

# The evolving role of agriculture in climate change negotiations: Progress and players

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## Abstract

This paper documents and analyzes the substantive and discursive progress regarding agriculture as a discussion item in climate change negotiations. Our analysis traces agriculture's negotiating history from the establishment of the United Nations Framework Convention on Climate Change in 1992 until the 20<sup>th</sup> Conference of the Parties in Lima in December 2014. We find that while agriculture has progressed into an important theme in the negotiations, albeit with shifting discourses, explicit commitments on agriculture have not materialized yet. We explain progress using three analytical lenses: (a) the position of key states in the negotiations; (b) the particularities of agriculture as a political issue; and (c) the role of non-state actors in the negotiation process. Our analysis relies on an extensive review of the scientific literature and policy documents and 16 semi-structured interviews with climate change negotiators and representatives from relevant observer organizations involved with agriculture.

## 1. Introduction

Agriculture is crucial for our survival. It provides food to eat and offers livelihood for 36% of total world's workforce (FAO 2008). In Sub-Saharan Africa where one in four people are chronically hungry (FAO 2014a) two thirds of the population work in agriculture (FAO 2008). Agriculture and related activities also provide a livelihood for millions of people in Asia which hosts two thirds of the world's hungry (FAO 2014a).

Simultaneously, agriculture faces enormous challenges (Foley et al. 2011). Demand for food is expected to increase 60% by 2050 in order to feed a projected population of 9 billion people (FAO 2012). Yet, already the land used for agriculture occupies about 40 to 50% of the Earth's terrestrial surface (IPCC 2007). Importantly, only 62% of crop production is currently dedicated for human consumption (Foley et al. 2011). The remaining 35% is used for animal feed and 3% for bioenergy, seed and other industrial products (ibid.).

Furthermore, agriculture has serious climate change implications. In 2005, it accounted for 10-12% of total global anthropogenic greenhouse gas (GHG) emissions (5120 MtCO<sub>2</sub> eq/yr to 6166 MtCO<sub>2</sub> eq/yr (IPCC 2007). Notably, the group of five regions mostly consisting of non-Annex I countries was responsible for 74% of total agricultural emissions. These are also the regions where most of the food production is expected to take place in the future (Muldowney et al. 2013), and where most of the mitigation potential of the sector lies (IPCC 2007). At the same time, however, countries in these regions face the largest adaptation challenges (Muldowney et al. 2013), and continue to struggle with poverty, malnutrition and food insecurity.

In this context, the need to secure food production while striving for a safe and stable climate in a world that is experiencing strikingly different conditions is pivotal. This need is recognized in the United Nations Framework Convention on Climate Change (UNFCCC) founding document (Article 2). However, despite its crucial implications for food security and its clear links to climate change, agriculture has not had a very prominent role in any of the agreements emerging from the climate negotiations. While some progress has been made recently, this has been painfully slow.

This paper tries to understand this puzzle. Specifically, the paper documents and assesses the progress regarding agriculture as a discussion item in climate change negotiations from

the establishment of the United Nations Framework Convention on Climate Change in 1992 until the 20<sup>th</sup> Conference of the Parties in Lima in December 2014. In explaining progress or lack thereof, the paper uses three analytical lenses: (a) the position of key states in the negotiations; (b) the particularities of agriculture as a political issue; and (c) the role of non-state actors in the negotiation process. Our analysis relies on an extensive review of the scientific literature and policy documents and 16 semi-structured interviews with climate change negotiators and representatives from relevant observer organizations involved with agriculture.

The paper is structured as follows. Section 2 presents our analytical framework and methodology. Section 3 traces the negotiating history and progress of agriculture in climate change negotiations. Section 4 explores explanations and section 5 concludes the analysis.

## **2. Analytical framework and methodology**

To analyze the progress of agriculture as a discussion item in climate change negotiations we use two criteria : (a) discursive progress, i.e. the framing of the issue in the negotiations. In this context, we are particularly interested in the way agriculture is understood historically in relation to climate change (e.g. through the lens of mitigation, adaptation or both; whether as a specific sector or in relation to broader policies) and to food security, as reflected in the COP decisions; (b) substantive progress, i.e. progress regarding agriculture as an agenda item in the negotiations. In this context, we are interested in the extent to which agriculture is placed in the negotiating agenda as well as the terms of debate regarding agriculture as a negotiating item (see also Betsill and Corell 2008).

In order to understand what contributes to these forms of progress (or lack thereof) we use three sets of explanatory variables, delineated in some detail below.

### *Positions of key states*

First, we map the positions of key states involved in the negotiations in order to understand their varying interests and associated capacity to pursue those interests in the negotiations. Typically, Annex-I (developed) countries have more bargaining capacity in relation to non-Annex I (developing) countries due to their superior structural and economic power. Yet, they are also constrained by the need for agreement which requires acceptance by the weaker parties. The literature on bilateral negotiations and countries' experiences therein

demonstrates that developing countries have managed to use this potential to push forward some of their own positions in recent years (Page 2002, 2004; Durrant 2002; Hess 2001). They were able to achieve that particularly by becoming more experienced negotiators and forming alliances with one another (Page 2004). In this paper we try to understand whether similar developments can be identified in agriculture related negotiations within the climate change regime.

### *Characteristics of the issue*

Second, we examine whether the characteristics of the issue itself, in this case agriculture, play a role in explaining its progress in negotiations. More specifically, issues that are highly uncertain both analytically (i.e. there is lack of established scientific basis) and normatively (there is lack of consensus regarding the political and ethical principles that should guide them) are more problematic than issues that lack these characteristics (Biermann 2010). The literature on 'wicked' and 'super wicked' (e.g. Levin et al. 2012) problems is rich in examples of issues that due to their uncertain and controversial character have not moved forward in international environmental negotiations, with climate change itself being one of them.

Moreover, issues with high degrees of stakes are expected to make less progress in negotiations. Specifically, proposals that challenge aspects of sovereignty, particularly control over internal affairs and autonomy over economic decisions are expected to be contested (Friedman et al. 2005). Likewise, issues and associated proposals that contradict the key norms of decisive actors (e.g. key norms of liberal environmentalism) are expected to be contested (Bernstein 2001).

Finally, issues may exhibit institutional overlap with other issues. For example, forest policy is negotiated in different institutional contexts including climate change, desertification and biodiversity (Betsill and Corell 2008). Such institutional overlap may enhance or limit progress. For instance, in the case of biosafety negotiations issues of labeling that were closely linked to the World Trade Organisation (WTO) and the trade regime were dismissed (Williams and Ford 1999). Synergies are also possible, however. Examples include the strengthening of the global regime on the transboundary movement of hazardous waste as a result of regional regimes addressing the same issue (Meinke 2002); and the EU Nitrates Directive contribution to the implementation of the North Sea Declarations (Oberthür and Gehring 2006).

### *Strategies of non-state actors*

Third, the literature recognizes an increasingly important role of non-state actors in negotiations. In recent years a number of studies try to understand that influence both inside and outside the negotiations (Betsill and Corell 2008; Schroeder and Lovell 2012). The former includes activities that rely on direct transmission of information to decision-makers; the latter seeks to create pressure more indirectly by influencing public opinion and mobilizing the public (Betzold 2013).

Although the two can reinforce one another the opposite is also possible. Fisher (2010) argues, for instance, that the merging of movements inside and outside the COP-15 negotiations in Copenhagen led to a disenfranchisement of non-state actors from the negotiations and a weakening of their overall influence. In this study we are trying to assess how the strategies pursued by non-state actors inside and outside the negotiations enabled or hindered their objectives.

In conceptualizing the influence of non-state actors we follow Betsill and Corell (2008, p.24) who define influence as 'the intentional communication from one actor to another in order to alter the latter's behavior from what would have occurred otherwise.' Communication is broadly conceived as technical or other type of information, efforts to establish trust, claims to legitimacy or threats that can occur both at the domestic and international level as well as inside and outside the negotiations (ibid.).

Finally, we aim to identify the sources of non-state actor influence in the negotiations. In this context, the literature typically identifies knowledge, expertise and information (Keck and Sikkink 1999; Betsill and Corell 2008), organization and mobilization capacity (Falkner 2010), financial resources (Falkner 2010; Levy and Newell 2000), and legitimacy (Gough and Shackley 2001). In this study we specifically examine which sources are considered important by the negotiators themselves in their effort to promote progress of agriculture as a discussion item in the negotiations.

### *Methodology*

Our analysis is based on an extensive analysis of the scientific literature and policy documents as well as interviews with key negotiators via telephone and skype and face-to-face at the COP 20/CMP 10 in Lima Peru, in December 2014.

More specifically, during the COP-20 in Lima, several interviews were conducted with relevant actors of these negotiations identified prior to the conference. The purpose of these discussions was twofold. First, we intended to better assess the developments in these negotiations and in particular to further the understanding of dynamics having contributed to the current state of play. These interviews were crucial given that much of the relevant information on factors shaping this process is not available publicly. Second, the interviews provided information on the role of various actors in these negotiations. Interviewees provided information on the positions of most relevant negotiating groups (EU, Umbrella Group, Africa, BASIC). They also shared their assessment of how observers play a role in shaping these discussions.

