Prospects for a sustainable agricultural transformation in Ethiopia
– green niche actors navigating a challenging institutional context

Linn Järnberg
Abstract
Identifying pathways of agricultural development that enable substantial productivity improvements is of prime importance for food security and human development across Sub-Saharan Africa. To ensure long-term welfare for its people and landscapes, it is imperative that such agricultural transformations are environmentally sustainable. This study explores the case of Ethiopia and aims to assess constraints and opportunities for a sustainable agricultural transformation, by analysing a) the governance context, b) narratives of agricultural development, and c) strategies employed by “green” non-state actors in the agricultural sector to lever change in the direction they perceive as desirable. By assessing the governance structure, the study finds that many non-state actors face significant legal and practical barriers to action, and that the strong government domination and rigid structures provide limited opportunities for influence. Further, the study finds that agricultural policy is dominated by a “Green Revolution”-inspired narrative focused on production and productivity, although food security and environmental rehabilitation narratives exist alongside. Issues of agricultural production and natural resource management are found to be largely decoupled in policy, which constitutes another barrier for green non-state actors working across the divide. Given these challenging conditions, green non-state actors in Ethiopia choose a strategy of close collaboration with government institutions, which, while offering the possibility of large-scale impact, may also reduce the prospects for more radical change. Applying current theories of sustainability transformations to a new type of system, the study concludes with a call for new conceptualisations of endogenous and exogenous change in future research to ensure that the theory fits a broader range of social-ecological realities.
Acknowledgements

First of all to Elin and Linus for being so generous with your time and good advice, and giving me the opportunity to go on this journey.

To all the persons I interviewed for the study without whom there would be no thesis, and who gave me a glimpse into the fantastic work you carry out, which will continue to inspire me for a long time.

To James Warner and the team at IFPRI for hosting me in Addis Abeba and providing invaluable help – and introducing me to the best shiro in town.

To my classmates for inspiring and teaching me loads, and making seemingly endless days in the dungeon always enjoyable.

And finally, to my family for always being so supportive and encouraging. A special mention to my mother for the committed proof-reading.
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<tr>
<td>ADLI</td>
<td>Agricultural Development-Led Industrialisation</td>
</tr>
<tr>
<td>AGP</td>
<td>Agricultural Growth Programme</td>
</tr>
<tr>
<td>ATA</td>
<td>Agricultural Transformation Agency</td>
</tr>
<tr>
<td>BoA</td>
<td>Bureau of Agriculture</td>
</tr>
<tr>
<td>GTP</td>
<td>Growth and Transformation Plan</td>
</tr>
<tr>
<td>GTP II</td>
<td>Second Growth and Transformation Plan</td>
</tr>
<tr>
<td>HDI</td>
<td>Human Development Index</td>
</tr>
<tr>
<td>MoA</td>
<td>Ministry of Agriculture and Natural Resources</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<tr>
<td>SLMP</td>
<td>Sustainable Land Management Programme</td>
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<td>SSA</td>
<td>Sub-Saharan Africa</td>
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1. Introduction

Despite rapid economic growth and increasing agricultural yields over the past decade, Ethiopia remains one of the world’s poorest countries, marked by significant food security problems and recurrent famines (Berhanu 2012). Similar to large parts of Sub-Saharan Africa (SSA), smallholder agriculture is the primary livelihood for 85% of the Ethiopian population (MoARD 2010). Dominating farming systems are non-mechanised and rainfed, and characterised by yield levels as low as 1 ton/ha for many staple crops (Minot and Sawyer 2013). An agricultural transformation is therefore urgently needed in order to achieve food security and lay the foundation for economic development. Acknowledging that various options are available to satisfy the growing demand for food and other agricultural products – including reduced post-harvest losses (FAO 2011), as well as a more equal distribution of existing agricultural production (Alexandratos and Bruinsma 2012) – increasing agricultural productivity will remain a key issue in the decades to come, for Ethiopia and SSA in general. With a growing recognition of the importance of ecosystem services (Costanza et al. 1997, Millennium Ecosystem Assessment 2005) and acknowledgement of the negative environmental side-effects that conventional agricultural intensification may lead to (Pretty et al. 2000, Tilman et al. 2002), there is a strong case for sustainable agricultural intensification, which aims for increased productivity while maintaining the natural resource base upon which agricultural production depends (Pretty et al. 2011).

The current Ethiopian government has made agricultural transformation a top priority, and has established a new agency, the Agricultural Transformation Agency (ATA), which is dedicated to catalyse the process. However, an agricultural transformation is yet in its infant stage, and a wide range of scenarios is still possible for future Ethiopian agriculture. The crossroads at which Ethiopia currently finds itself may in fact be a crucial point in time to try to steer the development in a more sustainable direction.

This study draws on current theories of transformation in social-ecological systems in order to explore the prospects for a sustainable agricultural transformation in Ethiopia. The thesis is conducted within a larger research project that investigates the potential of a set of sustainable intensification technologies to contribute to raising yields while conserving and enhancing environmental benefits. The thesis explores the broader socio-political context in which these technologies operate in Ethiopia, focusing on the governance context, and on how the government as well as proponents of sustainable intensification (hereafter referred to as green
niche actors) act to lever change in the direction they perceive as desirable. Specifically, the thesis aims to answer the following research questions:

1. What are the governance characteristics of the Ethiopian agricultural sector, and their implications for achieving a sustainable agricultural transformation?
2. What are key narratives of agricultural development, in public policy and among green niche actors?
3. How do key regime actors and green niche actors in this context mobilise and make use of resources and social networks, and act to lever change in the direction they perceive as desirable?

The thesis is organised as follows. Firstly, some theoretical aspects of sustainability transformations are presented. The Ethiopian case is then introduced, followed by a description of the methodology applied. The results are presented in the order of the research questions, and the thesis concludes with a discussion of barriers and bridges for a sustainable agricultural transformation in Ethiopia, as well as some lessons for future research on sustainability transformations.
2. Theoretical frameworks

This study builds on three primary strands of theory: theories of transformations in social-ecological system, transition theory, and theory of institutional change. The concept of sustainable agricultural intensification is also guiding the study, and is briefly introduced below.

2.1. Sustainability transformations

2.1.1. Transformations of social-ecological systems

Resilience scholars have developed the concept of social-ecological transformation, which refers to a deliberate process of change, whereby human and environmental interactions and feedbacks are fundamentally altered so that a new trajectory for the system emerges (Walker et al. 2004). The framework describes transformations as evolving at multiple levels, in multiple phases, and across scales (Olsson et al. 2014). A key assumption of the approach is that social and ecological systems cannot be understood in isolation from one another, but are fundamentally interlinked (Berkes and Folke 1998, Folke 2006). Agricultural systems are prime examples of such social-ecological systems (Enfors 2013).

The development of a social-ecological system can often be thought of as a set of alternative development trajectories (Figure 1a), each leading to different social and ecological outcomes (Folke et al. 2010, Enfors 2013). For an agricultural system, one could for instance imagine conventional intensification along one trajectory, and sustainable intensification along another. Transforming an agricultural system requires moving from one such trajectory to another, when conditions along the current trajectory are deemed undesirable. At certain points in time, the system may be more open to such shifts (described below as “opportunity”).

