



# ‘Climate-Smart Agriculture’: the Emperor’s new clothes?

} The concept of ‘climate-smart agriculture’ being promoted by a Global Alliance is too broad

} The Alliance does not question the structural causes of climate change and hunger

} The Alliance lacks transparency and social and environmental safeguards

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The paper argues that there is a real risk with the current concept of 'climate-smart agriculture' as being promoted by the Global Alliance for Climate-Smart Agriculture and other actors of the international community. It also highlights concerns and flaws identified in the Global Alliance for Climate-Smart Agriculture, before suggesting alternative elements and principles which should be at the heart of initiatives truly dedicated to tackling the climate and food crises.

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# Executive summary

Today we find ourselves facing converging food and climate challenges of an unprecedented scale. While on the one hand we live in a world in which nearly 805 million people are suffering from chronic hunger,<sup>1</sup> this situation is set to be exacerbated by climate change, which poses a major threat to food security. The Intergovernmental Panel on Climate Change (IPCC) predicts that food insecurity could increase by between 15-40 per cent by the year 2050.<sup>2</sup> Agriculture and the food system have a unique and complex role to play within this context. Firstly, as a source of food and nutrition security, they serve as a lifeline to millions, yet despite decades of increased production, millions of people remain without access to adequate food. Secondly, they are also major contributors to the causes of climate change, and therefore an integral part of the problem driving food insecurity. Thirdly, agriculture is a sector that is immensely vulnerable to the impacts of climate change, and in this context, it is crucial that small-scale food producers are enabled to build farming practices that make them more resilient to such changes. To achieve food security for everybody it is therefore imperative that global agriculture and the food system are reformed in such a way that they:

- }] Are more resilient to the impacts of climate change (known as ‘adaptation’) and other shocks and crises (such as food price volatility, the ongoing economic crisis, and depletion of natural resources);
- }] Contribute less to global climate change (known as ‘mitigation’);
- }] Ensure the right to food of people through appropriate levels of production as well as through distribution and equitable access.

This unique role of agriculture presents a whole host of challenges which are technical, environmental, social, and economic in nature, and all relevant stakeholders – policy makers, academics, civil society, and scientists among them – grapple with ensuring food security in a climate-constrained world. Extensive research and debate have been increasingly emerging around this theme of late, and within this context, the concept of ‘climate-

smart agriculture’ (CSA) – a term first coined in 2009 and subsequently developed in 2010 by the Food and Agriculture Organization (FAO) of the United Nations (UN) – has surfaced as a “new conceptual framework that aims to simultaneously address”<sup>3</sup> these interlinked challenges of food security and climate change.

As defined by the FAO, ‘climate-smart agriculture’ “sustainably increases productivity, resilience (adaptation), reduces/removes greenhouse gases (mitigation) while enhancing the achievement of national food security and development goals.” However, CIDSE perceives some significant weaknesses in terms of content, particularly regarding:

- }] The absence of criteria to distinguish models which are sustainable from those which are not, and the degree of emphasis on productivity at the expense of the broader context and set of issues at stake;
- }] The absence of the concept of the right to food;
- }] The somewhat limited conception of resilience which does not challenge the structures that made people vulnerable in the first place, and
- }] The misplaced focus on climate change mitigation while focusing on small-scale farmers, and the failure to recognise the contribution of specific models and historical responsibilities of developed countries regarding greenhouse gas (GHG) emissions that result from such models.

CIDSE believes that as long as a lack of clarity around the concept prevails, the term ‘climate smart’ will continue to be misleading, offering leeway for socially and environmentally detrimental practices.

The Global Alliance for Climate-Smart Agriculture (hereafter “the Alliance”) has emerged as a voluntary initiative, in parallel to and independent of pre-existing global institutions and agreements governing the world’s response to food insecurity and climate change. This approach in itself undermines the relevance, legitimacy and any potential impact posed by the initiative



from the outset. Bodies such as the World Committee on Food Security (CFS) and the United Nations Framework Convention on Climate Change (UNFCCC), amongst others, are the appropriate and legitimate fora for tackling the challenges of food insecurity and climate change whilst prompting political action to keep global temperature increase below two degrees Celsius. The Alliance established a roadmap during the third Global Conference on Agriculture, Food and Nutrition Security and Climate Change<sup>4</sup> (held in 2013 in South Africa), which includes the launch of the Alliance during the UN SG Ban Ki-moon Climate Summit in September 2014.

While the efforts of the Alliance might be regarded by some as the international community's first attempt at a systemic approach towards the problems in question, bringing policy issues pertinent to agriculture, food security, climate change and sustainable development all together under one umbrella, CIDSE believes that the concept of 'climate-smart agriculture' being promoted by the Alliance is a missed opportunity for the following reasons:

- }] The Alliance does not question the structural causes of the problems it claims to address;
- }] The concept of CSA is so broad that it "encompasses virtually any agricultural practice,"<sup>5</sup> even potentially unsustainable ones which can compromise the future resilience of communities;
- }] The Alliance may create confusion and further fragment food security policies and risks to weaken recognised governance spaces;
- }] The Alliance lacks transparency, a governance structure, and social and environmental safeguards.

As a result, the Alliance risks diverting attention away from the real changes needed, leading to a misplaced emphasis on building an enabling environment for international investments, developing markets and increasing the commodification of nature and agriculture, in addition to promoting technological fixes and increasing regional specialisation and international trade. These approaches do not bring anything new to the public debate on food and agriculture;

they also fail to meet the high standards implied by the Alliance as outlined in its Global Alliance for Climate-Smart Agriculture Framework Document (hereafter referred to as the "Framework Document"). The current vagueness of the concept and the many questions still pending regarding the Alliance's governance and vision give leeway for the justification – via a simple and superficial 'climate-smart' label – of a whole plethora of projects, alliances and initiatives which have no adequate accountability and monitoring mechanisms in place to ensure legitimacy, coherence and transparency of their proposed approaches.