Several interviews could not be conducted on the spot due to the hectic schedule of the interviewees. In this case, contact was established with the objective of conducting the interviews through phone after the conference. Nevertheless all the actors interviewed have been actively engaged in the negotiations related to agriculture under the UNFCCC.

The interviewees were selected on the basis of two main criteria. First, all individuals interviewed were specialized on issues related to agriculture and/or land use issues. Second, the composition of this sample aimed at including a balanced representation of the main voices involved in the negotiations: including negotiators and experts from both developed and developing countries and a broad geographic range. We also ensured that different categories of actors identified in this study were represented in a balanced manner.

We classified interviewees in four main groups: Annex-I countries; non-Annex I countries; International Organizations and global partnerships supporting international cooperation, such as the Food and Agriculture Organisation (FAO) and the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS); and non-governmental organizations and stakeholder groups, such as farmers' organizations and climate justice groups. Interviews are anonymous and the numbering we provide in this text does not reflect the actual order of the interviews.

Sixteen interviews were conducted in total:

- Four with negotiators from Annex-I countries from Australasia, Europe and North America;

- Two with negotiators from non-Annex I countries from Africa and South America;
- Six with delegates from intergovernmental organizations and think tanks;
- Four with representatives from interest groups: including non-governmental organizations and farmers organizations.

### **3. Negotiating history: the evolving role of agriculture in the UNFCCC negotiations**

#### **3.1 Implementing the Convention and the Kyoto Protocol**

The role of agriculture in the context of climate change is mentioned explicitly in the provisions of the UNFCCC, both in relation to mitigation and to adaptation. Food security is mentioned as one of the three criteria that shall guide the interpretation of the ultimate objective of the convention. Specifically, the convention provides that the stabilization of greenhouse gases concentrations in the atmosphere should be achieved in a timeframe that “ensure[s] that food production is not threatened” (UNFCCC article 2). Additionally, agriculture is listed among the sectors falling within the obligation of parties to develop mitigation plans and measures, alongside other sectors including energy, transport, industry, forestry and waste management sectors (UNFCCC Article 4.1(c)).

Decisions adopted in the years following the adoption of the convention operationalized these references in the guidelines related to the preparation of national communications by recommending that parties include relevant information.<sup>1</sup>

Building on the provisions of the convention, the Kyoto Protocol adopted in 1997 further refers to the importance to “promote sustainable agriculture in light of climate change considerations” (Kyoto Protocol, article 2). The protocol also reiterated the commitment for all parties to adopt sectoral mitigation policies and measures, including in relation to the agriculture sector (article 10).

Following the adoption of the Kyoto Protocol, several additional references were made to the issues of agriculture and food security in thematic COP decision relating to the impact of response measures,<sup>2</sup> finance<sup>3</sup> and capacity building.<sup>4</sup> Decisions related to the

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<sup>1</sup> UNFCCC COP Decisions 9/CP.2 and 10/CP.2.

<sup>2</sup> UNFCCC COP Decision 12/CP.5

<sup>3</sup> UNFCCC COP Decisions 5/CP.6, 5/CP.7, 5/CP.7, and 5/CP.9

implementation of the Clean Development Mechanism (CDM) also emphasized the need to avoid impact on food security of afforestation and reforestation project activities taking place under the CDM.<sup>5</sup>

Additionally, the Subsidiary Body for Scientific and Technological Advice (SBSTA) mandated the organization of an in-session workshop in 2006 dedicated to aspects related to agriculture, forestry and rural development in the context of mitigation.<sup>6</sup> This workshop was part of the series of four thematic workshops aimed at “exchanging information and sharing experiences and views among Parties on practical opportunities and solutions to facilitate the implementation of the Convention”. The workshop resulted in a short report by the SBSTA chair highlighting some of the key characteristics of this issue shared among several parties.<sup>7</sup> In the context of a climate change regime largely focused at the time on mitigation, agriculture was addressed during this initial phase mainly as a potential sector for the reduction of emissions.

### **3.2 The Bali Action Plan and Copenhagen negotiations**

The adoption of the Bali Action Plan in 2007, which provided the mandate for the negotiations towards a new comprehensive agreement expected in 2009, provided an opportunity for agriculture to be considered more specifically.<sup>8</sup> In relation to mitigation action, the Bali Action Plan called for consideration of “cooperative sectoral approaches and sector-specific actions”.<sup>9</sup> This decision to include sectoral actions in the negotiations of the new agreement reflected the growing interest among governments and scholars for such alternative approaches to nationally wide targets (see Kulovesi and Keinänen 2006; Höhne and Lahme 2005; Bodansky 2007).

In the negotiations leading to the COP-15 conference, negotiations related to sectoral approaches focused on three main components: general provisions related to sectoral

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<sup>4</sup> UNFCCC COP Decision 2/CP.7

<sup>5</sup> UNFCCC COP Decisions 19/CP.9 and 14/CP.10

<sup>6</sup> SBSTA report 23, para. 26.

<sup>7</sup> See the chair’s summary of the “in-session mitigation workshop on agriculture, forestry and rural development” held at SBSTA 24, available at [http://unfccc.int/files/methods\\_and\\_science/mitigation/application/pdf/mitigation\\_ws\\_sbsta24\\_chair\\_summary.pdf](http://unfccc.int/files/methods_and_science/mitigation/application/pdf/mitigation_ws_sbsta24_chair_summary.pdf)

<sup>8</sup> UNFCCC COP Decision 1/CP.13.

<sup>9</sup> UNFCCC COP Decision 1/CP.13, para. 1(b)iv.

approaches, a section specifically addressing emissions from aviation and maritime bunker fuels, and the section related to agriculture.

By the end of the Copenhagen conference, a draft decision was prepared in relation to agriculture. The draft decision provided that all parties would take further action and cooperate in relation to agriculture in mitigation as well as established a work programme on agriculture under the SBSTA.<sup>10</sup> Some of the provisions contained in the draft decision remained controversial, including a reference to the trade implications of agriculture specific measures. Due to the collapse of the negotiations in Copenhagen, however, the decision was neither finalized nor adopted. Additionally, negotiators involved in these discussions pointed at the fact that addressing agriculture together with the issue of bunker fuels has complicated the prospects of an agreement, as the latter was an even more controversial issue for the negotiations.

Despite the adoption of a comprehensive outcome at the Cancun COP-16, no decision could be adopted on the issue of sectoral approaches, including agriculture. Consequently, this issue remained on the agenda of the AWG-LCA up to the 2011 Durban Conference. At the conference, more countries engaged actively in the negotiations related to agriculture, expecting the COP to finally reach a decision on this issue. As little progress could be secured up to the opening of the high-level segment toward the end of the conference, the COP presidency mandated the French minister of the environment to facilitate consultations on the issue of sectoral approaches. As the results of these consultations highlighted a continuation of the deadlock in these negotiations, the COP presidency proposed to isolate the issue of agriculture from the broader discussions on sectoral approaches and bunker fuels. The outcome decision proposed by the COP presidency thus suggested mandating the SBSTA “to consider issues related to agriculture at its 36<sup>th</sup> session, with the aim of exchanging views and the COP adopting a decision on this matter at its eighteenth session”.<sup>11</sup> As this proposal was made during the final plenary as one of the element of a package agreement on all issues considered by the AWG-LCA, countries could not oppose the proposal without risking threatening the adoption of the overall outcome. Despite considered by some of the negotiators interviewed as lacking legitimacy, this initiative by

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<sup>10</sup> See the draft decision -/CP.15: “Cooperative sectoral approaches and sector-specific actions in agriculture” contained in the report of the AWG-LCA on its eighth session, held in Copenhagen from 7 to 15 December 2009 FCCC/AWGLCA/2009/17, Annex J.

<sup>11</sup> UNFCCC COP Decision 1/CP.17, para 74 to 78.

the South African presidency resulted to the first concrete decision adopted by the COP in relation to agriculture since the adoption of the Bali Road Map.

### **3.3 Agriculture under the SBSTA: the Durban legacy**

The decision reached in Durban led to two main consequences. First, for the first time the issue of agriculture was included as a separate item on the formal agenda of one of the bodies established under the UNFCCC. Second, the decision to request the SBSTA to consider this issue resulted in a focus on the technical aspects of the issue of agriculture as the mandate of this body is limited to providing information and advice on “scientific and technological matters relating to the Convention” (UNFCCC article 9.1).

While both sessions of the SBSTA in 2012 remained inconclusive in relation to the issue of agriculture, the body did succeed to make more progress in June 2013. Specifically, the SBSTA adopted conclusions calling for the submission of views by parties, for the preparation of a compilation report and mandated the organization of a workshop dedicated to agriculture during the COP-19 in November 2013. The SBSTA specified that these activities should focus on “adaptation of agriculture to climate change impacts while promoting rural development, sustainable development and productivity of agricultural systems and food security in all countries, particularly in developing countries”.<sup>12</sup> While the discussions related to agriculture on the basis of the Bali Action Plan had mainly focused on mitigation aspects, this decision indicated a strong focus on adaptation in the initial work of the SBSTA related to agriculture. Parties did not reach agreement on a draft decision that could be forwarded to the COP as had been originally mandated in the COP decision adopted in Durban.