2.1.2. Transition theory and the multilevel perspective

This study further draws on transition theory (Rotmans et al. 2001b, Geels 2005, Kemp and Loorbach 2006) to understand the prospects for a sustainable agricultural transformation in Ethiopia. In transition theory, an explicit multilevel perspective (Figure 1b) distinguishes three

Figure 1. Theoretical frameworks of the study. a) Alternative development trajectories in a social-ecological system (adapted from Enfors 2013). b) The multilevel perspective (adapted from Geels 2002).
levels of analytical concepts, which combine as a nested hierarchy: the landscape, regime and niche levels (Morrissey et al. 2013). The landscape represents the macro-level context and its deep structural trends (Geels 2002), which in the case of Ethiopian agriculture includes e.g. its integration in international markets, various globalisation processes, and the overall political situation in the country. The regime is defined as the most ‘dominant’ configuration of actors, structures and practices (Avelino and Rotmans 2009), which in this study refers to the Ethiopian government actors and structures, and the politically dominant narratives of agricultural development. A niche, in turn, is defined as a space in which actors can develop alternative practices that deviate from the existing regime (Rotmans et al. 2001a, Avelino and Rotmans 2009). The niche in focus for this study is represented by actors promoting a sustainable intensification approach to agricultural development. The multilevel framework is used to structure the analysis, with a primary focus on the regime and niche level, and how structures and practices at these two levels create opportunities for different development trajectories.

2.1.3. The role of agency
Scholars within transformation and transition research highlight that individuals and organisations can play a key role in enabling and navigating change processes (Folke et al. 2003, Westley et al. 2013). This study uses the concept of agency to understand actors’ ability to intentionally pursue interest and have an impact (Scott 2001). Building on Dorado (2005), Battilana (2006), and Battilana and colleagues (2009) on the enabling role of actors’ social position, agency is conceptualised as having two primary features – resources and social network – which are used strategically to pursue different courses of action and, by extension, contributing to creating different development trajectories.

Scholars of institutional change stress the need to also consider the constraints imposed on actors by the institutional context in which they are embedded (Meyer and Rowan 1977, DiMaggio and Powell 1983). While the degree to which institutions determine behaviour is a source of controversy (see e.g. Battilana et al. 2009 and Garud et al. 2007 for a review), the concept of agency as situated in social structure and context offers a way forward since it acknowledges the interplay between structure and agency, and accounts for institutions and social relations as constraining and enabling, but not determining, the choices of actors (Hoffman and Ventresca 2002, Thornton and Ocasio 2008). While acknowledging that structure directly influences agency, this study primarily focuses on how structures shape the opportunity for agency (Dorado 2005) – also referred to as “opportunity context” (Westley et al. 2013) – and how opportunity context and agency together mediate the action strategies chosen by actors.
The analysis of the opportunity context is, in line with institutional theory, focused on institutional aspects. In this study, this is interpreted to include discursive structures, assuming that niche actors’ ideological stance in relation to the dominant discourse will impact the likelihood of their ideas being taken up.

2.2. Sustainable intensification

Sustainable intensification has been proposed as a means of mediating the need for substantially increased agricultural yields with calls for long-term environmental sustainability (Petersen and Snapp 2015). As an alternative to the "Green Revolution" approach to intensification, which emphasises the use of high-yielding varieties, chemical fertilisers and pesticides, mechanisation, and irrigation (Matson et al. 1997), sustainable intensification focuses on producing more food from the same area of land while reducing the negative environmental impacts and at the same time increasing contributions to natural capital and the flow of environmental services (The Royal Society 2009, Godfray et al. 2010, Pretty et al. 2011). This requires a shift in production factors, making better use of existing land, water and biodiversity resources (Pretty 2008). While there are many potential technologies and practices that could contribute towards sustainable intensification (see e.g. Pretty 2008, The Montpellier Panel 2013), the Triple Green research project (Dagerskog 2014), which constitutes the backdrop for this study, specifically assesses the potential synergy effects of three specific ones. These are 1) water harvesting, through the collection of run-off water for supplemental irrigation to bridge dry spells, 2) conservation tillage, in this case contour tillage to increase infiltration and reduce erosion, and 3) productive sanitation, in this case adding urine as a nitrogen top-dresser. This is done in field experiments in two villages in Minjar Shenkora district in the mid-Ethiopian highlands that have been carried out together with local farmers from 2012 to 2016. This study assesses the prospects for actors advocating similar kinds of approaches to have a broader impact in Ethiopia, given the institutional and political context in which they operate.
3. Case study description

Located in the Horn of Africa, Ethiopia is Africa’s second most populous country with 99 million people (UNDESA 2015). It caters over 70 ethnic groups, (Berhanu 2012) and has wide variation in agro-ecological conditions (Mengistu 2006). The Ethiopian highlands run from southwest to northeast (Mengistu 2006), and are home to a majority of the population (Funk et al. 2012). The primary livelihoods consist of agriculture in the highlands, pastoralism in the lowlands, and mixed livelihood strategies in between (Figure 2). These livelihood patterns translate into social and economic inequalities, with the highlands scoring dramatically higher on basically any human development indicator (Vaughan and Tronvoll 2003). Although the highlands generally receive sufficient rainfall, there is strong inter-annual variability of rainfall all over the country, leading to periodic droughts affecting all areas (Mengistu 2006).

3.1. State of the agricultural sector

The agricultural sector is dominated by subsistence-oriented smallholder farming, which accounts for 95% of the country’s agricultural production (Bill & Melinda Gates Foundation 2010). Although food production and consumption have risen considerably over the past two decades (Dorosh and Rashid 2013), food security remains a significant challenge with continuous dependence on food aid (Berhanu 2012), and more than 30% of the population is undernourished (FAO, IFAD and WFP 2015). Similarly, poverty levels have decreased since 2000, but the country remains one of the world’s poorest with a HDI ranking of 174 (out of 188 countries) (UNDP 2015).

Land issues are central in Ethiopian agriculture. Land holdings are generally small, with 60% of the population farming less than a hectare (Taffesse et al. 2011). Land fragmentation has increasingly emerged as a key problem (Gebresellassie 2006), and land degradation is a concern.
including high rates of annual soil losses (Taddese 2001). Land has been nationalised since 1975, although the current regime has made certain reforms, such as allowing leasing of land.

3.2. Governance characteristics
Early steps were taken towards democratisation when the current regime came into power in 1991. However, since 2000 Ethiopia has been on a path of increasing authoritarianism and gradual undermining of basic human rights (Aalen and Tronvoll 2009). Although formally separated, the state administration is largely merged with the structures of the ruling party (Vaughan and Tronvoll 2003).

The current regime has implemented far-reaching ethnic decentralisation (Vaughan and Tronvoll 2003), creating nine regional states responsible for a wide range of political, social and economic issues (UNDESA 2004). In practice, however, the decentralisation process is counteracted by strongly centralised forces. The ruling party’s tight grip at all administrative levels, centralised policy-making, and maintained strong economic power at federal level (Hagmann and Abbink 2011) create a state of affairs which one expert interviewee in this study terms “centralised decentralisation”. Socio-political culture in Ethiopia is generally strongly hierarchical, which translates into top-down approaches to policy making and implementation (Berhanu 2012).
4. Methods

This study combines several different methods to gain a comprehensive understanding of the phenomena at hand. Firstly, the governance context is analysed through a literature review complemented with expert interviews. Secondly, a narrative policy analysis is carried out. Thirdly, narratives, action strategies, resources and social network among regime and green niche actors are investigated through respondent interviews. Figure 3 summarises how the different methods contribute to answering the research questions. Interviews were carried out in October-December 2015 in Ethiopia.

![Figure 3. Methods used in the study and their relation to the research questions.](image)

4.1. Literature review and expert interviews

The literature review included scientific and grey (not academically published) literature examining various aspects of national-level political life in Ethiopia in general and in the agricultural sector specifically. Where gaps in the literature were identified, qualitative informant interviews (Esaiasson et al. 2012) with six agricultural experts were carried out. Experts were considered those having substantial experience and expertise of Ethiopian agriculture, with a specialisation (such as agricultural policy) relevant for the topic of the interview. Further information regarding the informants and the main topics of each interview can be found in Appendix IV. The institutional description and Figure 4 (Section 5.1.1.) are based on additional sources, including informal conversations with staff from the Ministry of Agriculture (MoA), and the institutions’ webpages.