CIDSE considers that the current concept of 'climate-smart agriculture' being promoted by the Alliance is gravely flawed and threatens to open a veritable Pandora's box of social and environmental risks and detrimental impacts. CIDSE calls upon policy makers to support a real transition towards agroecology – the only approach, science and set of practices which truly addresses the three pillars in which 'climate-smart agriculture' is centred – and to foster more socially and environmentally sustainable food systems at global level by:

- }] Implementing a rights-based approach;
- }] Developing food democracy;
- }] Strengthening local and regional food systems;
- }] Helping citizens to improve their dietary habits, partly through the consumption of local and seasonal products;
- }] Strengthening small-scale farming systems to support local economic development;
- }] Scaling-up agroecology.

As our paper intends to demonstrate, there are many good policies, frameworks, guidelines, models and alternatives to overcome hunger in the face of climate change which already exist and which could help shape our food system, both in the global North and South. Yet, they lack implementation, and this is where action is needed. CIDSE invites policy makers and other stakeholders engaged in the fight against hunger to elaborate on these aforementioned approaches in order to overcome the challenges posed by climate change and to secure the human right of all people to feed themselves in dignity.



The first part of this paper discusses the definition of 'climate-smart agriculture' and outlines CIDSE's understanding of the different dimensions of the challenges pertaining to the food system in a climate-constrained world, namely: productivity, mitigation and resilience. Underpinning these dimensions allows us to outline CIDSE's overall vision of food and nutrition security which can truly address the three pillars on which 'climate-smart agriculture' is intended to be based. In contrast to this vision, CIDSE believes there is a real risk that the current concept of 'climate-smart agriculture' as being promoted by the Alliance, other members of the international community and the private sector, will not be able to live up to its own vision in practice.

The second part of this paper focuses on the Global Alliance for Climate-Smart Agriculture specifically, in order to highlight the concerns and flaws identified by CIDSE in terms of safeguards, governance and investments. Building on this analysis, the paper aims to offer alternative elements and principles which CIDSE believes should be at the heart of initiatives truly dedicated to tackling the climate and food crises.



# The concept of 'climate-smart agriculture' – A reality check

## The right to food and sustainable models of production – Unleashing the power of agroecology

In the past, Green Revolution initiatives and policies – based on the “assumptions that abundant water and cheap energy to fuel modern agriculture would always be available and that climate would be stable and not change”<sup>6</sup> – solely focused on increasing production. While enhancing crop yields, this approach “proved to be unsustainable as it damaged the environment, caused dramatic loss of biodiversity and associated traditional knowledge, favoured wealthier farmers, and left many poor farmers deeper in debt.”<sup>7</sup> Nowadays, due to a context in which climate change is gaining importance and international attention, a shift towards a focus on ‘productivity’ is emerging in diverse international fora. As a positive result, current discourses frequently include ideas and concepts such as ‘improving the efficiency of production’, based on approaches which aim to reduce the amount of external inputs required to produce the crop yields equal to those produced with old-fashioned, input-heavy approaches. The concept of ‘climate-smart agriculture’, as developed by the FAO, is encompassed within this trend,<sup>8</sup> but unfortunately, this semantic change is not always accompanied by changes in practices since such discourse is also used to promote models and practices inherited from the past and which pose serious threats to long-term ecological and economical resilience.

## Agroecology and small-scale farming systems: the path towards climate-resilient agriculture

CIDSE believes that agroecology is the only approach, science and set of practices which is truly productive in the face of climate change. As highlighted by Olivier De Schutter during his tenure as UN Special Rapporteur on the Right to Food, agroecology can produce positive impacts on several dimensions of food security, such as (i) availability (by increasing yields);<sup>10</sup> (ii) accessibility (by enhancing on-farm fertility production and reducing farmers’ reliance on external inputs);<sup>11</sup> and (iii) adequacy (by increasing the diversity of agroecosystems, leading to diversified diets and nutritional gains), to name but a few. Moreover, agroecology can also increase the sustainability and resilience of food systems. These impacts are made possible, and more so because agroecology delinks “food production from reliance on fossil energy.”<sup>12</sup>

The combination of agroecology and small farming systems is needed if increases in production are to go hand in hand with increases in productivity. In practicing polycultures and on-field diversification, “small farms are much more productive than large farms if total output is considered rather than yield from a single crop.”<sup>13</sup> Moreover, “there are many cases where even yields of single crops are higher in agroecological systems that have undergone the full conversion process.”<sup>14</sup>

## Why agroecology?

“Agroecological initiatives aim at transforming industrial agriculture partly by transitioning the existing food systems away from fossil fuel-based production largely for agroexport crops and biofuels towards an alternative agricultural paradigm that encourages local/national food production by small and family farmers based on local innovation, resources and solar energy. This implies access of peasants to land, seeds, water, credit and local markets, partly through the creation of supportive economic policies, financial incentives, market opportunities and agroecological technologies.”<sup>9</sup>

In light of such evidence, CIDSE believes that agroecology and small-scale food producers can play a vital role in the much needed holistic approach towards addressing the structural causes of hunger and poverty, while also increasing the sustainability and resilience of food systems. CIDSE also believes that by directing the onus away from productivity alone, a solid set of alternatives is at our disposal for addressing the structural causes of poverty and hunger in a climate-constrained world (*see page 10 for more*).