Fifteen countries and four coalitions of parties provided written submissions prior to the Warsaw conference.<sup>13</sup> As mandated in the previous conclusions of the SBSTA, all contributions addressed issues related to adaptation. Many parties nevertheless also took the opportunity to discuss issues related to mitigation, either as co-benefits of adaptation measures or as a separate issue. References to the relevance of technology transfers also revealed significant differences between the expectations that developed and developing countries have for the work of the SBSTA in relation to agriculture.

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<sup>12</sup> See the report of the 38<sup>th</sup> session of the SBSTA, UN Doc. FCCC/SBSTA/2013/3, para. 81-83.

<sup>13</sup> See the compilation of submissions to the SBSTA by parties, UN Doc. FCCC/SBSTA/2013/MISC.17, FCCC/SBSTA/2013/MISC.17/Add.1 and FCCC/SBSTA/2013/MISC.17/Add.2.

The workshop organized during the COP-19 was conceived so as to promote less formalized exchange of views among parties and to enhance understanding among negotiators. The workshop opened with presentations by the IPCC and FAO in order to provide a general introduction to the issues, followed by six country-specific presentations and a general discussion. Parties were invited in all of their interventions to emphasize national experiences. Despite specific national circumstances, all parties highlighted the impacts that climate change has for their agriculture sectors.<sup>14</sup> The workshop also provided an opportunity for parties to highlight different measures adopted at the national level and, in particular for developing countries, to identify specific vulnerabilities and needs that the SBSTA could contribute in addressing.

Besides the workshop, parties could not find an agreement to resume substantive discussions dedicated to agriculture during the COP-19. Several developing countries emphasized that parties had only agreed to the organization of a workshop in Warsaw and therefore opposed the proposal to establish a contact group to consider the issue as well as to discuss the content of the submissions by parties. Consequently, parties only agreed to continue their exchange of views on the following session on the basis of the report of the workshop and of the compilation of parties' submissions.<sup>15</sup> Several parties, in particular developed countries that had hoped to be able to discuss as well matters related to mitigation, expressed frustrations at the absence of substantive discussions in Warsaw.<sup>16</sup>

Significant progress was finally secured during the June 2014 SBSTA negotiations with the adoption of a two-year set of activities. The parties identified four areas of work in relation to which SBSTA would continue its technical work in 2015 and 2016 with calls for submissions by parties and observers and the organization of in-session workshops on the following four themes:

- (a) Development of early warning systems and contingency plans (2015);
- (b) Assessment of risk and vulnerability of agricultural systems (2015);
- (c) Identification of adaptation measures (2016);

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<sup>14</sup> See full report of the workshop, UN. Doc. FCCC/SBSTA/2014/INF.2

<sup>15</sup> Report of the 39<sup>th</sup> session of the SBSTA, UN Doc. FCCC/SBSTA/2013/5, para. 60.

<sup>16</sup> See the report of the session contained in Earth Negotiations Bulletin, Vol. 12, Issue 594.

(d) Identification and assessment of agricultural practices and technologies to enhance productivity in a sustainable manner (2016).<sup>17</sup>

While several parties had continued to emphasize the need to consider aspects related to mitigation,<sup>18</sup> the conclusions fell short of referring explicitly to this issue, only mentioning potential co-benefits of adaptation measures in the agriculture sector and the importance for the increase of productivity to take place in a sustainable manner. These activities should support the continuation of the discussions of SBSTA on agriculture issues. Consequently, SBSTA is not expected to reach any major decisions on the issue before its COP16 in November 2016.

### **3.4 Integrating agriculture to national adaptation and mitigation plans**

While progress in the discussions aimed at addressing agriculture as a specific sector in the climate change process have been comparatively slow, many countries have considered adaptation and mitigation issues in this sector when designing and implementing national activities related to adaptation and mitigation.

Even though the adaptation regime under the UNFCCC has not yet addressed the agriculture sector in a structured manner, activities undertaken by countries under this framework have nevertheless featured agriculture related actions and measures prominently. The UNFCCC adaptation regime has built on three successive steps. First, the Marrakesh Accords adopted in 2001 established a work programme aimed at addressing the particular concerns of least developed countries, in particular through the support of National Adaptation Programmes of Action (NAPA).<sup>19</sup> Guidelines for the preparation of the NAPAs were also adopted by the COP in order to provide guidance on how LDCs should identify, together with domestic stakeholders, priority adaptation actions that should benefit from international support.<sup>20</sup> Food security and agriculture were explicitly highlighted as one of the suggested criteria proposed in the guidelines. A study of the content of all the NAPAs submitted before 2012 highlighted that the large majority of the priority actions identified by LDCs related to agriculture, forestry and fisheries (Meyback et al., 2013).

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<sup>17</sup> See the report of the 40th session of the SBSTA, UN Doc. FCCC/SBSTA/2014/2, para. 83-90.

<sup>18</sup> Earth Negotiations Bulletin, Vol. 12, Issue 598.

<sup>19</sup> UNFCCC COP Decision 5/CP.7.

<sup>20</sup> UNFCCC COP Decision 18/CP.7.

The second step in the adaptation regime consisted in the adoption in 2006 of the Nairobi work programme on impacts, vulnerability and adaptation to climate change.<sup>21</sup> The work programme aims at supporting informed adaptation decision-making by promoting the exchange of information among governments and relevant stakeholders. The implementation of the Nairobi Work Programme relies to a large extent on the active contributions of partner organizations. The large majority of the organizations registered as partners of the work programme have indicated being active or having expertise in the field of “food security, agriculture, forestry and fisheries”.<sup>22</sup> Additionally, and while no activity mandated in the context of the NWP has focused specifically on agriculture, this sector is the most prominent in the outcomes of some of the initiatives implemented under the work programme. For instance, the sector is the most represented among the entries to the “compendium on methods and tools to evaluate impacts of, and vulnerability and adaptation to, climate change” prepared by the secretariat in 2009.<sup>23</sup> Additionally, the majority of the adaptation technology needs identified by developing countries in their technologies needs assessments and in their national communications relate to agriculture.<sup>24</sup>

The third stage of the adaptation framework under the UNFCCC was initiated in 2010 with the adoption of the Cancun Adaptation Framework.<sup>25</sup> The framework intends to enhance adaptation through international cooperation and coherent consideration of the issue under the convention. Agriculture and food security are identified as one of the eight sectors in relation to which parties are expected to enhance the planning, prioritizing and implementing adaptation actions.<sup>26</sup> The Cancun Adaptation Framework provides for all Parties, both Annex I and non-Annex I parties, to formulate and implement National Adaptation Plans (NAPs) in order to address their mid-term and long-term adaptation needs. It provides technical guidelines prepared by the group of least developed countries (LEG),

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<sup>21</sup> UNFCCC COP Decision 2/CP.11.

<sup>22</sup> As of March 2015, 76% of the organizations having indicated their area of work. See database available at <https://www3.unfccc.int/pls/apex/f?p=333:20:2726247990191121:>

<sup>23</sup> Available at [http://unfccc.int/adaptation/nairobi\\_work\\_programme/knowledge\\_resources\\_and\\_publications/items/5457.php](http://unfccc.int/adaptation/nairobi_work_programme/knowledge_resources_and_publications/items/5457.php)

<sup>24</sup> see Nairobi Work Programme progress report to the 31<sup>st</sup> session of the SBSTA, UN Doc. FCCC/SBSTA/2009/INF.5, at 5.

<sup>25</sup> UNFCCC COP Decision 1/CP.16, para 13

<sup>26</sup> *Ibid.*, para. 14(a)

other developing countries being encouraged to follow similar modalities for the design of their own adaptation policies.<sup>27</sup> The technical guidelines for the national adaptation plan process suggest that parties might consider food security as one of the criteria to identify priority actions and provide a case study of how parties can evaluate adaptation measures in agriculture.<sup>28</sup> It is likely that agriculture will remain as a very prominent sector across the majority of developing country NAPs.

Additionally, parties agreed during the COP-16 to another country-driven process established for developing countries in relation to mitigation action. According to the Cancun agreements, developing countries shall take “nationally appropriate mitigation actions (NAMAs) in the context of sustainable development, supported and enabled by technology, financing and capacity-building, aimed at achieving a deviation in emissions relative to ‘business as usual’ emissions in 2020”.<sup>29</sup> The concept of the NAMAs thus enabled developing parties to consider, prepare and seek international support for sectoral mitigation policies based on the national priorities of the country (Hänsel 2012). Since the COP-16, numerous initiatives have been undertaken to support developing countries in the preparation of their NAMAs. A work programme was established under the SBI to further the understanding of the diversity of NAMAs<sup>30</sup> and a NAMA registry was established by the UNFCCC secretariat.<sup>31</sup> Additionally, a NAMA partnership was established at the COP-18 with the participation of multilateral and bilateral development banks, UN agencies, bilateral development agencies, and relevant think tanks.