4.2. Narrative policy analysis

In order to understand the discursive context, a narrative policy analysis (Roe 1994) was carried out, focusing on dominating perspectives on agricultural development, as expressed in recent official policy documents. Policy narratives can be understood as stories that link the past, present and future and suggest courses of action (Radaelli 1999), which is in this case translated into an analytical framework consisting of logic Cause-Problem-Solution-Vision chains (building on Atkinson 2000). To identify the narratives, four questions were addressed: 1) what is seen as key problems in the agricultural sector?, 2) what is seen as the causes behind these problems?, 3) what is presented as solutions to the problems?, and 4) what is the overarching
vision of agricultural development towards which these solutions are aimed? Based on this framework, three main narratives about agricultural development were drawn out (for further details, see Appendix II). The policy documents on which the narrative analysis is based are described in Table 1.

Table 1. Policy documents included in the narrative policy analysis.

<table>
<thead>
<tr>
<th>Policy documents</th>
<th>Description</th>
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<tbody>
<tr>
<td>Second Growth and Transformation Plan 2015/16-2019/20 (GTP II)</td>
<td>Ethiopia’s five-year development plan covering all economic sectors including agriculture.</td>
</tr>
<tr>
<td>Agriculture Sector Growth and Transformation Plan II (2015-2020) (Draft October 2015)</td>
<td>A sectoral policy for the GTP II period, which sets out the objectives for the agricultural sector in more detail. The policy had not been approved by parliament at the time of writing, and the analysis is therefore based on a draft version.</td>
</tr>
<tr>
<td>Ethiopia’s agricultural sector policy and investment framework (PIF) 2010-2020</td>
<td>The PIF operationalises the Comprehensive Africa Agriculture Development Programme (CAADP), the African Union’s policy framework for agricultural transformation. The PIF sets out priority areas for agricultural investment in a detailed manner, and complements GTP II in that it takes a more long-term perspective on agriculture.</td>
</tr>
<tr>
<td>Rural Development Policy and Strategies 2003</td>
<td>Covers the fundamental principles that guide Ethiopian agricultural development. It highlights key priorities and explains the government’s theory of change.</td>
</tr>
</tbody>
</table>

4.3. Respondent interviews

In order to understand green niche actors’ narratives of agricultural development, and action strategies among regime and green niche actors, semi-structured respondent interviews (Esaiasson et al. 2012) were carried out with ten regime and ten green niche actors in Ethiopia. Five respondents each were interviewed from MoA and ATA, which were identified as the two primary regime actors in the agricultural sector. Following the principle of maximal variation (Esaiasson et al. 2012), a wide representation of niche actor groups was sought. Table 2 presents the actors included in the study (see also Appendix IV). The green niche actors are all independent from the government structure, operate at national level in Ethiopia, and emphasise sustainable intensification approaches in agriculture. As a collective, they promote a broad set
of practices and technologies for sustainable intensification (see also Table 2), and range from relatively moderate to more radical in their interpretation of the sustainability concept.

Table 2. Green niche actors interviewed.

<table>
<thead>
<tr>
<th>Name of actor</th>
<th>Type of actor</th>
<th>Sustainable intensification focus (examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute for Sustainable Development</td>
<td>Ethiopian NGO</td>
<td>Soil and water conservation, composting</td>
</tr>
<tr>
<td>MELCA</td>
<td>Ethiopian NGO</td>
<td>Agroecology, traditional ecological knowledge</td>
</tr>
<tr>
<td>Self Help Africa</td>
<td>International NGO (charity)</td>
<td>Conservation agriculture, climate-smart agriculture</td>
</tr>
<tr>
<td>World Agroforestry Centre</td>
<td>International research institute</td>
<td>Agroforestry</td>
</tr>
<tr>
<td>ICRISAT</td>
<td>International research institute</td>
<td>Soil and water conservation, intercropping, water harvesting</td>
</tr>
<tr>
<td>Africa RISING</td>
<td>Action research programme</td>
<td>Crop-livestock integration, land and water management</td>
</tr>
<tr>
<td>GIZ</td>
<td>International development cooperation agency (implementer)</td>
<td>Support to Sustainable land management programme (led by MoA)</td>
</tr>
<tr>
<td>Horn of Africa Regional Environmental Network and Centre (HoAREC-N)</td>
<td>Regional network</td>
<td>Environmental governance (including in agriculture)</td>
</tr>
<tr>
<td>Gedion Shone</td>
<td>Private entrepreneur</td>
<td>Soil and water conservation, local resource management</td>
</tr>
<tr>
<td>Aybar Engineering PLC</td>
<td>Private entrepreneur</td>
<td>Soil and water conservation</td>
</tr>
</tbody>
</table>

Each interview covered the following themes: action strategies, social network, and resources (see interview guide in Appendix VI). For niche actors, it also covered narratives of agricultural development, corresponding to the four questions guiding the narrative policy analysis. The interviews were transcribed and entered into the software Atlas.ti 6.1 for coding. To ensure theoretical relevance while also allowing for unexpected results, meaning coding (Kvale and Brinkmann 2009) combining inductive and deductive codes was used (Fereday and Muir-Cochrane 2006). The overarching, deductive coding categories were Narrative (sub-divided into Problem, Cause, Solution, and Vision), Action strategy, Social network (including Type of actor), and Resources. A qualitative approach was applied where emerging themes were identified by exploring the empirical dataset (Strauss and Corbin 1994). In the presentation of the results, respondents are referred to using a number (see Appendix IV).
5. Results

The results are presented below in the order of the research questions, starting with the governance context, followed by an examination of key narratives about agricultural development as found in policy and held by green niche actors. Lastly, action strategies and agency employed by regime and green niche actors are presented.

5.1. Governance context

5.1.1. Institutional structure of the agricultural sector in Ethiopia

Figure 4 gives an overview of the key public institutions in the agricultural sector, and their respective mandates. MoA (F) develops national-level agricultural and rural development policy and coordinates policy implementation and agricultural research. Further, it has the overarching responsibility for the extension system, and implements programmes with external donor funding. MoA is divided into two general directorates for agricultural production and natural resources, respectively. Regional-level Bureaus of Agriculture (BoAs; G) are responsible for policy implementation. The Ethiopian Institute for Agricultural Research (A) coordinates agricultural research across the decentralised research system (B) (Beintema and Solomon 2003).

In 2011, ATA (M) was established with support from Bill and Melinda Gates foundation. ATA has the ambitious mandate of catalysing Ethiopia’s agricultural transformation by providing strategic analysis and advice on systemic issues, and strengthening coordination across actors. ATA is steered by the Agricultural Transformation Council (L), which is chaired by the prime minister and develops a Transformation Agenda with prioritised interventions that guides ATA’s work.

The Ethiopian government has made the extension system (farmer education system) a key priority in enabling agricultural development (Davis et al. 2009), and the country has one of the world’s highest farmer-to-extensionist ratios (Davis et al. 2009). Although the approach has been slightly broadened over the years, the top priority of the extension system is to enhance the use of external inputs (Davis et al. 2010). In line with general policy implementation in the country, extension is carried out in a top-down manner (Mogues et al. 2009). Despite certain drawbacks, however, the extension system is a unique feature of the Ethiopian agricultural system and has potentially massive leverage.
Natural resource management work in the country is primarily done in campaign-based efforts and each year during off-season, farmers are required to work on natural resource management activities during 20-60 days (depending on region)\(^1\).

5.1.2. Niche actor conditions
Alongside these government structures, numerous non-state actors operate, facing various institutional and legal opportunities and constraints. Below, these conditions are reviewed for a few actor groups deemed to be particularly relevant for a sustainable transformation of Ethiopian agriculture.

