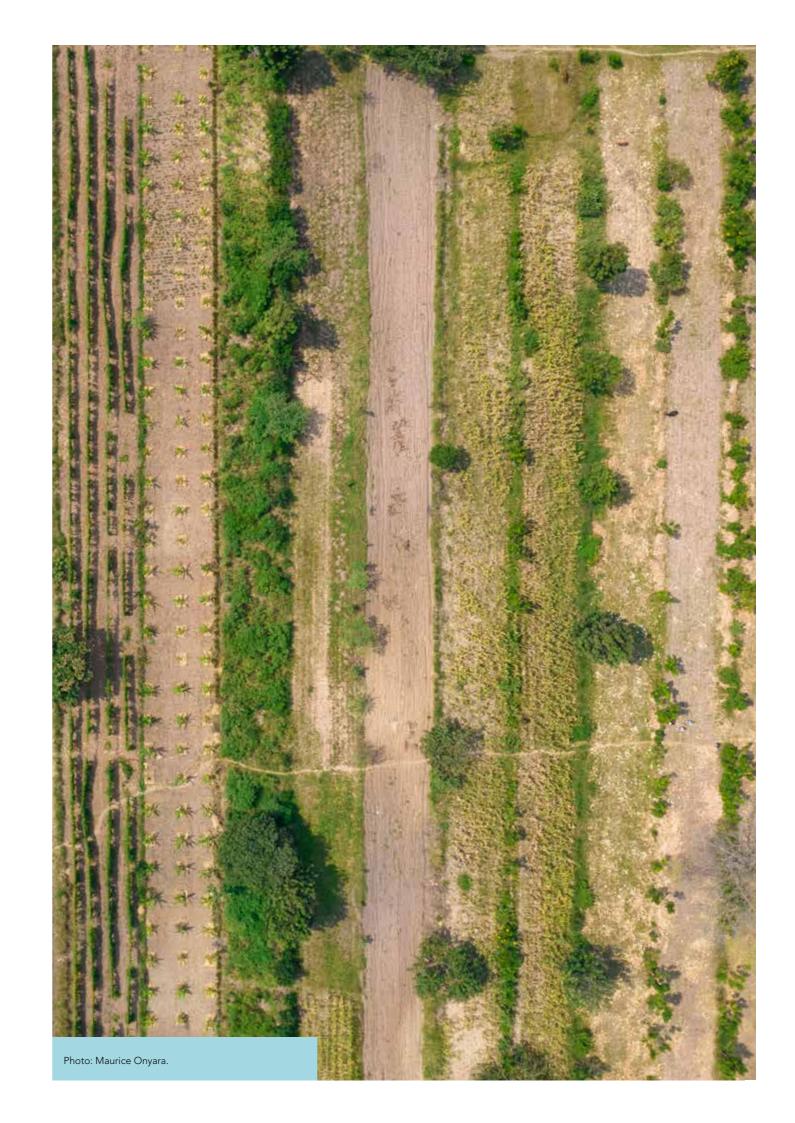
Vi Agroforestry and We Effect recommend the following to policy and decision makers:

#### 1. Make climate justice the overarching goal for international climate policy.

While climate change is a global problem and a major source of injustice that needs global solutions, the causes of climate change is not evenly distributed nor can the responsibility for solving it be. Those who have contributed the most to the climate crisis must subsequently take the greatest responsibility to decrease its emissions, support resilience measures and restoration of ecosystems.

- **2. Make climate finance truly new and additional.** Climate finance must be additional to current levels of ODA. No funds should be deducted from ODA to finance climate action.
- **3. Increase focus on climate adaptation in international climate finance.** Adaptation measures are as important as mitigation actions, yet adaptation is receiving less funding compared to mitigation. This must change, and climate adaptation should receive a vast majority of the climate finance channelled through development assistance.
- **4. Make climate finance needs-based.** The sum of climate finance should be based on, but not limited to, the costs that low-income countries face to adapt to the consequences of a changing climate. As shown in this report, adaptation needs to far exceed the funding currently available. The world is not doing enough.
- **5. Ensure that more climate finance reaches people living in poverty.** Climate finance must reach all the way to those communities that are hit hardest by the climate crisis, especially small-holder farmers, women and children, in line with the main principle of the 2030 Agenda that no one should be left behind.
- 6. Demand a stronger position for agriculture and gender equality in climate politics.

Change the structure of the global food system to achieve a four-fold effect: mitigate climate change, strengthen the capacity of developing countries to adapt, boost the rights of women in rural areas, and reduce poverty and hunger.



CLIMATE JUSTICE

#### CLIMATE JUSTICE

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### **ABBREVIATIONS**

COP	Conference of the Parties, referring to UN summit meetings on climate and biodiversity	LDCF	Least Developed Countries Fund, part of UNFCCC
СРІ	Climate Policy Initiative, think tank	LMIC	Lower-Middle Income Countries
GEF	- · · · · · · · · · · · · · · · · · · ·	MCU	Machakos Cooperative Union
	climate fund	NDC	Nationally Determined Contributions
FAO	Food and Agriculture Organization of the United Nations	OECD	Organisation for Economic Co-operation and Development
HLPE	High Level Panel of Experts on food security and nutrition within the UN	UNFCCC	United Nations Framework Convention on Climate Change
IFAD	The UN International Fund for Agriculture Development	WFP	The UN World Food Programme

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Vi Agroforestry fights poverty and climate change together through agroforestry, and We Effect works for a just, sustainable world free of poverty.

Both organisations want to enable women and men living in poverty to improve their lives.

This report has been written jointly by Vi Agroforestry and We Effect.