Agriculture was highlighted as a main feature of many of the proposals for NAMAs communicated by developing countries. Seventeen individual countries as well as the African Group mentioned opportunities to reduce emissions in their agriculture sector.<sup>32</sup> Up to now, most of these proposals have not yet been turned into concrete plans with the preparation or the implementation of a sectoral NAMA. Eight countries are currently

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<sup>27</sup> Ibid., para. 15-16.

<sup>28</sup> NAP technical guidelines, at 64 and 75.

<sup>29</sup> UNFCCC COP Decision 1/CP.16, at 48 ff, completed by decisions 2/CP.217 and 16/CP.18.

<sup>30</sup> UNFCCC COP Decision 1/CP.18, para. 67.

<sup>31</sup> Available at <http://www4.unfccc.int/sites/nama/SitePages/Home.aspx>

<sup>32</sup> See the compilation of information communication by developing countries, FCCC/SBI/2013/INF.12/Rev.2

conducting feasibility studies, developing or implementing such NAMAs.<sup>33</sup> Only four NAMAs focused on the agriculture sector have however been submitted to the UNFCCC registry (by Costa Rica, Dominican Republic and Uganda) in order to seek international support.<sup>34</sup>

The review of the UNFCCC adaptation framework and of the NAMAs process highlights that, while the COP has made relatively slow progress with the adoption of decisions focused specifically on agriculture, many developing parties have used country-driven processes – both in relation to adaptation and to mitigation – in order to integrate the agriculture sector in their climate policies.

### **3.5 Negotiations towards the Paris Agreement**

While the SBSTA has facilitated an exchange of views among parties on this issue, political aspects of the climate negotiations have been addressed under the Ad hoc Working Group on the Durban Platform for Enhanced Action (ADP) since 2012. The ADP process is structured along two workstreams, the first one related to the preparation of a new comprehensive climate agreement to be adopted by the end of 2015 and the second dedicated to raising short-term mitigation ambition.

The negotiations towards a new climate agreement have built on a different basis than those that had led to the Copenhagen conference and to the Cancun outcomes. In particular, the emphasis on global sectoral approaches is downplayed in the current process. Instead, parties decided at the COP-19 that the national pledges related to the 2015 climate agreement would consist of “intended nationally determined contributions” (INDCs).<sup>35</sup> Furthermore, the COP-20 in Lima failed to adopt a set of mandatory upfront information that parties should provide when submitting their INDCs, only providing a list of the information that parties might voluntarily include to facilitate the transparency of their commitment.<sup>36</sup> In Lima, parties also agreed that the scope of the INDCs might include

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<sup>33</sup> See the database of the NAMAs created by ECOFYS, available at <http://www.nama-database.org/index.php/Special:RunQuery/QueryData>

<sup>34</sup> Additional NAMAs with implication for the sector, such as NAMAs related to the production of biogas, have also been submitted. See NS-149 - Reducing Greenhouse Gases (GHG) Emissions in Pig Farms in the Dominican Republic, NS-71 - Costa Rica Livestock NAMA, NS-72 - NAMA - Low Carbon Coffee - Costa Rica, NS-154 - Developing appropriate strategies and techniques to reduce methane emissions from livestock production in Uganda

<sup>35</sup> UNFCCC COP Decision 1/CP.19, para 2(b).

<sup>36</sup> UNFCCC COP Decision 1/CP.20, para 14.

adaptation measures.<sup>37</sup> Consequently, the scope and the format of the INDCs that parties will put forward as their pledges under the new climate change framework remains at the discretion of each country. Parties might therefore include sector mitigation and/or adaptation measures or targets related to agriculture.

At the time of the submission of this report, four countries (Switzerland, Norway, Mexico and the United States) and the EU have communicated their INDCs.<sup>38</sup> All of the five INDCs submitted so far include the land use sector (or agriculture in the case of Mexico) in the scope of the target proposed for the reduction of emissions. In the case of the EU, Switzerland and Norway, the INDC indicates that the accounting rules for the land use sector will be determined at a later stage. The INDC submitted by the United States already provides information on the methodologies that the country expects to use to account emissions from the land use sector. In addition, the INDC submitted by Mexico also contains commitments related to adaptation, which include measures related to agriculture. The country commits to implement actions between 2020 and 2030 to “strengthen the diversification of sustainable agriculture by conserving germplasm and native maize species, thermal comfort for livestock, development of agro-ecosystems, through the incorporation of climate criteria in agriculture programs”.

The draft negotiating text prepared during the February 2015 meeting of the ADP contains only one reference to agriculture in one of the sub-options proposed for the provisions related to financial support.<sup>39</sup> Instead of addressing agriculture under specific provisions, several countries and organizations have supported addressing agriculture together with other land use issues including forestry, wetlands and grasslands. The mitigation section of the draft agreement thus contains references to the role that the land use sector could play to contribute to the accounting and reduction of emissions.<sup>40</sup> The alternative options proposed in relation to land use highlight the strong divergence that remains among countries on the role that this sector could play in the post-2020 climate framework. Food

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<sup>37</sup> Ibid., para. 12

<sup>38</sup> See the UNFCCC portal for the submission of Intended Nationally Determined Contribution, available at <http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx>.

<sup>39</sup> UN Doc. FCCC/ADP/2015/1, para. 82

<sup>40</sup> Ibid, various options related to para. 39.

production is mentioned in language proposed for the preamble and the adaptation section of the text.<sup>41</sup>

The role of agriculture and of the land use sector has also been addressed through the activities organized in the ADP workstream-2. In 2014, the workstream-2 was structured around the organization of several Technical Expert Meeting (TEMs), one of which was dedicated to the issue of land use. The TEMs dedicated to land use opened with a keynote address by the FAO and included an expert panel on the mobilization of means of implementation with several intergovernmental organizations including CGIAR-CCAFS, CIFOR and UN-REDD.<sup>42</sup> The panelists highlighted the important contribution of the land use sector to global emissions, suggested that the sector could include low-costs emissions reductions and identified many good practices at the national level in order to address this issue. During the follow-up meeting organized during the following session of the ADP in October 2014, the FAO was also invited to provide a short update on recent developments, including on outcomes related to agriculture of the 2014 UN Climate Summit. Several developed countries as well the Latin American countries that are members to the Independent Alliance of Latin American and the Caribbean (AILAC) have requested in their written submission that the workstream-2 considers explicitly the role of agriculture in short-term mitigation ambition.

In 2015, discussions under workstream-2 continue as a technical examination process. During the February 2015 session of the ADP, a meeting was organized to consider ways to assess the benefits of the TEMs and to consider how to structure future discussion throughout 2015. The FAO was invited to intervene during this meeting. Specifically, the FAO welcomed the consideration of “land use and agriculture” as one of the thematic areas with high mitigation potential and highlighted the role that CSA could play in these respects, both in developed and developing countries.<sup>43</sup> Some countries that have opposed discussions of agriculture in the context of mitigation action rejected the content of this intervention and questioned how the promotion of CSA could take place under the UNFCCC given the principle of CBDR (section 4 further elaborates this issue).

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<sup>41</sup> Ibid, para 5, 17.2, 18 and 50.

<sup>42</sup> See the report of the Technical Expert Meetings, UN Doc. FCCC/TP/2014/13, at 13-20.

<sup>43</sup> See the statement delivered by the FAO during the technical examination process, available at [http://unfccc.int/files/bodies/awg/application/pdf/statement\\_of\\_fao-tep.pdf](http://unfccc.int/files/bodies/awg/application/pdf/statement_of_fao-tep.pdf).

The ongoing negotiations under both workstreams highlight that significant resistance remains among some parties to addressing emissions from agriculture – including through the implementation of CSA – under a sectoral approach applicable to both developed and developing countries, both in the short term and in relation to the post-2020 framework. However, given the structure of the climate agreement expected in December 2015, individual parties can decide to include the sector in their own national contributions.

In short, while the discourses around agriculture are changing over the years, there is little substantive progress in the negotiations. Major discursive changes include (a) the shift in emphasis from mitigation to adaptation, particularly under SBSTA; (b) the efforts to link agriculture with land use and forestry, particularly in terms of potential mitigation action; and (c) the weakening of explicit references to food security except in the national adaptation and mitigation plans and in the IPCC Working Group II, which in AR5 considers food systems rather than agriculture alone. Substantively, a major turning point was the COP-17 in Durban, where Parties agreed to make agriculture an agenda item in the SBSTA, moving it from the Long-Cooperative Action (LAC) Ad-hoc working group. Under SBSTA the more technical and scientific aspects of agriculture in relation to climate change are discussed. While the hope among negotiators was that such a move would depoliticize the issue allowing countries to focus on more substantive aspects, agriculture remains deeply political and controversial. The shift towards national pledges and voluntary commitments as terms of debate instead of sectoral approaches agreed upon by all parties further confirms the recurring contestation around this issue. At the same time, it provides the opportunity to make progress at the national level taking into account the needs and vulnerabilities of specific contexts.