\(^1\) Based on expert interviews
The current regime’s relation with the NGO sector has been characterised by suspicion (Vaughan and Tronvoll 2003). In 2009 the heavily criticised Charities and Societies Proclamation was introduced, which restricts NGOs from engaging in human rights and advocacy activities, requires cumbersome registration processes, and sets strict standards for NGOs’ spending. Research institutes play a certain role in Ethiopian policy processes, but the government itself seldom requests policy advice, and policy engagements are often not reflected in policy outcomes (Tadesse and Tsegaye 2014). The private sector has seen a move towards liberalisation (Spielman et al. 2006), but many market sectors remain de facto oligopolies (Hagmann and Abbink 2011). Further, actors targeting smallholder farmers in Ethiopia face many practical constraints such as a generally risk-averse consumer group with low ability to pay (Dercon 2004) that is difficult to reach due to infrastructure challenges². The donor community has a certain influence through its financial power and technical advice, and is strongly involved in policy-making (Tadesse and Tsegaye 2014). However, the government has shown repeatedly that it does not tolerate interference by donors in sensitive matters (Hagmann and Abbink 2011), which shows that there are indeed limits to the influence of the donor group in the country.

In conclusion, apart from the donor group there is a general lack of influential actors outside of government, and many niche actors – particularly NGOs – face severe legal and practical constraints, which limit their role as agents of change.

5.1.3. Opportunity

Institutional systems may be more or less open for influence by niche actors, and scholars of institutional theory highlight two factors of particular importance for understanding such opportunities: multiplicity, which refers to the number of organisational forms, and their overlap and conflict (Dorado 2005), and institutionalisation, which defines the constraining and enabling effect of institutions on actors (Zucker 1977, 1987).

The Ethiopian agricultural system is strongly dominated by a single actor - the government. Although ATA has emerged as a significant actor and constitutes a new avenue for influence, it remains true that few options are available for niche actors seeking support for their ideas, and particularly for ideas that challenge government. The system can therefore be considered having low multiplicity. Further, the Ethiopian political culture characterised by authoritarianism, highly hierarchical bureaucratic structures, and top-down approaches, implies

² Based on respondent interviews
a high degree of institutionalisation. Combined, these characteristics make Ethiopia what Dorado (2005) terms “opportunity opaque”, meaning that opportunities for novelty and innovation are constrained.

5.2. Discursive context - narratives of agricultural development
This section draws out main policy narratives of Ethiopian agricultural development and is based on four recent policy documents (Table 1). These policy narratives are then compared with green niche respondents’ narratives of agricultural development.

5.2.1. Policy narratives
The government’s theory of change is summarised in the term Agricultural Development-Led Industrialisation (ADLI), which sees the industrialisation of the country being driven by agricultural development. Another important feature of Ethiopian agricultural policy is its strong focus on smallholders, which are seen as “the [main] source of growth in the agriculture sector” (MoFED 2015:17).

In a study from 2000, Keeley and Scoones identified two major policy narratives of agricultural development in Ethiopia. Firstly, a Green revolution narrative, focused on rapidly increasing yields through packages of external inputs linked with credit, promoted by a strong extension system. Secondly, an Environmental rehabilitation narrative, concerned with degradation of the natural resource base, and land in particular. The following analysis draws on the work of Keeley and Scoones, but identifies a third narrative in present-day policy documents. The three policy narratives identified, here termed “Agriculture as an engine for growth”, “Environmental rehabilitation”, and “Food security and resilience”, are described below.

**Narrative 1 – Agriculture as an engine for growth**
The Agriculture as an engine for growth narrative is strongly linked to the ADLI strategy and focuses on the role of agriculture in the economy. It identifies low agricultural production and productivity as key problems, as well as the subsistence orientation of the production. The main cause of this situation is the traditional nature of agriculture:

“[W]hat is envisaged? Clearly, it is not that agriculture employ superfluous labor, backward technologies and traditional agricultural practices” (MoFED 2003:15)

Instead, the government wants to see rapidly increased production and productivity through the use of improved technologies, primarily chemical fertiliser and seed. There is generally a strong focus on technology as the main solution to development challenges, with frequent references to modernity as opposed to the traditional. This classic Green revolution narrative, also
identified by Keeley and Scoones (2000), is combined with a strong focus on commercialisation, including increased quality, agro-processing, and high-value crops as key solutions. The visions related to this narrative are primarily concerned with broader development objectives of Ethiopia becoming a middle-income country by 2025 through rapid economic growth.

**Narrative 2 – Environmental rehabilitation**

The *Environmental rehabilitation* narrative in current policy largely corresponds to the narrative identified by Keeley and Scoones (2000). Environmental degradation, and especially land degradation, is identified as a key problem. As also noted by Keeley and Scoones (2000), a Malthusian diagnosis identifies heavy population pressure and poverty in combination with “*inappropriate agricultural techniques*” (MoARD 2010:13) as underlying causes. Proposed solutions include intensification rather than expansion of agriculture, soil and water conservation, irrigation, and livestock management. The main emphasis is on reducing degradation, and environmental rehabilitation is expressed more as a necessary evil than a driver of development. This is also illustrated by the fact that a vision is largely absent from the narrative – or when expressed, termed vaguely as “*sustainable use*” or the like.

While land degradation is likely a large problem for smallholders in parts of Ethiopia, it is interesting to note that this narrative fits into a wider debate on land degradation in Africa, in which there are controversies as to the extent of land degradation and its implications (see e.g. Koning & Smaling, 2005). The *Environmental rehabilitation* narrative corresponds very well with a conventional view on land degradation commonly put forth by agronomists, which has been criticised for overlooking environmental complexities, being based on inadequate methods and giving preference to technocratic top-down policy approaches to land management (Leach and Mearns 1996, Scoones and Toulmin 1999).

**Narrative 3 – Food security and resilience**

The third policy narrative emerging from the analysis concerns the problem of food insecurity and vulnerability to shocks. Food aid dependence is expressed as a failure, and Ethiopia is described as having a history of being “*an international alms recipient*” (MoFED 2003:9). While the rainfall pattern in many parts of the country is pointed out as a primary cause, the policies also identify typical poverty trap features such as low levels of savings and capacity at household level.
The policy documents state that a new approach towards food security is necessary. As opposed to the previously dominant focus on food insecure areas, the proposed solution is to increase agricultural investments in the productive highlands, combined with a comprehensive safety net programme. The narrative emphasises problems rather than visions, and the ultimate objective is to achieve food security and resilient livelihoods, and release financial resources for other agricultural development activities.

**Links between the three policy narratives**

There is a clear geographical dimension of the narratives in that the *Agriculture as an engine for growth* narrative is primarily focused on highland areas, whereas the other two are mainly related to lowland areas. As noted by Keeley and Scoones (2000), there is a tradition of linking food security issues and natural resource management dating back to the major 1984 drought and famine, which was attributed to environmental degradation. However, while the environmental rehabilitation and food security narratives are closely interlinked, natural resource management is largely decoupled from production and productivity issues, as illustrated by the following quote:

> “Natural resources development, agro-forestry and animal resources development are areas that can be greatly expanded. However, there is no good reason why these regions [with reliable rainfall] should particularly concentrate on these development activities as they have the opportunity also to increase crop production.” (MoFED 2003:53)

As the quote also illustrates, there is a hierarchy among the narratives in that production and productivity are explicitly given overriding importance. The implications of this are further addressed in the discussion (Chapter 6).