### **‘Climate-smart agriculture’: a failure to identify specific models of agriculture**

Proponents of ‘climate-smart agriculture’ acknowledge the limits and negative consequences of an approach which focuses solely on production and does not take long-term environmental sustainability into account. This explains why sustainably increasing agricultural productivity and incomes is the first pillar on which the concept of ‘climate-smart agriculture’ is based.<sup>15</sup> This concept is further developed in the Alliance’s Framework Document, which promotes “sustainable increases in the productivity of food systems, by a sustainable use of natural resources, the adaptation of people’s livelihoods that are threatened by climate change, and agricultural practices that contribute to reduced emissions and less deforestation as a result of agriculture.”<sup>16</sup>

As it stands, the definition of CSA holds true for agroecological practices. However, it does not exclude a broad range of other practices and technologies such as herbicide-tolerant crops, sustainable intensification, genetically modified seeds<sup>17</sup> and energy-intensive, large-scale industrial agriculture among others – all of which CIDSE considers to be part of the problem rather than a solution, since increases in productivity gained through such practices would compromise long-term economic and ecological resilience. Consequently, any practices or technologies focused on increasing yields alone (thereby minimising greenhouse gas emissions from reduced deforestation), whilst also claiming to reduce the total amount of external inputs

needed for production (thus minimising the environmental impact of such practices) could potentially be seen as ‘climate smart’.

Whilst a clear definition of what CSA is and what it is not remains absent, all manner of stakeholders are entitled to label their preferred modes of agriculture as ‘climate smart,’ even when only common efficiency improvements of conventional food production are referred to. This does not contribute to bringing about the ‘paradigm shift’ being called for by the International Assessment of Agricultural Knowledge, Science and Technology for Development<sup>18</sup> (IAASTD). CIDSE calls for the identification of agricultural models which are truly productive, sustainable and resilient, and demands that a distinction be drawn between these models and those which are unsustainable.

Another major flaw of the concept lies in its failure to question the way in which food systems are designed, leaving several dimensions of the food chain – other than the production one – aside (*see below and pages 10 and 13 for more*). Whilst climate change is clearly undermining food production capacities, CIDSE reminds decision makers that food security cannot be achieved through food ‘availability’ alone, since food insecurity is not solely a matter of insufficient production but also of inadequate access.

### **Climate change mitigation – Unpacking the causes of greenhouse gas emissions**

Agriculture is a major contributor to climate change. According to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), the agriculture sector, excluding emissions from fossil fuel consumption of machinery or from the production of fertilisers, accounts for 13 per cent of global anthropogenic greenhouse gas (GHG) emissions,<sup>19</sup> and for about one third of total anthropogenic GHG emissions when considering land-use change (including deforestation).<sup>20</sup> It is hence paramount that any policy dedicated to reducing GHG emissions should carefully comprise agriculture.



Whilst food production is widely blamed for generating the lion's share (80 to 86 per cent) of GHG emissions related to the food system, several authors also underline the fact that in "developed countries", "emissions resulting from activities beyond the farm gate account for approximately half of food chain emissions."<sup>21</sup> The Consultative Group on International Agricultural Research (CGIAR) emphasises that "middle-income countries will likely follow this trend in the future."<sup>22</sup>

### Mitigation in different stages of the food chain

CIDSE believes that mitigation policies must address both production and post-production activities that are part and parcel of the food system. In addition, there is a need to acknowledge the limits and dangers of industrial farming systems: in this regard States must acknowledge that the way our food systems are designed is currently exacerbating the climate problem, and as such radical changes are urgently needed in order to cope with the effects of climate change. Investments and climate finance dedicated to agriculture should therefore aim at reshaping our food systems (*see page 15 for more*) in a sustainable and resilient way (*see page 10 for more*).

In response to this situation, CIDSE calls on policy makers to acknowledge that, regarding production, agroecological methods can play a fundamental role in (re)building healthy soils – an essential asset for strong productivity. Agroecological methods reduce external inputs (increasing resilience), reduce GHG emissions, "restore soils and in some cases may sequester more carbon in microbial biomass and better support nitrogen-fixing bacteria populations."<sup>23</sup>

Whilst soil carbon sequestration may result from such practices, it should not be considered the primary goal of mitigation policies, but rather "an outcome of good agricultural management"<sup>24</sup> (e.g. restoring soils and tackling fossil fuel dependency through agroecological methods). Nor should it be considered as a way to further develop carbon market mechanisms. Yet, these principles address merely the production side

of food systems. Combining agroecological methods with "stopping land clearing and deforestation for plantations, distributing food mainly through local markets instead of transnational food chains, decentralising livestock farming and integrating it with crop production"<sup>25</sup> could reduce the total amount of current global GHG emissions by half, demonstrating the importance of an integrated approach covering the different dimensions of the food system. In light of these arguments, CIDSE advocates for:

- }] Support towards food production processes and distribution practices which are more resource efficient and less detrimental to the environment in terms of GHG emissions;
- }] The dissemination of agroecological approaches through people-led and participatory research and grassroots movements, such as *farmer-to-farmer* networks;
- }] Support for producers' and processors' organisations and cooperatives in order to facilitate enhanced post-harvest methods, preservation techniques, packaging and distribution systems to reduce waste and losses and add value at local level (e.g. processing facilities and food hubs);
- }] Investment in public awareness strategies for helping citizens to improve their dietary choices (by, for example, consuming less meat – where it is over-consumed – and more local and seasonal products), and reduce food waste, particularly in developed countries.