#### **4. Exploring explanations**

In this section we explore three sets of explanations regarding our previous observations on the discursive and substantive progress of agriculture in climate change negotiations. First, we begin by describing the positions of key states on this issue. Second, we examine the characteristics of agriculture as a political issue. And, third, we turn to the negotiating strategies of non-state actors in this issue and analyze their influence in the negotiations.

### ***Positions of key states***

Compared to many other issues addressed at the climate negotiations, discussions related to agriculture involved a relatively limited number of active actors among the parties to the Convention. Several Annex-I countries have spearheaded proposals to consider the inclusion of this sector in discussions related to mitigation. When countries were invited to submit views on the content of the 2009 climate change agreement, New Zealand and Japan referred, for instance, explicitly to the opportunity to consider a sectoral approach to address emissions from agriculture.<sup>44</sup> Other developed countries, including the EU, Switzerland and the US, have also contributed actively to these negotiations, for instance through the submission of written views when input was requested in relation to the work of the SBSTA on this issue.<sup>45</sup> While there remain some differences among the positions adopted by developed countries on this issue, the positions of these actors are relatively homogenous.

While the number of non-Annex I countries actively involved in these discussions is also relatively limited, these countries have often adopted different positions with regards to the objectives of these sectoral negotiations depending on their national interest.

First, large exporters of agriculture goods, in particular Argentina and Brazil, have been wary of proposals for a sectoral approach to mitigation in the agriculture sector. These countries are, in particular, concerned about the potential trade and competitiveness implications that such proposals could lead to. Consequently, these countries have been very reluctant to develop under the UNFCCC a sectoral approach to mitigation in agriculture and have insisted on the inclusion in any decision addressing this issue of a reference to the prohibition of “means of arbitrary or unjustifiable discrimination” or “disguised restrictions on international trade”.<sup>46</sup> In relation to adaptation in this sector, these concerns for competitiveness have translated into proposals that address related intellectual property rights and transfers of technologies.<sup>47</sup> We elaborate on these concerns further below.

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<sup>44</sup> UN Doc. FCCC/AWGLCA/2008/16/Rev.1

<sup>45</sup> UN Doc. FCCC/SBSTA/2013/MISC.17 and UN Doc. FCCC/SBSTA/2013/MISC.17/Add.1

<sup>46</sup> See for instance the wording suggested in para. 2 of the draft decision negotiated at the COP 15 on Cooperative sectoral approaches and sector-specific actions in agriculture, UN Doc. FCCC/AWGLCA/2009/17.

<sup>47</sup> See the Argentinean submission to SBSTA, UN Doc. FCCC/SBSTA/2013/MISC.17/Add.2, para. 8.

India has also been actively engaged in these negotiations. As the country struggles to provide food security for its own people, its governments have opposed the inclusion of agriculture in mitigation actions or programmes targeting developing countries, emphasizing that the role of this sector should remain to provide food rather than to contribute to emissions reductions. This position led the country to explicitly exclude emissions from agriculture from its emissions intensity target communicated in the country's NAMA<sup>48</sup> and to oppose vehemently the inclusion of mitigation aspects in the activities undertaken on agriculture by the SBSTA.<sup>49</sup> More recently, however, India has radically shifted its position. According to the Environment minister Prakash Javadekar future efforts to address climate change in agriculture would also include mitigation, particularly regarding methane emissions.<sup>50</sup> This position is embedded in a broader approach to climate change emphasizing clean energy generation, energy conservation and energy efficiency in India, and could result in bending the resistance towards higher attention to mitigation in future negotiating outputs.

Since 2010, the Africa Group of Negotiators has also emerged as an important group of actors actively engaged in these discussions. These countries share in common a high priority for food security and the vulnerability of their agriculture sector in the context of climate change. Consequently, African countries have actively advocated for the development of sector-specific adaptation measures. Several interviewees emphasized the important role played by these countries at the COP-18 in order to move the negotiations beyond the deadlock on mitigation between developed countries and the developing countries listed previously.<sup>51</sup> African countries have also played an active role in the SBSTA negotiations. The programme of activities adopted by SBSTA in June 2014 reflects to a large extent the expectations expressed by several African countries in their written input submitted to the UNFCCC secretariat in 2013.<sup>52</sup> In their written submissions, many African parties also refer to potential mitigation co-benefits of actions promoting adaptation in the

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<sup>48</sup> UN Doc. FCCC/SBI/2013/INF.12/Rev.3, para 113.

<sup>49</sup> See for an account of the mandate of the Indian delegation at the COP19: <http://www.thehindu.com/sci-tech/energy-and-environment/india-scores-a-win-in-warsaw-on-emission-cuts-affecting-farmers/article5347727.ece>

<sup>50</sup> [http://articles.economicstimes.indiatimes.com/2015-01-20/news/58267907\\_1\\_national-action-plan-climate-change-energy-efficiency](http://articles.economicstimes.indiatimes.com/2015-01-20/news/58267907_1_national-action-plan-climate-change-energy-efficiency)

<sup>51</sup> Country negotiator 4, IGO delegate 1 and 4, stakeholder 3

<sup>52</sup> See UN Doc. FCCC/SBSTA/2013/MISC.17.

agriculture sector, a position therefore at odds with some developing countries listed previously.

After the decision adopted in Durban, Costa Rica, Uruguay and several other AILAC countries also began to engage actively in negotiations related to agriculture. These countries have supported addressing adaptation and food security while also considering mitigation co-benefits of measures adopted in the agriculture sector.<sup>53</sup> The two sectoral NAMAs prepared by Costa Rica demonstrate this interest for mitigation actions related to agriculture.

Accordingly, there are conflicting positions among key states in the negotiations. Friction is reflected both between Annex-I and non-Annex I countries as well as among non-Annex I countries themselves, particularly African countries and large producers and exporters of agricultural products. While by acting as a group, African countries have managed to reflect their position within SBSTA and contribute to progress in the negotiations, agriculture remains contentious. Specifically, negotiators are concerned that it will be extremely hard to secure explicit references to agriculture in a future formal agreement particularly when mitigation is concerned. At the same time, they regard links to land use as an opportunity to move negotiations forward and argue in favor of more explicit links to food security concerns at the national level.

### ***Characteristics of agriculture as a political issue***

#### *Stakes: vulnerability and contribution to climate change via agriculture*

The extent to which different states contribute to and are vulnerable to climate change impacts from agriculture can help shed further light on their position in the negotiations and associated progress therein.

More specifically, the agriculture sector's vulnerability to climate change impacts and the potential to increase productivity varies considerably among states (Beddington et al. 2012). Overall, mid-to high-latitudes agriculture are expected to benefit, while agriculture in low latitudes will be adversely affected. Quantifying regional impacts, Fisher et al. (2002) estimate that globally there will be major gains in potential agricultural land by 2080,

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<sup>53</sup> See the submission by the Independent Alliance of Latin America and the Caribbean, UN Doc. FCCC/SBSTA/2013/MISC.17/Add.1

particularly in North America (20-50%) and the Russian Federation (40-70%), but losses of up to 9% in sub-Saharan Africa. The regions likely to face the biggest challenges in food security are Africa, particularly sub-Saharan Africa and Asia, particularly South Asia. Likewise, the IPCC expects that the impact will be particularly complex for groups with small adaptation capacity, in particular smallholder and subsistence farmers, pastoralists and artisanal fisherfolk (IPCC 2007), typically situated in the South. It is not surprising in this context that a focus on adaptation features high in the preferences of developing countries.

Mitigation, however, entails at least two challenges. First, emissions are much higher in non-Annex I countries and continue to rise while the opposite is the case for Annex-I countries. Specifically, over the period 2001-2011 annual emissions increased by 14% all from non-Annex I countries (FAO 2014b). At the same time emissions from agriculture in Annex I countries decreased by 3%. Taking into account a longer time horizon, from 1990 to 2011 agriculture emissions, decreased in Annex-I countries by 20% and increased in non-Annex I countries by 37% (ibid.). Within non-Annex I countries the largest emitters are Asian countries counting for 44% of all agriculture emissions (FAO 2014b).

Second and related, the future of the Common but Differentiated Responsibilities (CBDR) principle is uncertain. This principle, a cornerstone of the UNFCCC convention, implies the attribution of different commitments for different states according to their circumstances and capacities, their historical contributions to CO<sub>2</sub> emissions and their development needs (Pauw et al. 2014). However, more than two decades after the adoption of the CBDR principle the world has changed. Indicatively, the overall emissions of non-Annex I countries have increased by 223% between 1990 and 2008 while China and India, in particular, are among the world's major GHG emitters (Parikh and Baruah 2012; Pauw et al. 2014).