**5.2.2. Green niche actors’ narratives**

The narratives of agricultural development among green niche actors are on many points similar to the policy narratives, and primarily differ concerning the role of external inputs. This is little surprising considering that input use is one of the main differences between conventional and sustainable intensification, and was thus one of the criteria in the selection of green niche actors. While some consider chemical fertilisers as a necessary complement (e.g. 15, 16, 17), others believe that use of external inputs may not be suitable in the Ethiopian context (14), and “can at times do more harm than good” (20).
Many green niche actors highlight the issue of land degradation (11, 12, 13, 14, 15, 20), emphasising its connection with productivity:

“\textit{In Ethiopia, one of the main problems is the degraded land. Because of land degradation, although farmers work very hard, the soil cannot hold water. And it is devoid of nutrients, and because of that the crop productivity is very low.}” (20)

Some highlight that reducing degradation is not enough, and enhancing the natural resource base should also be a priority: “\textit{the first [thing I would like to see happening] would be halting soil erosion, second feeding the soil naturally}” (12). Recycling and using local resources wisely is proposed as a means to achieve this: “\textit{Local resource management would make agriculture more sustainable.}”(20)

Some actors have an explicit systems focus, highlighting the need for holistic approaches (e.g. 14), and acknowledging complexity: “\textit{there are trade-offs, there are knock-on effects, there are unintended consequences}” (16). Some also highlight the need for context-specific solutions:

“\textit{Technologies cannot be adopted the same way everywhere, and the local biophysical solutions are different}” (14).

On other points, green niche actors identify common problems, solutions and visions as those found in policy. Many share the goal of moving from subsistence-oriented to high-productive, market-oriented agriculture, highlighting the need for rural finance, mechanisation and commercialisation (13, 15, 19, 20). The green niche actors in other words primarily distinguish themselves in terms of the priority they give to natural resource management and green revolution technologies respectively.

\textbf{5.3. Navigating the system – strategies for change}

Given the institutional opportunities and constraints and actors’ respective narratives of agricultural development, regime and green niche actors choose various action strategies to try to steer the development pathway in the direction they perceive as desirable. To this end, they draw on various types of resources, and their social networks. These strategies, resources and social networks are described below. See also Appendix III for a more detailed overview.

\textbf{5.3.1. MoA’s action strategies and resources}

MoA has an extensive task, covering a wide range of issues including production, irrigation, food security, natural resources management. ATA has been driving the establishment of two new directorates at MoA – the Soil Fertility Directorate and the Soil Information Directorate –
where the latter is expected to take over responsibility of a new soil atlas, which has been developed by ATA. The Soil Fertility Directorate has teams working with chemical and organic fertiliser, and promote integrated soil fertility management (combining chemical and organic fertiliser), primarily targeted at farmers who cannot afford the standard recommendations for chemical fertiliser. They also work on other soil health aspects, especially soil acidity, where a main intervention consists of lime application (2). The Natural Resource Management Directorate works with a diversity of interventions, where an increasingly important area is watershed activities (4). MoA respondents (4,5) as well as an expert state that there has been a “mass mobilisation” around watershed activities over the last few years, although it is not clear whether this emerges from the grass-roots (which MoA respondents claim), or is driven by political interests from the top (which the expert states).

MoA respondents highlight that the extension system “is really a strength, it is a very good channel for the government to disseminate their programmes” (1). In a yearly screening and evaluation process, “best practices” are identified and documented in order to enable up-scaling, where “increasing yields is the major objective” (1). New technologies and practices are promoted in packages that have a strong focus on external inputs (1). For instance, new chemical fertilisers are developed that are better customised to local agro-ecological conditions. MoA are also “aggressively promoting” improved seeds, including disease and pest tolerant varieties with higher productivity (1). Improved practices and crop management are also included in the packages (1). A MoA respondent highlights that only 40% of the farmers are currently fully following the package recommendations, and that the remaining “are the farmers that need to change to reach the top level” (1).

MoA also implements donor-funded programmes of which the two major ones are the Agricultural Growth Programme (AGP) on the production and productivity side, and the Sustainable Land Management Programme (SLMP) on the natural resource management side3. Unlike the directorates, which operate across the country, the programmes work in a smaller number of districts, which allows a more concerted effort as well as piloting new, innovative practices. AGP is concentrated in the highland regions, and focuses on a set of selected commodities, strengthening production and marketing of these. SLMP has initiated a holistic assessment of the land situation, identifying existing solutions and technologies, and prioritising investment areas. A key feature of the programme is its holistic focus, including soil and water

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3 The Productive Safety Net Program is MoA’s largest program in terms of budgetary spending, but is social security-oriented and is therefore outside the scope of this study.
conservation, but also e.g. grazing land management, homestead development, and land tenure issues (5).

In short, whereas the directorates work broadly with primarily policy implementation, the programmes allow for more strategic action. A crucial component of MoA’s work is the extension system, which is characterised by a strong focus on external inputs, promoted through packages, and with a top-down tendency.

Resources
Resources at MoA is a somewhat sensitive topic since it is generally recognised that they are capacity-constrained. Rather than sporadic information obtained on this issue during the interviews, the following is therefore based on a comprehensive capacity assessment by Tadesse and Tsegaye in 2014. In short, it states that while MoA overall has adequate physical resources such as computers, connectivity and physical space, it faces severe constraints in terms of human resources. The staff has inadequate qualification, there is high staff turnover, and staff motivation is low. The human resources gaps reportedly lead to staff being busy with routine work rather than strategic, systematic activities.

5.3.2. ATA’s action strategies and resources
ATA primarily works in the highland regions (ATA 2016) and much of their initial work has been focused on issues associated with production and productivity in combination with commercialisation. Under GTP I, two flagship projects concerned soil fertility and were aimed at moving from blanket fertiliser recommendations to location-specific recommendations (ibid.). A soil fertility atlas – the first of its kind in Africa - was created, which is now expected to guide fertiliser recommendations (ibid.), and fertiliser blending facilities have been established in the highland regions (ibid.). Under GTP II, ATA’s main action strategy is named Agricultural Commercialisation Clusters – a commercialisation-oriented approach in which farmers in selected geographical areas are linked with other actors along the value-chain (ibid.). Farmers are encouraged to focus on specialisation, and in each cluster a small set of commodities and varieties will be promoted (9). Although ATA’s scope of activities is slightly increased under GTP II to also focus on inclusiveness and sustainability (7), there is a continuously strong emphasis on Green Revolution technologies and commercialisation. Combined with their explicit references to the East Asian green revolution (ATA 2016), ATA can therefore be seen as institutionalising the Agriculture as an engine for growth narrative.
As for their working modality, ATA does not have any implementation responsibility (6) and can focus solely on strategic, analytical work (6). A major component of ATA’s work is diagnostic studies, in which key aspects of the agricultural system are reviewed to identify major challenges where key interventions could have a large impact (7, 9). New, innovative approaches are piloted (6), with strong emphasis on evaluating whether they have “transformative potential” (9). ATA respondents describe their role in the transformation process as one of a “catalyser”, “facilitator”, and “coordinator” (8, 10), whereby they “lead the transformation process” (10) and align efforts of other actors (9). Their main partner is MoA, but they also work closely with government research, cooperatives and regional BoAs (7). They also work to increase coordination and collaboration with other ministries, including the Ministry of Industry and Ministry of Trade (8).

The above activities are all clearly in line with ATA’s initial mandate. However, there was also an overwhelming agreement among the respondents that a key challenge for ATA is implementation. As one respondent put it:

“We don’t have control over the results. We provide implementation support but we are only as good as the traction we get from our partners”. (7)

The implementation challenges are in part due to cooperation problems with MoA, linked to territorial issues: “initially, people become suspicious, and think in terms of competition” (10). However, there are also important capacity problems across implementing partners, and one respondent stated that “the systemic issue we talk about currently is the capacity limitation” (8). For these reasons, a lot of ATA’s strategic work is geared towards ensuring implementation. Interviewees highlight that “a lot of consultation is needed, and communication” (7), as well as a strong focus on capacity building, and creating ownership and accountability among partners (10). ATA has also advocated changes in how MoA operates, trying to reduce their burden of routine work and make them “move towards a focus on transformative activities” (6).