### 'Climate-smart agriculture' on mitigation in agricultural production

According to the FAO Climate-Smart Agriculture Sourcebook, there are two ways in which agricultural production can contribute to mitigating climate change that are in line with the prime objective of improving food security.<sup>26</sup>

The first way is to "improve efficiency by decoupling production growth from emissions growth,"<sup>27</sup> which amounts to increasing the productivity of agriculture in order to spare land (with the objective of reducing deforestation, minimising the



pressure of agriculture on the environment and allowing carbon storage) and to raise efficiency in the use of natural resources and inputs in order to reduce GHG emissions per unit of product. This approach is what is generally referred to as ‘sustainable intensification of agriculture.’ It complements “conventional approaches inherited from the Green Revolution model by a more systemic approach to sustainably managing natural resources, including through a more selective use of external inputs,”<sup>28</sup> offering to combine them depending on the context. As for ‘climate-smart agriculture’, the problem with sustainable intensification is that it is not specific and could encompass many different agricultural practices and/or technologies. Whilst on the one hand agroecology could feasibly fit under this umbrella, so too could conventional agriculture and a whole array of ‘false solutions’ – such as biochar,<sup>29</sup> no-till industrialised agriculture<sup>30</sup> and technologies such as genetically modified organisms (GMOs), which not only pose risks for consumers, but also create dependencies on corporations and favour large-scale farming.

The second way in which agricultural production can contribute to the mitigation of climate change, according to the FAO, is via the enhancement of soil carbon sequestration. According to the 2007 IPCC report, carbon sequestration represents 89 per cent of the total technical mitigation potential (per year) that has been estimated,<sup>31</sup> especially in developing countries. Yet, these assumptions fail to include many practices that have proven their ability to enhance soil quality and improve yields in organic farming systems worldwide.

They do not look at the substitution of industrialised fertilisers, the positive impact that restricting concentrate feed for animals could have on deforestation, or the potential of reducing food losses. They also fail to address the consumption side of the equation, including the reduction of food waste or dietary issues.<sup>32</sup> These aspects, however, are pivotal, since emissions have risen substantially due to meat consumption and the use of synthetic fertilisers in recent decades.<sup>33</sup> Furthermore, CIDSE has observed that the focus on soil carbon sequestration is being used to push for the inclusion of agriculture in carbon markets, such as the Clean Development Mechanism and the forthcoming New Market mechanisms.<sup>34</sup> Ultimately, CIDSE qualifies such carbon market proposals as false solutions.<sup>35</sup> Notwithstanding the complexity of such sequestration and the limits and risks related to it – such as, among others,<sup>36</sup> increasing the value of scarce land, often leading to land grabbing and the support of inappropriate technological solutions for farmers – the real issue at hand is “tackling fossil fuel dependence and the consumption habits supported.”<sup>37</sup> (*see page 10 for more*).

While CIDSE recognises the need to improve the way in which soils are managed, we believe that using climate change to perpetuate the misguided discourses on production and carbon markets mechanisms divert attention away from what should be the primary goal of any mitigation policy: a radical shift in the conventional agricultural model towards agroecological farming systems, as well as a radical shift in the way our food system works towards securing the right to food.

As there is a differentiated impact of models of agriculture on climate, CIDSE believes that differentiated responsibilities are also needed, and that the burden of mitigation should not be placed on the shoulders of developing countries or on the shoulders of small-scale food producers alone. Tackling climate change in a fair and equitable way calls for the identification of the main structural sources of GHG emissions, and requires States and governments to develop policies that support a transition towards food systems that emit drastically fewer GHG emissions. Moreover, the historical responsibility of industrial agriculture – and therefore the historical responsibility of developed countries – needs to be acknowledged and recognised,<sup>38</sup> be it in terms of emissions related to production, transformation and distribution or in terms of deforestation.<sup>39</sup> Not making a choice between different sets of technologies, models and practices amounts to giving up on truly tackling the structural causes of climate change.



## Building resilience – Looking beyond adaptation and redesigning our food system

### Resilience: a concept encompassing various scales and issues

The concept of increasing the resilience of food systems is widely understood as a need to decrease their vulnerability and increase their capacities to adapt when shocks occur. Generally speaking, resilience refers to the ability to cope with and adapt to risks, uncertainty and vulnerabilities. As such, resilience is concerned not only with climate change but also with food price volatility, globalisation, soil depletion and contamination, economic crises, energy shocks and the depletion of natural resources. Seeking to increase the resilience of our food system should be done in a coherent and comprehensive way in order to ensure that the remedies (practices and policies) proposed do not increase the vulnerability of other dimensions of the food system. Moreover, the “power structures that made people vulnerable in the first place”<sup>40</sup> also need to be challenged. Failing to rise to this challenge opens up the risk of achieving the polar opposite of the desired outcome.

### Concentration and dependency on imports: a contribution to the vulnerability of our food systems

For CIDSE, developing sustainable and resilient food systems must be on a par with fighting against vertical concentration (where one company undertakes or otherwise controls all or many parts of a supply chain)<sup>41</sup> and horizontal<sup>42</sup> concentration. These aims should go hand in hand with the objective of minimising the dependence on imports and exports. Indeed, “for many countries in the global South, export-led growth has failed to deliver on its promises and has meant spending valuable foreign currency reserves on importing vital foodstuffs in which they had once been self-sufficient.”<sup>43</sup> It has also led to the increased vulnerability of these States to food price volatility, energy shocks and economic crises. In his final report as Special Rapporteur on the Right to Food, Olivier De Schutter identified such dependency as a recipe for social and political instability.<sup>44</sup> Correspondingly, “food availability for intraregional distribution and consumption” needs to be increased.<sup>45</sup>