This questions the current classification of countries in Annex-I and non-Annex I and their associated responsibilities with mitigation commitments attributed particularly to the former. If this principle changes and without a reclassification of countries to reflect their current realities all would have to commit equally to reductions from agriculture. This is problematic regarding progress in the negotiations. Given that links to food security, economic well-being and labor in relation to agriculture is much more pronounced in developing countries, the implications from an equal commitment in mitigation may disproportionately affect the latter's ability to support their populations.

### *Scientific uncertainty and normative conflict*

The contribution of agriculture to climate change mitigation as well as the impact of climate change on agriculture and associated need for adaptation have been issues that are fairly well studied with little disagreement among scientists. However, particularly policies regarding mitigation options entice conflicting positions and interpretations. Four such conflicts are particularly relevant for agriculture and are highlighted in the interviews.

The first concerns carbon sequestration as a mitigation strategy. Studies show that the agricultural sector has the potential to mitigate climate change by increasing the carbon sequestration rate (i.e. rate at which carbon is stored in the soil), and to a lesser degree, through the reduction of other GHG emissions, such as N<sub>2</sub>O and CH<sub>4</sub> (Smith et al., 2007). Interviewees argue, however, that carbon sequestration is contentious and difficult to monitor. Indeed, the literature underlines serious political and social constraints in that respect. A major political constraint, particularly in developing countries is land tenure. Africa, for instance, with a great potential on carbon storage through afforestation and reforestation projects faces a number of problematic land tenure features (including the disconnect between customary and statutory rights, legal pluralism, the smallholder land use system, etc.) that challenge that potential (Unruh 2008). At the same time, carbon sequestration has sparked protests in the South as well as in the North with main resistance points the corporate control over land (Gerber 2011) and the environmental and safety uncertainties involved in such projects (Nature 2010).

The second and related issue concerns competition for land and land use, which is expected to intensify in the coming years. Increasing demand for food and energy exaggerates pressure on land conversion which leads to further climate change, in turn affecting productivity and availability of land (Harvey and Pilgrim 2011). Particularly in a post fossil-fuel economy, demand for land driven by biofuels and biomaterials will compete with demand for land for food production (ibid.). It is not surprising in this context that current discourses try to link agriculture with land use and forestry in the negotiations. According to interviews<sup>54</sup> this link has a great interest for negotiators with many having argued in favour during the in-session workshops organized in Bonn in 2014, as well as in the Lima COP workshop on non-CO<sub>2</sub> GHG emissions. Interviewees expect that these discussions will have a

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<sup>54</sup> Stakeholder 2, stakeholder 4.

significant impact in future decisions regarding agriculture but will only be able to deliver potential results after Paris 2015.

The third issue concerns the complexity of reforms regarding small farmers against the background of the cultural importance of an agricultural model based in many countries on smallholdings. There are about 500 million smallholders worldwide who face both mitigation and adaptation challenges but who are limited in their ability to counteract them. Smallholders, for instance, have to deal with poor functioning of markets, weak local institutions and infrastructure, inadequate extension systems and lack of credit and insurance markets (Streck et al. 2012). Simultaneously, some of the options potentially available to smallholders, such as the carbon sequestration mentioned above is resisted in the South due to associated corporate control of land and population displacement (Gerber 2011). Northern NGOs are also pressuring funding agencies and foreign investors in industrialized countries to reconsider their support for specific projects, thus creating mutually reinforcing synergies (ibid.).<sup>55</sup> There are ways to benefit smallholders, however, at a meaningful scale. Evidence from India and Africa, more specifically, highlights the importance of programs that explicitly target obstacles to improve farmer income, invest in local capacity and give farmers a voice are extremely useful in reaching large numbers of smallholders and reducing rural poverty (Greatex et al. 2015).

The fourth issue concerns lifestyle choices. Agriculture mitigation options, in particular, could touch upon cultural values and lifestyles and, hence, are considered taboo by the negotiators. Indeed, research shows that plant-based diets emit less greenhouse gases in relation to diets rich in animal products and dairy (Carlsson-Kanyama and González 2009). Studies estimate, for instance, that global livestock production is responsible for around 12% of global greenhouse gas emissions (Westhoek et al. 2011). Given the projected population increase and rising incomes in fast developing countries, particularly China, shifting diets with increased meat and dairy consumption are expected to exacerbate the problem (Steinfeld et al. 2006). This is even more problematic when one considers that even relatively simple ideas such as a 'meat-free meal' where individuals can make a difference to climate change by choosing one or more meals without meat appear to be resisted by the public (de Boer et al. 2013).

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<sup>55</sup> Carbon sequestration is also resisted by NGOs in the North with an emphasis on yet unknown environmental and health risks (van Noorden 2010).

### *Institutional overlap: trade regime*

Agriculture has implications not only for food security and economic well-being but also for trade, as noted earlier. More specifically, climate change is expected to affect yields, world prices and, accordingly, trade. In this context, simulations on trade flow adjustments resulting from changing prices and production, although uncertain, show that overall developing countries' imports are expected to double until 2050 (Nelson et al. 2009). Some regions will be severely affected with estimates of up to 550% increase in imports of cereals for South Asia and 270% increase for Sub-Saharan Africa (ibid.). The projected population growth expected to materialize almost exclusively in developing countries in combination with rising incomes in some of them and the related richer animal-protein diet will have consequences for trade in animal feed and livestock products as well (Huang et al. 2011).

Simultaneously, trade itself has direct and indirect consequences on emissions. Direct consequences include the use of fossil fuel in transportation. However, these are relatively small in relation to the total emissions of the food system. Indirect consequences include the determination of the distribution and scale of agricultural production and associated emissions (ibid.). These can be both positive and negative for climate change. For instance, the carbon footprint of imported agricultural products could be higher or lower in relation to domestic equivalents depending on the methods of production, processing and transport to the final consumer.

In any case, any decision on agriculture at the UNFCCC will have trade implications for the future, which for some negotiators is a key explanation for the limited progress, so far and in the future. We elucidate this concern further by exploring the institutional links between these issue areas in more detail.

More specifically, a relevant discussion in the literature is the role of subsidies and, in particular, Green Box subsidies. The Green Box subsidies include environmental protection and regional development programs to the extent that they do not distort trade or cause only minimal distortion. In this context, planting less greenhouse gas-emitting crops, for instance, could qualify for such subsidies (see Josling 2015). Reforming the Green Box, however, is highly controversial. Exporting countries, in particular, prefer to keep it as restrictive as possible in order to avoid new measures becoming an alternative way to

support farmers elsewhere thus resulting in trade distortions to their disadvantage (Josling 2015).

Similar issues may occur with biofuel subsidies. Biofuels are even more complex due to the ambiguity in their classification: thus, while ethanol is traded as an agricultural product (HS2207) biodiesel is considered industrial (HS382490) (Josling et al. 2010). There are also different mechanisms in passing the subsidy to the beneficiary: a subsidy to the blender can be passed on to the biomass producer, for instance, via higher prices but a subsidy to the corn producer can be passed on to the blender via a lower corn price and higher supply (ibid., p. 5). The question is, further, whether biofuels indeed provide environmental benefits, a contentious issue due to the threats to biodiversity with the use of monocrops and food security by replacing crucial foodstuff.

Next to subsidies, for some large exporting agricultural producers there is the fear that mitigation measures could become non-tariff trade barriers if restrictions on high emission agricultural products are to be implemented (Kibo 2014). At the same time, the ability of small-scale farmers to cope both with climate change and competition with large-scale industrialized agriculture, reinforced through the liberalization of agricultural trade policies, is reiterated as a concern by the negotiators. Some proposals have been made in this regard including the development of Special Safeguard Mechanisms (SSM) allowing countries to raise tariffs temporarily to protect domestic producers and the designation of a number of products that would be exempt from tariff reduction requirements as crucial for food security (Chatterjee and Murphy 2013). However, we are unable to comment on the feasibility of such proposals as this issue was not explicitly addressed by the negotiators.

Further, innovation in adaptation technologies and more specifically, the patenting of climate-change-adaptation crops is controversial as well (Campbell et al. 2011). Such crops have the potential to increase the adaptation capacity, provide co-benefits and enhance tolerance to climate-related abiotic stress (Agrawala et al. 2012). Yet, the patenting of crops has been associated with corporate monopoly over seeds which under the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) can retail patent life for 20 years. Any technology transfer will most likely bypass those who are in need and who have to pay prices they cannot afford continuing a vicious circle of debt, poverty and hunger (see Timmermann et al. 2010).

Last, particularly important in the context of shifts towards voluntary commitments observed in the negotiations is the development of carbon footprint standards on food and agriculture items. The potential of carbon standards lies in their voluntary nature which allows frontrunner countries and companies to adopt them outside the long and taxing negotiation processes of formally binding international regulation. The conflict associated with such standards, however, may reduce that potential. Specifically, a major concern is whether carbon footprint standards will act as barriers to trade for countries whose producers fail to adopt them. A second potential concern is whether these standards would refer to the characteristics of the final product or the process of production (Huang et al. 2011). Both concerns are unlikely to be effectively addressed outside the WTO as the lack of a harmonized approach will have profound implications both for trade flows and for a common understanding of 'climate friendly' agriculture (ibid.).