As these results show, there are trade-offs between on the one hand being an independent, strategic think-tank without any of the routine work associated with other agencies, and on the other hand making sure that the designed interventions are actually implemented. As one respondent mentioned, ATA has moved gradually closer to MoA, as a strategy to ensure implementation (6). At the same time, ATA respondents highlighted that being independent from MoA is precisely what enables ATA to work strategically:
“The new ideas need to come from the outside. [...] If you want to transform, you need an external agency.” (6)

Further, the implementation issues may consume important resources that could have been spent on strategic thinking, which may reduce ATA’s transformative potential. Finding the right balance in relation to MoA is therefore likely a critical factor for the success of ATA.

Resources
ATA are well-funded, which allows them to have good physical resources such as internet access, a high-tech reporting system and other facilities (10). Most importantly, it also enables them to have highly qualified staff (6). Copying the model of international consultancy firms, ATA “hire staff that are trained by big international companies, which in turn build the capacity of the local staff” (6). The programme teams are sourced locally, from the Ethiopian diaspora abroad, and internationally (7), and the analytical capacity is identified by respondents as “ATA’s strongest point” (6). Thanks to their relatively small size, they are flexible and lack bureaucracy (7). ATA’s strong political leverage is also mentioned as a strength, and being closely linked to the prime minister gives them “a strong voice that is easily heard” (6).

5.3.3. Green niche actors’ strategies, resources, and social network
The green niche actors represent a diverse group, including NGOs, an international development cooperation agency, international research actors, a regional network of civil society organisations and knowledge institutes, and private entrepreneurs. While all work to promote sustainable intensification in some form, the green niche actors employ a range of different approaches, and their focus in terms of technologies and practices vary (see Table 2).

Some actors, and particularly the NGOs, primarily work with communities and seek a strong impact on the ground. This is in line with the new NGO legislation which requires them to spend 70% of their budget on implementation. One NGO focuses on rural saving and credit as well as agriculture and food security, where a flagship project has set up farmer-led multiplication of improved seed – the first of its kind in the country (13). A second NGO focuses on intergenerational learning, traditional ecological knowledge, and agroecology (12). The third NGO works with community governance and farmers rights, as well as ecological farming, including a strong focus on soil and water conservation (11). The organisation has e.g. developed a method for composting, which has been scaled up at national level.

The research institutes primarily work in smaller local projects in order to generate knowledge and evidence for a particular approach or technology that they are promoting, to enable up-
scaling. One actor works with participatory research in sustainable intensification, taking an integrated approach including land and water management, and crop-livestock integration. Another actor is specialised in agroforestry, working on integrated tree-crop-livestock systems from a landscape perspective (14). The third research institute works with crop improvement of legumes and cereals (which does not necessarily fall under the sustainable intensification umbrella), but also has a major component on natural resource management, including developing models for sustainable intensification.

The network works with environmental governance in the Horn of Africa, focusing on creating synergies by increasing collaboration across actors. In Ethiopia, they have e.g. worked to set up new governance structures around a major fresh water lake, involving a diverse set of stakeholders (including industry, commercial farms, civil society, smallholder farmers, knowledge institutes, and government institutions) to ensure sustainable management of the resource. This is now used as a model case and the national government plans to set up similar structures in other parts of the country. The international development cooperation agency provides capacity development to the Sustainable Land Management Programme (led by MoA), training staff at all levels, and improving the implementation process.

The private entrepreneurs have developed or identified technologies whose sustainable intensification potential they believe strongly in, and try to contribute to a sustainable agricultural transformation by promoting these. One actor focuses on smallholder mechanisation, developing new farm implements for soil and water conservation. For instance, he has developed a new type of plough implement that drains waterlogged land and allows earlier planting, which has been scaled up through MoA. Another actor is promoting effective microorganisms and works as an environmental consultant in e.g. soil and water conservation. He also works closely with smallholder farmers in different parts of the country, and picks up innovative sustainable intensification ideas and tries to spread them, e.g. by encouraging rural entrepreneurship.

In their approach towards scaling, the different green niche actors vary from focusing primarily on sustaining their impact locally, to having a very explicit and elaborate model for scaling. For instance, one of the research actors has a ten-year plan in which the first half is dedicated to building partnerships and generating credible evidence of their approaches, to convince partners with whom they plan to scale in the second five years (16). From a scaling perspective, action strategies commonly evolve around piloting innovative approaches and generating credible evidence that the approaches work in the local context, e.g. are affordable by farmers and fit in
the agro-ecological context, and do not have any other significant barriers for adoption in the Ethiopian context. For instance, both private entrepreneurs have done extensive trials of their products in collaboration with government agricultural research institutes, to demonstrate “that it is effective, that it is harmless, and that it is good for the environment” (19), or that it is “efficient and accepted by farmers” (20).

In their relation to the government system, all actors see the government as a key partner, especially for up-scaling. Certain actors are pragmatic about their relationship with the government, not necessarily being in favour of the government’s approach but acknowledging that they are the “major player” and need to be involved. Key government partners include regional and national government research, and various levels of administration including MoA, ATA, and regional BoAs. Most actors work closely with the extension system, and several highlight that it is an up-scaling channel with potentially huge impact. As one respondent stated:

“We have been working almost hand in hand. This is a joint effort, and that is why we can see success within a short period of time, and with very limited resources”

(13)

However, when scaling through the government system, the green niche actors to a certain degree lose control over the process. As one actors who has scaled composting points out:

“We are not responsible for rolling it out – we can't, we are tiny.” (11)

This may in turn impair the quality:

“There has been a lot of misinformation on how you make and use compost, although one of the things we have backed up our work with is manuals. (...) You get weird stories coming back.” (11)

As the actor points out, scaling this type of approaches in a system that is primarily adapted to disseminate external inputs constitutes a challenge:

“The weakest link in getting a lot of these ideas properly passed over or inculcated into farmers own knowledge is the extension system. The extension system, the curricula and everything, is still focused (...) on the American model, with high external inputs.” (11)
Another actor, who works with explicit systems approaches, also points out the challenges in scaling these:

“We have taken this systems' approach, and academically we are quite interested in the whole idea. Factors affecting systems' evolution, how that operates across different farm types, and so on. (..) But to scale that. (..) That is more of a challenge. (..) It is much easier to scale a new variety of wheat.” (16)

In practice, the actor has developed and promoted some of their innovations as “packages” to ensure scalability through existing structures:

So there is – this is not a very nice word but – a kind of package emerging there (..). And those are technologies that could be scaled. In south Tigray the zonal administration is actually really interested in scaling through their own system. (16)

Although it may appear contradictory for a systems-oriented actor to follow the reductionist-oriented logic of the Ethiopian extension system, where a few specific technologies are generally promoted without context-adaptation, this strategy of adaptation to the existing structures is a means of increasing their impact. The actor works within relatively short time frames, which may make such a strategy particularly tempting.

In sum, many of the green niche actors work with integrated approaches, introducing new innovative ideas for sustainable intensification and generating credible evidence that they work in the local context. In order to increase their impact, they collaborate closely with government structures, which however creates a range of challenges and trade-offs.