## Food and energy: a fundamental nexus for resilience and sustainability

In many analyses of the climate and agriculture nexus, one fundamental element is all too often left aside: the debilitating dependence of our food system on cheap energy. “Ranging from the production of agricultural inputs to almost all farm operations and on to long-distance transport of food across continents, fossil fuels have become an integral component of agri-food systems.”<sup>46</sup> Some studies suggest that the industrial model of agriculture takes between seven to ten energy calories to produce one calorie of food.<sup>47</sup> Not surprisingly, the food prices curve is now following that of oil prices, participating in the overall increase of food price volatility experienced globally over recent years. This energy dependency is one of the major threats facing our food system today: in 2010, the International Energy Agency recognised that the production of conventional oil peaked in 2006<sup>48</sup> and started declining in 2009.<sup>49</sup> Whilst it would be premature to suggest that the oil era is dead, these figures certainly indicate that the era of cheap oil is coming to an end. Among the existing alternatives to the depletion of conventional oil we find shale gas, shale oil, oil sands,<sup>50</sup> and biofuels, amongst other options. From the climate perspective alone the impacts of such approaches pose an ecological nightmare, but food security is also at risk. “The risk of new resource scarcities is real because global energy demand is expected to rise by 40 per cent by 2030,”<sup>51</sup> but also because “there are several potential peaks (...) to confront in the immediate and slightly distant future” in terms of energy but also in terms of agricultural inputs (such as phosphorus).<sup>52</sup>

## Seeking alternatives for resilient food systems

CIDSE believes that achieving resilience in a coherent and effective way demands a redesign of our food systems, placing diversity (in social, economic and ecological terms) and self-reliance at the centre of any ‘climate-smart’ policies and practices. Implementing efforts to meet appropriate criteria would significantly reduce risks and increase diversity and climate adaptation capacity. CIDSE believes that resilient food systems could be enhanced by:

- }] Promoting access to energy with decentralised and renewable energies as well as urban agriculture;
- }] Strengthening localised and regional<sup>53</sup> food systems,<sup>54</sup> thereby rendering farmers and communities less vulnerable to disruptions taking place in other parts of the world;
- }] Strengthening local markets to reduce food loss and waste;
- }] Strengthening local economies and communities through farmers’ markets, indigenous knowledge and other local exchange systems, and enhancing traditional seed production and distribution channels;
- }] Enhancing an equitable food and climate policy environment, realising the right to food through various and diverse means such as social security schemes and concentration limitation and targeting “the most vulnerable segments of the population, who are most severely affected by the crisis or who may least benefit from the remedies;”<sup>55</sup>

- }] Strengthening small-scale farming systems which are labour intensive, which are a constant source of innovation and which have the potential to increase production and productivity in the face of climate change;
- }] Establishing short food supply chains, linking rural and urban areas more readily;
- }] Strengthening public and private investments and public policies which support farmers’ own investments (*see page 15 for more*);
- }] Limiting the dependency on external inputs and on imports/exports.

## ‘Climate-smart agriculture’ and resilience

Building resilience calls for a paradigm shift. Whilst the concept of ‘climate-smart agriculture’ acknowledges to some extent the need for more on-farm diversity, resilience is often limited to increasing ‘efficiency’ and productivity, or calling for the expansion of industrialised food systems in developing countries,<sup>56</sup> thus failing to take the depletion of natural resources such as oil into account. At CIDSE we fear that the systemic approach needed is not being duly considered by defenders of ‘climate-smart agriculture.’ Moreover, CIDSE harbours concerns that what is labelled as ‘climate-smart agriculture’ is often far from the mark in terms of resilience potential, threatening to negatively impact both the climate and our food systems if appropriate actions are not taken.



# The Global Alliance for Climate-Smart Agriculture – Not up to the task at hand

## Safeguards left aside, rights-based approach undermined

In light of the much needed shift towards climate-resilient agriculture, achievable via the alternative principles and approaches outlined in the first part of this paper, CIDSE's concern is that the work of the Global Alliance for Climate-Smart Agriculture falls worryingly short of the mark. Fundamentally, the concept of 'climate-smart agriculture' is so broad that it opens space for embracing anything and everything to do with climate and agriculture – including the good, the bad, and the ugly. This 'free for all' approach poses a real risk for 'green-washing' and social and environmental damage, thereby undermining the very objectives laid forth by the Alliance.

This consistent lack of environmental and social safeguards in the Alliance's proposed approach raises questions about key issues of coherence, accountability and the assurance of a rights-based approach, all of which are apparently being overlooked in the current Framework Document. The way the Alliance has been formed does not adequately reflect or take into consideration the role of other internationally recognised fora for negotiations: indeed, by creating parallel processes and in failing to provide clearly defined criteria for so-called 'climate-smart agriculture', the Alliance is allowing scope for the promotion of industrial agriculture practices as responses to climate change. These responses can drive deforestation, increase synthetic fertiliser use, intensify livestock production or increase farmers' vulnerability.

Consequently, as a voluntary initiative with ambition to involve as many countries and as wide a range of stakeholders as possible, the Alliance risks serving as a 'green-washing' and policy-influencing platform, without clearly pointing out standards for adaptation and mitigation which are vital to ensure environmental integrity.

In addition to the lack of environmental safeguards, social protection standards also appear to be cast in the shadows, with the Alliance seemingly designed as a platform open to anybody looking to promote their respective activities and interests as 'best practices' in the fight against climate change's impacts on agriculture. In this way, companies with dire social impacts on small-scale food producers and vulnerable communities are able, through the Alliance, to promote approaches that increase the dependence of farmers on external inputs, trapping them into cycles of debt and poverty, thus rendering them vulnerable to the detrimental consequences of climate change. For example, through the promotion of genetically modified seeds, companies are placing biodiversity and environmental integrity in serious jeopardy. Moreover, in forcing developing countries to open up their national seed laws in order to expand those companies' patenting access to local landraces – as has been the case in different countries via the New Alliance for Food Security and Nutrition<sup>57</sup> for example – companies are actively undermining farmers' rights to "save, use, exchange and sell farm-saved seed and other propagating material."<sup>58</sup> Without any social or environmental safeguards in place, there is a high risk that such approaches are also labelled as 'climate-smart.'