In short, agriculture, trade and climate change are inextricably related. As a result, we expect developments in one domain to influence developments in the other.

### ***Strategies of non-state actors***

In this section we elaborate the strategies by non-state actors in the negotiations and try to tease out their influence and its sources. We consider in particular the role of global partnerships and stakeholder groups advocating a greater attention to agriculture in climate change negotiations. In addition, we examine the role of intergovernmental organizations in this process. The latter despite comprised of states perform roles that are similar to other non-state actors having a more technical rather than political mandate in the negotiations.

### **Intergovernmental Organizations and Global Partnerships**

#### *Direct contributions to the negotiations process*

The role that intergovernmental organizations can play in the climate negotiations is framed both by internal and external constraints (see Biermann and Siebenhüner 2009). Internal constraints include the mandate of each organization as well as its governance structure. These constraints might limit the range of issues on which an organization can take position or provide input within its sphere of expertise, in particular preventing the organizations to make interventions that could be contradicting the national interests of one of its members. Additionally, the role of intergovernmental organizations in the climate change process is framed to a large extent by the implications of the status of "observer organizations" to the

UNFCCC. Organizations with observer status can provide input into the discussions through several means, including the submissions of written views responding to call for submissions by parties as well as the organization of side events during the COPs and the meetings of its subsidiary bodies. However, several interviewees highlighted that the practice of tackling the most challenging negotiations issues in informal meetings rather than during the more formal and more transparent “contact groups” often constrains even more the ability of observers to attend the relevant discussions or to provide timely input.

The delegates interviewed highlighted several roles that intergovernmental organizations are in a position to play effectively in the negotiations process. First, these organizations can provide technical expertise, which was highlighted as particularly in this area of the negotiations involving complex technical issues.<sup>56</sup> In addition to the regular channels allowing observers to provide input to the negotiations, the four workshops mandated by the SBSTA will increase the opportunities for IGOs to share their expertise in 2015 and 2016. Many delegates highlighted the usefulness of the presentations delivered by intergovernmental organizations during thematic workshops such as the one organized at the COP-19.<sup>57</sup> Interviewees suggested that this expertise of IGOs allows the negotiations to remain connected to the reality of policy implementation.<sup>58</sup> A couple of interviewees also highlighted that this role is particularly relevant given that countries’ negotiators are sometimes prevented to address freely some of these practical issues given the limits of their negotiating mandate and the highly politicized environment in which negotiations related to agriculture takes place.<sup>59</sup> Additionally, IGOs also have the capacity to provide insightful political analyses of the positions of the main actors in the negotiations. Several negotiators have highlighted that such briefing papers can be particularly helpful in helping assess opportunities for consensus among all actors involved.<sup>60</sup>

More specifically, the FAO can build on the wealth of its experience at the national level, the organization supporting the implementation of projects in most developing countries and with 12 regional or sub-regional offices. The FAO also has the ability to rely on large

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<sup>56</sup> Country negotiators 1 and 5, IGO delegates 3, 4 and 5, stakeholder 3

<sup>57</sup> Country negotiators 4, 5 and 6, IGO delegates 2, 3 and 4

<sup>58</sup> Country negotiators 2 and 6, IGO delegate 2, stakeholder 4

<sup>59</sup> IGO delegates 2 and 3

<sup>60</sup> Country negotiators 1 and 3, IGO delegates 1 and 3, stakeholder 3

delegations at the climate talks and is thus in a position to follow closely any development related to agriculture, or more generally to the issue of land use. The universal membership of the FAO makes it also a particularly legitimate actor to provide input to the process. When technical discussions are mandated on the issue of agriculture in the climate change process, the organization is generally invited to provide a contribution. The role of the FAO is however limited by its political mandate that prevents the organization from taking political stands on the negotiations.<sup>61</sup> Several of the delegates interviewed suggested that networks established by the organization with domestic decision makers constituted its greatest entry point to the negotiations.<sup>62</sup>

In addition to the FAO, many interviewees also highlighted the role played by CCAFS in supporting the negotiating process through its expertise and its experience with the implementation of projects.<sup>63</sup> While the resources of CCAFS are more limited than those of the FAO, its mandate and governance structure allows it to play a more proactive role in supporting negotiators in the climate change process. During the past years, the contributions of CCAFS have involved the organizing of side event and off-site workshops – in most cases together with other IGOs and NGOs, the production of briefing paper as well as providing support, including capacity building, directly to negotiators in the countries in which CCAFS is implementing projects. CCAFS has cooperated in particular with the Common Market for Eastern and Southern Africa (COMESA) and with the Meridian Institute.

#### *Implications for the negotiations of IGOs-led external processes and projects*

The influence of intergovernmental organizations and global partnerships on the climate change is however not restricted to their direct input to the negotiation process itself. Developments proceeding outside of the process might also have a significant impact in framing the agriculture discussions under the UNFCCC. The majority of the interviewees highlighted that some of these developments might potentially lead to strengthening mutual understanding among negotiations or have the opposite effect of creating a sense of distrust for some of the countries engaged.

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<sup>61</sup> Country negotiator 2, IGO delegate 2 and 3, stakeholder 4

<sup>62</sup> Country negotiators 1 and 3, IGO delegate 3, stakeholder 3

<sup>63</sup> Country negotiators 1, 3 and 5, IGO delegates 1, 2 and 3, stakeholders 1, 3, 4 and 5

The initiatives launched by the FAO on Climate Smart Agriculture (CSA), however, have ambiguous evaluations. The concept of CSA emerged at an international conference hosted by the Netherlands in 2010. CSA is meant as an integrative approach aiming at enhancing agriculture productivity to contribute to food security while at the same time promoting resilience and reducing greenhouse gases emissions.<sup>64</sup> International cooperation to promote the implementation of CSA began with the launch of the CSA Alliance for Africa. The CSA Alliance for Africa was originally conceived by the New Partnership for Africa's Development (NEPAD) and involved the participation of the FAO, CGIAR as well as non-governmental organizations including Care and Oxfam. In 2014, plans were made to begin implementation of initiatives in three priority countries identified on the basis of a needs assessment: Ethiopia, Niger and Zambia. In 2014, 26 countries subscribed to a voluntary mechanism to support African countries to integrate climate change resilience into their agricultural development plans (NAIPs) to help enhance CSA readiness for climate finance. Under this initiative five countries have support from the NEPAD climate change fund to develop country CSA framework programs: Uganda, Tanzania, Kenya, Botswana and Namibia.

Participation to regional initiatives such as the CSA Alliance for Africa might have two primary implications for the climate change negotiations. First, it contributes to supporting efforts to build the capacity of the national administrations of the countries involved, which could thus result in a greater engagement in the negotiations by the countries involved. Second, participation to the initiatives might influence the scope of the issues that the members to seek to have addressed through the climate negotiations, particularly in terms of bringing together the adaptation and mitigation agendas. Indeed the activities sought by the CSA Alliance for Africa extend beyond the scope of the areas currently addressed in the activities initiated by the SBSTA.

More recently, however, the launch of a Global Alliance on CSA (GACSA) announced at the 2014 UN Climate Summit raised concerns among climate negotiators. The GACSA aims to offer a voluntary and multi-stakeholders platform enabling partnerships to promote the implementation of CSA. The framework document of the GACSA explicitly acknowledges the role of the UNFCCC as "the primary international, intergovernmental forum focused on

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<sup>64</sup> See the dedicated webpage of the FAO: <http://www.fao.org/climatechange/climatesmart/en/>.

addressing climate change” and further emphasized that actions supported by the Alliance should not “prejudice efforts under the UNFCCC to address climate change”.<sup>65</sup> Some interviewees suggested that there is a causal link between the slow pace of the progress secured at the UNFCCC and the willingness of some countries to move forward with the establishment of an international CSA alliance.<sup>66</sup> Delegates to the UNFCCC that we interviewed highlighted several concerns in relation to the role and influence that this new initiative might have on the climate change process.<sup>67</sup> First, some of the delegates expressed concerns in relation to the rather unusual governance structure of the GACSA as the Alliance departs from the model of country-driven organizations.<sup>68</sup> Second, and despite the disclaimer contained in the framework document of the GACSA, some parties are concerned that the GACSA might be perceived as an attempt by a limited group of countries to force the hands of other parties to the UNFCCC in relation to the issue of mitigation measures in the agriculture sector. At the same time due to the nature of its membership, the GACSA could possibly lead to stronger polarizing between the positions of the countries who have joined the alliance and those who have remained outside.<sup>69</sup>

In an intervention delivered to the ADP at its February 2015 session, the FAO provided a short update on the developments related to the GACSA.<sup>70</sup> Several developing countries reacted rapidly by denouncing this intervention as exceeding the scope of the ADP discussion. While it is too early to assess the implications of the GACSA for the climate negotiations, these reactions highlighted the level of distrust towards the GACSA – and as a consequence towards the role that the FAO might continue to play in the climate negotiations – among some of the negotiating parties.