Resources and social networks

The results on resources and social networks are not comprehensive for individual actors (see Appendix I for further details), but certain patterns emerge for the green niche actors as a group. They generally highlight that their strength lies in their human resources – not necessarily in staff numbers, but in terms of expertise, experience, committed staff and innovativeness. For instance, one of the private entrepreneurs states:

“I have the experience and the desire to develop improved implements. I think that is our strength. We are very innovative, we have good products“. (20)
The international research actors can draw on a large pool of competence since they have access to their other international offices, as well as partner research centres in Ethiopia. They have also built up considerable experience in their areas:

*Watershed-based management is one area where we have a long experience, from the level of actual research, up to seeing it as a major government development programme. That is quite a valuable experience, which can be used anywhere else in the world.* (15)

In terms of their financial situation, the actors vary from having stable long-term funding (e.g. 13) to constantly struggling to mobilise resources (e.g. 11). Certain NGOs mention the 2009 legislation being a challenge, which has forced them to change their mode of operation (13). Others mention the “projectification” trend in the donor society, which has led to more short-term project funding (14).

Many of the actors interviewed have strong personal networks with people at important positions in Ethiopian society (e.g. 11, 16, 19, 20), which is particularly useful given the rigid formal structures in the country. For instance, one green niche actor highlights how personal contacts within ministries allow them to informally navigate the system and “get things done” (16). Many actors are also good at building new, strategic partnerships, often being very explicit about what they gain by collaborating with various actors (e.g. 11, 16, 18). For instance, the NGO working on composting mentioned that collaborating with research and the local administration at an early stage was crucial in later enabling them to scale up, since that ensured that their work was perceived as relevant, and generated credible evidence of their impact:

*“We got a very big dataset in the end, over seven years. And that dataset convinced the Ministry of Agriculture.”* (11)

However, the green niche actors are not particularly well connected amongst themselves. Although there are certain efforts of coordination (such as a network for organic agriculture currently being set up by one of the NGOs), interviewees mention that “*people are working in isolation*” (19) and that there is a lack of a common forum to collaborate on issues around sustainable intensification of agriculture (12, 19). This has obvious implications for their ability to have an influence.
6. Discussion

Figure 5 summarises key findings of the study. As the study has shown, the Ethiopian context with strong government domination and rigid structures provides limited opportunities for niche innovations to emerge that could contribute to a much-needed agricultural transformation in the country. In current policy documents one primary narrative of agricultural transformation stands out, which builds on classical Green Revolution ideas. Alongside, there are two narratives of environmental rehabilitation and food security, which are, however, less future-oriented and clearly subordinate to the *Agriculture as an engine for growth* narrative. At national level, two main regime actors work to achieve such agricultural development. MoA, who is facing important human capacity constraints, work broadly with policy implementation and up-scaling of best practices. Since 2011, ATA is in place to fill institutional and capacity gaps. With strong human resources and political leverage, they work strategically and innovatively. As this study has confirmed, ATA has indeed a role to fill, and has managed to mobilise resources and gain momentum for a transformation, primarily in line with the *Agriculture as an engine for growth* narrative. This likely puts the regime in a much better position to achieve an agricultural transformation. However, this study has also shown that there are tensions within the regime. Since ATA struggle with having their ideas implemented, they are drawn closer to MoA, which risks limiting their independent, transformative role.

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**Figure 5. Summary of key findings.**

*Photo credit: O Ecotextiles, Yasamagaci, and Devex.*
In this context, the green niche actors try to influence the pathway of agricultural development, often facing severe legal and practical barriers to do so. In the following, their prospects for making a change in a more sustainable direction are discussed, focusing on two crucial aspects – namely the character of their interaction with the regime, and the discursive decoupling of issues of agricultural production and environment, which characterises current thinking about development in the country. To conclude, some theoretical implications of the study are discussed.

6.1. Institutional opportunities and how green actors navigate them

As this study has shown, the Ethiopian context provides limited opportunity for green niche actors to steer the agricultural development trajectory in a more sustainable direction. Firstly, many niche actors face severe legal and practical barriers for transformative action. Secondly, the governance context is difficult to penetrate, with a general lack of non-state partners and highly rigid institutional structures. In this context, the green niche actors seek to maximise their impact and adapt their strategies to the existing opportunities. They make use of their resources – which are primarily human resources such as knowledge, experience and creativity – in order to develop innovative sustainable intensification solutions, which regime actors may not have the interest or resources to focus on. To sustain their efforts and increase impact, all actors work closely with the government structure – a clear adaptation to the strong state-dominance in the country. Several actors highlight the potentially large impact that is possible by scaling through the government system, and several actors have managed to scale this way. However, this strategy comes at a price. Firstly, although the actors may be able to influence what is being scaled, they do not control how it is being scaled. Scaling through the extension system is likely done in a top-down manner, with a campaign and/or package approach. Not only may this be in conflict with the beliefs and values of the actors, but it may also significantly reduce the quality of the technology or approach being scaled. Certain things are more appropriate than others to scale in this manner, but systems approaches that require context-specific adaptation and long-term work are likely particularly ill-suited. If taken out of context, many sustainable intensification technologies may therefore not have the expected impact. Further, it could, as a consequence, impair the reputation of such technologies. Certain actors adapt their own approaches to fit into the existing structures, e.g. developing “packages”. Such adaptations may, again, be in conflict with their own interests and beliefs, but is a pragmatic approach to ensure impact beyond their own project sites. It, however, further reduces the prospects for more radical change.
Secondly, since the government maintains control of what and how things are scaled, the innovations are not challenging power. The government is unlikely to scale approaches that fundamentally deviate from their own narrative about agricultural development, and niche ideas may be “captured” and adapted to the government’s own agenda. Fressoli and colleagues (2014) distinguish between insertion and mobilisation as two options facing niche actors interacting with mainstream regime actors. Whereas insertion refers to introducing new ideas in existing spaces and “playing by or adapting to the rules of dominant institutions, technologies, regulations, etc.” (Fressoli et al. 2014:281), mobilisation is a process of gaining support for a more radically different pathway and challenging dominant practices, technologies, power relations and discourses. Using these terms, the green niche actors are clearly pursuing an insertion strategy. This is also in line with the type of behaviour that Dorado (2005) predicts in “opaque” opportunity contexts. Although this strategy reduces the potential for a more fundamental altering of the current development pathway, it may be a pragmatic approach in the current Ethiopian context where options for mobilisation outside government structures are limited.

6.2. Decoupling of agricultural development and the environment – a discursive barrier

Although environmental rehabilitation is relatively high on the agricultural agenda, the narrative policy analysis showed that natural resource management is seen as a means of reducing degradation rather than a crucial component of enhanced and sustainable agricultural production. The decoupling of agricultural productivity and natural resources identified in the policy narratives signals a more fundamental discursive separation of humans and nature. This dichotomy is common in Western thought and worldviews (Davidson-Hut and Berkes 2003), but constitutes a major obstacle towards truly sustainable development. As highlighted by e.g. Berkes and colleagues (2003), society and nature are in fact closely interconnected and characterised by two-way interlinkages and feedbacks. Dealing with the systems separately will therefore only, at best, generate a partial understanding (Walker and Salt 2006).

For the Ethiopian government, whose focus is directed towards achieving food self-sufficiency and middle-income status by 2025, the strong focus on production is understandable. But over the longer term, and accounting for the impacts on the broader system, an approach that does not acknowledge the links between agricultural systems and the surrounding landscapes will likely generate a range of significant problems, problems that may have been easier to solve at an earlier stage.
Not only is the decoupling of social and ecological system problematic in its own right, but it also translates into practical challenges for green niche actors trying to pursue an agenda that does not necessarily abide to the assumptions of the dominant discourse. Firstly, it constitutes a pedagogical challenge for actors who perceive themselves to work with both agricultural productivity and natural resource management issues. Further, the discursive divide tends to downplay the importance of natural resource management. The fact that the narratives are translated into an institutional structure where the issues to a large extent are dealt with separately (with e.g. MoA being divided into separate directorates for natural resource management and productivity issues) also constitutes a barrier for actors working across the divide.