## Guiding principles for initiatives tackling the climate and food crises

Thankfully, however there are many tools and opportunities at our disposal for securing safeguards for the environment and obtaining positive socio-economic impacts.

CIDSE believes there are several principles and concrete steps at hand for guiding initiatives which aim to tackle the climate and food crises. Though references to the relevant and legitimate international conventions such as the UNFCCC have been made in the Alliance's Framework Document, CIDSE thinks that the scientific knowledge provided by intergovernmental scientific bodies on climate change must become the basis of political action.<sup>59</sup> A first step towards reaching this aim could be to ensure that the precautionary principle – as also outlined in Article 3.3 of the UNFCCC<sup>60</sup> – guides decision makers during negotiating processes of any measures related to climate change and agriculture, particularly where food security is at risk or placed in jeopardy.<sup>61</sup> Most importantly, CIDSE promotes respect for and recognition of indigenous peoples' and local communities' practices, particularly with regard to biodiversity and traditional knowledge. As a second step, access to science and technology knowledge must be ensured for all, but their use should not undermine countries' pathways towards sustainable development, nor should it halt attempts to eradicate poverty.

## Governance pitfalls of the Alliance – Transparency, cohesion and legitimacy left by the wayside

The concerns held by CIDSE regarding the governance of the Global Alliance for Climate-Smart Agriculture are manifold. Firstly, with a lack of clarity on actors involved in the Alliance, as well as on membership criteria, decision-making processes and the Alliance's fundamental principles, questions remain as to exactly which bodies and individuals will be granted active participatory roles in discussions and decision making, and how this participatory approach will be operationalised. Will the people whom the Alliance claims to serve – those on the frontline of hunger, poverty and climate-induced disasters – be included at the table? And if so, exactly which consultation mechanisms will be in place to ensure these people are not only consulted but also given an active and participatory role in decision making? CIDSE harbours grave concerns about the fact that no rules or mechanisms for monitoring or gauging accountability of the different actions undertaken by the Alliance's members have yet been

established, suggesting a very *laissez-faire* approach whereby potential stakeholders are encouraged to become a member of the Alliance first, and find out exactly what membership entails at some unidentified time later on. Moreover, in claiming that it will “take into account and, where appropriate, draw upon existing programmes and initiatives to avoid duplication or the creation of parallel organisations”, members of the Alliance are – by taking it upon themselves to pick and choose elements of pre-existing frameworks that they deem appropriate, with apparently no accountability mechanisms to adhere to – undermining the legitimacy of established policy-making bodies and spaces, thereby opening the doors for incoherence and fragmentation in food and climate policy making.

The trend towards minimising the role and space of legitimate fora such as the CFS is, regretfully, a trend that is on the rise, as evident from the numerous food and agriculture alliances which have been rapidly emerging over recent years (including, among others, Grow Africa/Asia, the New Alliance for Food Security and Nutrition, and the Business Alliance against Chronic Hunger).





## Guiding principles for initiatives tackling the climate and food crises

A key prong of attack<sup>63</sup> in the fight against hunger in a climate-constrained world is the employment of a rights-based approach, emphasising the moral and legal obligation to ensure that all people – including future generations – have the capacity and resources to feed themselves in dignity. Governments can work to fulfil this obligation by creating an “enabling environment,”<sup>64</sup> whereby producers are given access to and control over the necessary resources – such as land, seeds and water – and so that producers are given access to the market. States should strive to create the aforementioned enabling environment by respecting, adhering to and implementing the relevant international legal treaties and guiding principles on issues as diverse as seeds, land, business, extraterritoriality, fisheries, gender inequality, coherence and biodiversity, namely:

- }] The Global Strategic Framework for Food Security and Nutrition<sup>65</sup>
- }] The FAO's Voluntary Guidelines on the Right to Food<sup>66</sup>
- }] The International Treaty on Plant Genetic Resources<sup>67</sup>
- }] The Voluntary Guidelines for the Responsible Governance of Land, Fisheries and Forests<sup>68</sup>
- }] The UN Guiding Principles on Business and Human Rights<sup>69</sup>
- }] The Maastricht Principles on the Extraterritorial Obligations of States<sup>70</sup>
- }] The Voluntary Guidelines for Securing Sustainable Small-scale Fisheries<sup>71</sup>
- }] The Convention on the Elimination of All Forms of Discrimination against Women<sup>72</sup>

CIDSE would like to stress that the CFS<sup>73</sup> – as the foremost inclusive international and intergovernmental platform dealing with food security and nutrition – is the legitimate policy-making organ for guiding international efforts to ensure coherence and avoid fragmentation. By respecting the role of the CFS, and of the UNFCCC's Subsidiary Body for Scientific and Technological Advice,<sup>74</sup> the great strides made by governments and civil society over recent years in the realm of international food and climate policy can continue to flourish in a coherent, transparent and accountable environment.