A couple of interviewees also indicated that the projects implemented by CGIAR and CCAFS contribute to helping the countries to understand the perspective of some of their partners.<sup>71</sup> As they are often implemented on a bilateral basis, a developed country

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<sup>65</sup> Global Alliance For Climate-Smart Agriculture (GACSA), Framework Document (2014), para. 3.

<sup>66</sup> Country negotiator 5, stakeholders 1 and 5

<sup>67</sup> Country negotiators 3, 4, 5 and 6, IGO delegate 3, stakeholders 1 and 3.

<sup>68</sup> Country negotiators 4 and 6

<sup>69</sup> Country negotiators 3, 4 and 6, stakeholder 1

<sup>70</sup> Intervention available at [http://unfccc.int/files/bodies/awg/application/pdf/statement\\_of\\_fao-tep.pdf](http://unfccc.int/files/bodies/awg/application/pdf/statement_of_fao-tep.pdf)

<sup>71</sup> Country negotiator 3, IGO delegate 2

providing support to measures implemented in a developing country partner, these projects provide the developed countries involved with insights on the challenges faced by and priorities of the host of the projects. Some of our interviews revealed that the participation to such bilateral projects has helped negotiators better understand the position of other countries in the negotiations and therefore facilitated the identification of opportunities for compromises across the divide between developed and developing countries.

### **Non-governmental organizations and stakeholders**

A great diversity of views exists among non-governmental organizations following the negotiations related agriculture. As among negotiating countries, the divergence is particularly striking on the question of the inclusion of the agriculture sector in mitigation commitments, organizations ranging from those supportive of such proposals to those opposing on principle any such inclusion. The negotiators interviewed for the present research were mainly of the opinion that the capacity of NGOs to influence a particular outcome at a given negotiation session was rather limited. Some of the delegates emphasized that NGOs had a greater capability in influencing countries' positions prior to the negotiations, in particular through advocacy work at the domestic level. Additionally, some delegates from intergovernmental organizations highlighted that IGOs and NGOs sometimes work closely together, for instance by contributing to each other's side events, organizing joint workshops parallel to the talks, or holding consultation meetings prior to some of the key negotiating sessions.

Many of the negotiators and representatives of intergovernmental organizations whom we interviewed suggested that NGOs influence the negotiation outcomes through two main approaches. First, several interviewees suggested that NGOs with high level of expertise and a good sense of the negotiations could be influential when they provide timely and relevant technical input.<sup>72</sup> The representatives of observer organizations interviewed for this project suggested that, at the climate negotiations, the capacity of NGOs to influence a particular outcome was a function of their relevance to the process rather than of their size or their political weight. The Climate Action Network (CAN) was mentioned in several instances as an example of an organization contributing to the outcomes of negotiations on agriculture through the expertise and its understanding of the negotiation process.<sup>73</sup> The ability for CAN

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<sup>72</sup> IGO delegates 3 and 4, stakeholder 4

<sup>73</sup> Country negotiator 4, IGO delegates 3, 4 and 5, stakeholder 5

to provide relevant input on all issues related to the role of agriculture in the climate negotiations is also limited due to the wide range of positions supported by its membership.

Second, several negotiators and IGO delegates mentioned that NGOs also have the capacity to significantly influence the outcomes of the negotiations related to agriculture when taking strong negative stances on specific issues.<sup>74</sup> Delegates highlighted that such positioning could contribute to polarizing the discussions and increase the political costs of the adoption of specific positions by some of the countries, thus reducing the opportunities to adopt compromises to move the negotiations forward.

Finally, organizations representing farmers are also participating to the climate talks and engaging in issues related to the agriculture negotiations. The UNFCCC secretariat has granted observer status to ten such organizations, the most active at the climate talks being the World Farmers' Organisation (WFO) and the International Federation of Organic Agriculture Movements (IFOAM).<sup>75</sup>

Besides benefiting from the same opportunities to provide input to the climate talks than other observer organizations described previously, farmer organizations also benefit from the status of civil society constituency. Since the early years of the negotiations, the UNFCCC Secretariat has used civil society "constituencies" to structure the participation of the large amount of NGOs willing to participate to the process.<sup>76</sup> This status is granted to groups of stakeholders on the basis of the nine major groups the participation of which is recognized in part III of agenda 21 as a prerequisite for sustainable development. The status requires these groups to organize themselves with internal decision-making procedures in order to ensure the legitimacy of the input provided to the climate change regime. The recognition of the constituency status to a major group allows the group to benefit from additional logistical support from the UNFCCC secretariat, from additional participation rights including invitation to thematic workshops and opportunity to provide interventions in some of the plenary sessions of the negotiating bodies.

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<sup>74</sup> Country negotiators 1 and 3, IGO delegate 3

<sup>75</sup> For full list of these organizations, see [http://maindb.unfccc.int/public/ngo.pl?sort=const.og\\_name](http://maindb.unfccc.int/public/ngo.pl?sort=const.og_name)

<sup>76</sup> For a description of the criteria required for recognition of the constituency status, see: "Promoting effective participation in the Convention process", Note by the secretariat, UN Doc. FCCC/SBI/2004/5, para. 20

While several delegates interviewed listed the WFO or other farmer organizations among the entities following the negotiations related to agriculture, the interviewees suggested that the influence of farmers on the outcomes of the negotiations is comparatively small and that their interactions with negotiators are limited.<sup>77</sup>

Finally, many countries and IGO delegates mentioned the significant contribution made by the Meridian Institute in relation to the agriculture negotiations in the climate change regime.<sup>78</sup> While the Meridian Institute is a non-profit organization, it differs from the other stakeholders listed in this section, as its contribution does not involve advocacy for a particular outcome. Building on the experience of the institute in facilitating dialogue among negotiators involved in a particular aspect of the climate negotiations, the institute was commissioned by several governments and foundations to organize between 2010 and 2012 thematic workshops to allow negotiators to discuss specific issues in a less politicized environment. The workshops brought together negotiators from a balanced set of countries representing the main positions expressed in the negotiations. The Meridian Institute also prepared a scoping report and a policy brief aimed at highlighting some of the key elements that UNFCCC negotiations related to agriculture could address.<sup>79</sup> These documents, which supported the workshops organized by the institute, were prepared in cooperation with CCAFS, FAO and the World Bank's Biocarbon Fund. Interviewees highlighted that these workshops had significant benefits for the negotiating process, contributing to building the capacity of some of the negotiators, establishing interpersonal connections and trust, and helping negotiators understand the proposals made by other delegations.

## **5. Conclusions**

This paper aimed to understand the progress of agriculture as a discussion item in climate change negotiations. Using the concept of discursive and substantive progress the paper highlighted a number of significant shifts in discourse but little change in substance overall. Specifically, while agriculture has progressed into an important theme in the negotiations explicit commitments on agriculture have not materialized yet. In order to understand these developments the paper examined (a) the positions of key states on this issue; (b) the

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<sup>77</sup> IGO delegates 3 and 4, stakeholders 2 and 5

<sup>78</sup> Country negotiators 2 and 6, IGO delegates 1, 2 and 3, stakeholder 5

<sup>79</sup> These documents are available at [http://merid.org/Content/Projects/Climate\\_Change\\_and\\_Agriculture.aspx?view=docs](http://merid.org/Content/Projects/Climate_Change_and_Agriculture.aspx?view=docs)

specific characteristics of agriculture as a political issue; and (c) the strategies of non-state actors and their influence in the negotiations.

We observed that positions among states differ substantially not only between Annex-I and non-Annex I countries but also among non-Annex I countries themselves. In particular the African Group and large agricultural producers and exporters express strikingly different positions regarding attention to mitigation or adaptation and different anxieties regarding the repercussions of any potential agreement on agriculture under the climate change regime.

Such positions are partly explained by the different degrees of vulnerability of these countries' agriculture sectors to climate change as well as their contributions to current GHG emissions from agriculture. In addition, particularly policies regarding mitigation options entice conflicting positions and interpretations among negotiating parties. Moreover, the institutional overlap between agriculture, trade, and climate change has been a significant factor in the slow negotiating progress so far particularly due to the uncertainties regarding subsidies, patenting of innovation technologies, small-scale farmers and labeling instruments.

Non-state actors are considered crucial in facilitating negotiations particularly because of their expertise, knowledge and capacity building. Despite significant achievements, however, their efforts have faced two major constraints. First, especially among non-governmental organizations and stakeholders there is significant heterogeneity regarding a potential inclusion of agriculture in mitigation commitments. Second, parallel processes and projects taking place outside the negotiations, particularly discussions regarding the Global Alliance on Climate Smart Agriculture, generated suspicion and distrust among parties.

Currently, the potential of agriculture to further develop as a negotiating item lies within SBSTA. Negotiators, however, consider it unlikely that any specific commitment will be contracted prior to 2020, the year where a new global climate agreement agreed upon in 2105 is supposed to be implemented. Until then parties interested in pushing agriculture forward will need to overcome a range of challenges that require both political compromise and innovative technical solutions.

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