Moreover, CIDSE views food sovereignty – “understood as a requirement for democracy in the food systems, which would imply the possibility for communities to choose which food systems to depend on and how to reshape those systems”<sup>75</sup> – as a vital condition for a transition towards rights-based food systems which would be more resilient and sustainable (see page 10 for more), and which would incite a real ‘food democracy’ at all levels. Food Policy Councils<sup>76</sup> have been identified as one way to develop and foster broad and transparent participation while addressing the food system as a whole by bringing together the various actors involved. Though they take many forms and serve different purposes, these councils all aim to “identify and propose innovative solutions to improve local or state food systems, spurring local economic development and making food systems more environmentally sustainable and socially just.”<sup>77</sup>

To accompany such a shift, research must be rejuvenated. CIDSE believes that the following bodies, through operating in an independent, evidence-based, consultative and transparent fashion, offer scientific and technological guidance that should be adhered to:

- }] Food & Agriculture: the High-Level Panel of Experts on Food Security and Nutrition (HLPE),<sup>78</sup> the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD),<sup>79</sup> and the International Panel of Experts on Sustainable Food Systems (IPES-Food) – whose creation is currently under progress
- }] Climate: the Intergovernmental Panel on Climate Change (IPCC)<sup>80</sup>
- }] Biodiversity: the Intergovernmental Platform on Biodiversity and Ecosystems (IPBES)<sup>81</sup>

There is also a risk that the Alliance might undermine and threaten the multilateral negotiations within the UNFCCC by pushing for a certain vision of agriculture on which an agreement has not yet been reached due to the inherently complex and challenging nature of such negotiations. In this context, CIDSE wishes to stress that the UNFCCC has been designated as the forum under which “coherent climate strategies must be defined, taking into account the issues of agriculture and food security.”<sup>62</sup> This trend reveals a growing tendency among States and other stakeholders to create new structures lacking in transparency and democracy (such as Free Trade Agreements and similar alliances with somewhat nebulous intentions) when negotiations developments are seen to be faltering in pre-existing global structures. A common thread running consistently throughout these alliances is the repeated failure to place those who are most affected by food and climate policies – that is, small food producers and consumers – at the centre of policy negotiations and decision making. CIDSE believes that this misguided and indeed dangerous approach is reflected in the way our food system works today, representing a great cause for alarm.

## Finance and investment – Falling short of the mark

Criticism of the Global Alliance for Climate-Smart Agriculture does not only concern the Alliance’s governance structure, but also addresses the real risk of the Alliance driving investments in counter-productive ways, potentially resulting in harmful impacts which are at complete odds with the Alliance’s stated aims. An overview of some of the Alliance’s objectives as outlined in the Framework Document suggests that finance and investment, as well as the related ‘enabling environment’, feature high up on the agenda. In these areas, however, CIDSE foresees a plethora of risks, namely:

**] The risk of bolstering both a market-based approach to the agriculture-climate nexus and the funding of ‘climate-smart agriculture’ projects by carbon offset schemes.** Such risks could

foster a financialisation of natural resources dynamic that would place undue pressure on local populations for accessing those resources and diverting much needed funds away from sustainable small-scale farming towards the quantification of soil GHG emissions. In including and supporting initiatives focusing on the sequestration potential of land, the Alliance risks reinforcing the growing land-grabbing phenomenon. Of grave concern is the fact that the majority of such deals are made in countries in which more than ten per cent of the total population is suffering from hunger, yet the crops being grown on grabbed land are frequently exported, or used to produce biofuel. Research published by Rulli and D’Odorico (2014)<sup>82</sup> estimates that “if this food were used to feed the local populations it would be sufficient to abate malnourishment in each of these countries, even without investments aiming [increase] yields.”<sup>83</sup> It is also important to underline that “for those developing countries for which data are available, between 10 and 20 per cent of all landholders are women.”<sup>84</sup> Moreover, the financialisation of land threatens to expose those landholders to greater risks than those they are already facing, in addition to increasing gender inequalities;

**] The risk of establishing conditionalities** and of shaping national policies towards a ‘better’ environment for businesses, granting them facilitated access to resources for foreign direct investments. As indicated by its desire to be “action-driven”, the Alliance will also work on “integrating *climate-smart agriculture* into policy” and “establishing policies that encourage responsible practices and investment along the value chain,”<sup>85</sup> which in turn casts doubt on the Alliance’s promise to respect recognised, pre-existing fora and spaces. This could also lead to the re-introduction of conditionality – as has been the case with the New Alliance for Food Security and Nutrition;<sup>86</sup>

**] The risk of promoting and supporting private initiatives which pursue profit-driven interests over environmentally and socially equitable outputs.** Initiatives targeting private sector actors with a



major focus on investments in the name of development has been a rising trend in recent years. In CIDSE's experience, such efforts usually fail to support small-scale food producers in a sustainable and holistic way: "in spite of recent attention to foreign direct investment and official development assistance, and in spite of weak enabling environments faced by many farmers, on-farm investment by farmers themselves dwarfs these sources of investment and also significantly exceeds investments by governments. On-farm investment in agricultural capital stock is more than three times as large as other sources of investment combined."<sup>87</sup> Such practices tend to dismiss small-scale producers, who are often characterised as simple, incompetent and inefficient beneficiaries working 'out of the market'. The perspective of such initiatives is typically that small-scale food producers will only benefit from (i) large-scale investments that support their integration into global value chains and (ii) from the development of the supermarket model,<sup>88</sup> with both facets – whether they originate from foreign investors or national ones – being widely viewed as the true drivers of inclusive development, growth and modernisation, ignoring therefore a broad set of alternatives that can really support and foster food producers' own investments.

Just as 'climate-smart agriculture' fails to make a distinction between those agricultural practices which are sustainable and those which are not, the Alliance fails to identify which investments are 'climate-smart' investments and which are not.<sup>89</sup> From CIDSE's viewpoint, this trend carries many risks, which include, though are not limited to: increased concentration in food systems; increased dependence on external inputs and or import/exports; increased potential for land grabs and land concentration, and scope for driving people out of the agricultural sector altogether as a result of the promotion of large-scale agriculture. In addition, whilst infrastructure plays an important role in securing and supporting both farmers' own investments and investments dedicated to developing and strengthening local and regional food systems, international food and agriculture alliances are increasingly directing investment in infrastructure via models inherited from colonial times, linking fertile rural areas (the key target of large-scale investments) to global markets via ports. This approach is facilitating both the extraction of natural resources and the diffusion of "agricultural inputs such as chemical fertilisers and pesticides, expanding the market for input agribusinesses (...) rather than building infrastructure to better connect producers and local populations."<sup>90</sup> Such practices are neither sustainable nor resilient.

## Guiding principles for initiatives tackling the climate and food crises

Alternatives to the Alliance's misplaced strategies regarding finance and investment in climate and agriculture are numerous, as outlined below:

- ] Firstly, as underlined in the FAO's Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, States should support both investments by smallholders and public and private smallholder-sensitive investments;
- ] CIDSE believes that the public sector plays an important role in enabling and maximising smallholders' own investments through providing direct, independent and free information and education on agro-met, agro-technology, natural resource rights and management; research for development; infrastructure development; provision of public goods; support for collective bargaining and access to credit; secure access to land and other resources, and the development of social security systems among other factors;
- ] Moreover, the development and up-scaling of agroecological practices should be supported by the public sector since agroecology is 'knowledge-intensive.' This is of utmost importance given that "private companies will not invest time and money in practices that cannot be rewarded by patents and which don't open markets for chemical products or improved seeds";<sup>91</sup>
- ] The private sector comprises a vast and diverse range of actors with varying interests which are not always aligned with poverty alleviation and food security. As such, public policies should accompany and regulate these investments in such a way that they strengthen smallholder production systems which are more resilient and sustainable;
- ] Public policies can also "help strengthen local food systems as well as open up 'new markets' for small-scale food producers that offer stable and remunerative prices through for example public procurement."<sup>92</sup> Developing agricultural marketing boards, agricultural research, agricultural development banks, regulatory stocks and local money and community banks might also be areas addressed by public sector investments and policies;
- ] Investments towards developing local and regional food systems (by reducing the distance that food needs to travel and therefore increasing its nutritional quality as well as reducing food losses and the need for energy, thus increasing the resilience of cities) should be prioritised. Equally, priority should be given to rail and maritime transport, and also to investments in local processing facilities (such as food hubs and mobile slaughterhouses, for example);
- ] The misplaced onus on increasing agricultural productivity through agribusiness should be addressed by redirecting attention towards the gravely underfunded area of climate adaptation. To this end, the delivery of new and additional (beyond ODA) public climate finance must be prioritised;
- ] Moreover, the UNFCCC frameworks, such as the SBSTA's Nairobi Work Programme<sup>93</sup> and the Work Programme on Loss and Damage,<sup>94</sup> should be kick-started through renewed political will and by the necessary financial support;
- ] Climate finance should deliver through increased funding of developing country adaptation needs and direct access to UNFCCC funds such as the Adaptation Fund and the Green Climate Fund – the latter is currently vastly underfunded and focused on the private sector facility to increase the role of the private sector and business, and
- ] Develop strong safeguards in order to guarantee the right to food under the Green Climate Fund and other funds falling under the UNFCCC.



## Conclusion

Given the unrivalled scale of the food and climate crises and their devastating impacts on vulnerable communities around the world, CIDSE welcomes the level of international attention finally being given to the long overlooked area of agriculture in a climate-constrained world. However, CIDSE fears that the current nebulous definition of 'climate-smart agriculture' being used by the international community – as well as the extensive political marketing of this vacuous concept, and the lack of transparency in the governance of the Alliance supporting it – will ultimately lead to 'green-washing' of undesirable agricultural production models, such as the large-scale monoculture production of biofuels and energy, as well as pesticide-intensive polluting production models. CIDSE believes this worrying trend is being promoted by the Global Alliance for Climate-Smart Agriculture.

CIDSE's analysis of the Alliance is that it lacks: i) a clear elaboration of the concept of CSA and the agricultural practices and models that CSA encompasses; ii) criteria for stakeholder engagement in the alliance, and iii) clear and transparent identification of 'climate-smart' investments. We also feel that the Alliance falls under a trend towards minimising the role and space of legitimate fora such as the CFS, as well as undermining multilateral negotiations within the UNFCCC. These critical weaknesses suggest that rather than contributing to more socially and environmentally sustainable agriculture, the Alliance, as it stands now, risks placing food security, sustainability and resilience at risk, whilst opening the door for States, investors and agribusiness companies to mask business as usual approaches with weak, superficial and ultimately harmful false solutions.

As our paper has highlighted, there are many good policies, frameworks, guidelines, models and alternatives to overcome hunger in the face of climate change which already exist. Yet, they lack global implementation, and this is where action is needed. We thus call on decision makers in the fields of climate and agricultural policy to urgently redirect their attention towards genuine opportunities for building truly sustainable and resilient food systems – systems which, in placing the right to food as the ultimate objective, offer real potential for serving the world's poorest and most vulnerable communities and making a significant contribution towards the fight against global poverty, hunger, injustice and environmental degradation.



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To access these resources, please click on the embedded hyperlinks available in the online version of this paper. See [www.cidse.org/resources](http://www.cidse.org/resources).

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} CIDSE is an international alliance of Catholic development agencies. Its members share a common strategy in their efforts to eradicate poverty and establish global justice. CIDSE's advocacy work covers global governance; resources for development; climate justice; food, agriculture & sustainable trade, and business & human rights.