6.3. Implications for transformation theory

Theories on transformation in social-ecological systems and socio-technical transitions largely build on studies from Western contexts (see e.g. Gunderson et al. 1995, Olsson et al. 2004, Loorbach and Rotmans 2010, Farla et al. 2012). This study has broadened the scope of applications of the theory by examining an opportunity context that is in many ways radically different from what is found in Western countries, not least in terms of democratic governance and state capacity. In the hierarchical and authoritarian Ethiopian context with strong government domination and marginalised niche actors, transformation is likely to be a government-led top-down process, with only small tilts made by niche actors. The study thus sheds some light on how transformation processes in this type of contexts can be expected to play out, as well as which actors that are likely to be involved. This may be illustrative for other countries in SSA and beyond, who face similar governance characteristics and challenges in terms of transforming current agricultural systems.

Further, this study has analysed a case in which not only niche actors try to achieve a transformation, but where the regime itself seeks to transform. However, with its focus on opportunity context and strategic agency, transformation theory is better at explaining change emerging from the niches (exogenous change) than from the regime itself (endogenous change). The multilevel perspective may be useful precisely to distinguish between change emerging from niches and the regime, and to clarify some of the power dimensions in this regard. New conceptualisations may, however, be needed to better account for endogenous change, including assessments of regime and system-level characteristics. For instance, it is probably uncontroversial to claim that system-level capacity and resources are likely important factors for realising a transformation in this context – an aspect that is not comprehensively accounted
for in current theories on sustainability transformations. Developing a framework that distinguishes and is able to explain both endogenous and exogenous change therefore constitutes an avenue for further research.
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Appendix I – Methodological reflections

Research design
The study is designed as a single-case study (Yin 2014) exploring a potential agricultural transformation in Ethiopia. The social-ecological system in question is smallholder agriculture in present-day Ethiopia, with its associated power, political and institutional structures. The primary objective of the study is to understand the Ethiopian case with the help of transformation theory. However, in doing so, the study also tests the usefulness of transformation theory in understanding a new type of case, and certain findings may be relevant to a broader range of cases.

The research design allows for an in-depth understanding of a complex phenomenon within its real world context, and where the researcher has no control (Esaiasson et al. 2012, Yin 2014). However, since the empirical data was only collected at one point in time, it does not enable exploring transformational dynamics over time. A further limitation is that the study is concentrated at the national level, although there are large regional disparities in how the transformation plays out across the country.

Methods

Expert interviews
The main validity concern of the expert interviews is that they cover potentially politically sensitive issues in an oppressive context. This is particularly an issue for the interviewees that are closely associated with the government. This was dealt with by granting the informants the highest possible degree of anonymity (although full anonymity was not possible). Further, informants’ claims about government achievements and the like were interpreted with caution, and one informant who is openly critical towards the government was included, which enabled cross-checking.

Policy analysis
The small number of documents included in the analysis may increase the risk of bias, which is dealt with by strategically choosing the national policy documents that are most global in scope. A potential weakness in the selection is that the oldest document is from 2003 and the newest from 2016, and narratives may have changed over this time. However, the Rural Development Policy and Strategies (2003) deals more with underlying principles for agricultural development and the theory of change, which by and large have remained the same.
A problem in most policy analyses is that government policies may not necessarily reflect the true interests of the government. A further limitation in the Ethiopian context is that the government has very limited capacity to implement. This means that policies do not necessarily reflect what is happening on the ground. However, focusing on the overarching priorities, I assume that the policy documents reflect the mainstream political discourse around agricultural development.

The narrative analysis builds on the assumption of the importance of social constructions (Jones and McBeth 2010). Narratives are not seen as units that actually exist in a delimited fashion in reality, but rather as analytical concepts that can help make sense out of a socially constructed reality (Winther Jørgensen and Phillips 2000, Jones and McBeth 2010).

**Respondent interviews**
The choice of a qualitative method allows for nuanced descriptions, flexibility, and helps uncover central themes (Kvale and Brinkmann 2009), which is useful for exploring actors’ strategies. Dealing with actors as a group, however, tends to downplay differences within the group.

In the following, some validity concerns of the respondent interviews are addressed. Although resources were pointed out as important in the literature on transformational agency, it proved challenging to operationalise and measure in practice. As can be seen from the interview guide (Appendix VI), questions relating to resources were not comprehensive and the results on this point are therefore not entirely comparable across the interviews. In certain cases, the interviewees were explicitly and extensively covering resources. In other cases, resources were inferred by the researcher based on implicit statements (e.g. that elaborate reasonings about partners’ needs indicates relational skills). Further, the results for MoA are primarily based on external reports, whereas the others are based on the interviews (i.e. self-reporting), which may create a bias. Interviews may in fact not be the most appropriate method to gather this type of information, since it 1) is difficult to make comparisons across interviewees and assess the level of resources, and 2) requires both self-perception and honesty from the interviewees. Further, since it is a somewhat sensitive topic, direct and detailed questions may be perceived as intimidating by the interviewees. In order to increase validity, the content of Appendix III was sent out for verification to all green niche actors, to ensure a fair representation. Minor revisions were then done by some interviewees.
Transformation literature provides little guidance on operationalisations of the concept, and claims about actors’ resources are often not clearly backed up by evidence, which makes it difficult to replicate. Under the circumstances, the method used here was judged to give the best approximation of resources. However, it remains the main validity concern of the respondent interviews.

For partly the same reasons, the assessment of actors’ social network is also sketchy. Since it is challenging to measure in a short conversation, the assessment cannot be said to be comprehensive. For both resources and social networks therefore, the results should be interpreted as a partial description of reality, and the results should not be compared across individual actors. For the green niche actors as a group, however, the results give a reasonably good estimate.

**Epistemology**
With its qualitative, holistic approach and focus on understanding (rather than e.g. prediction), this thesis takes a, to a certain extent, constructivist approach (Creswell 2003). For instance, the narrative analysis builds on the assumption that no narratives “exist” in reality, but that the narratives identified by the researcher could provide a useful means of understanding a complex, socially constructed reality. However, the study is also strongly problem-oriented and makes use of a variety of methods (combining for instance inductive and deductive approaches), which is in line with a pragmatic approach (Creswell 2003).

**Reflections on the field work**
By and large, the field work could be carried out as planned. A key to success was good local contacts who had a good network, and knew how to “get things done”. This was particularly important in the hierarchical and bureaucratic Ethiopian context.
Appendix II – Further elaborations on methods

Policy analysis
Identification of narratives

Table 3. Policy priorities for the agricultural sector as stated in the respective documents.

<table>
<thead>
<tr>
<th>Policy priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ethiopia’s agricultural sector policy and investment framework 2010-2020</strong></td>
</tr>
<tr>
<td>• Production and productivity</td>
</tr>
<tr>
<td>• Commercialisation</td>
</tr>
<tr>
<td>• Natural resource management</td>
</tr>
<tr>
<td>• Vulnerability and food security</td>
</tr>
<tr>
<td><strong>Rural Development Policy and Strategies 2003</strong></td>
</tr>
<tr>
<td>• Production and productivity</td>
</tr>
<tr>
<td>• Food security</td>
</tr>
<tr>
<td><strong>Growth and Transformation Plan II 2015/16-2019/20</strong></td>
</tr>
<tr>
<td>• Crop productivity and production</td>
</tr>
<tr>
<td>• Livestock productivity and production</td>
</tr>
<tr>
<td>• Natural resource conservation and utilisation</td>
</tr>
<tr>
<td>• Food security, disaster prevention and preparedness</td>
</tr>
</tbody>
</table>

In order to capture key policy narratives, the choice of narratives was based on explicit priorities identified in the policy documents. Table 3 summarises such top priorities in the respective policy documents. The stated policy priorities were synthesised into three overarching narratives. Production and productivity, and commercialisation were combined into the *Agriculture as an engine for growth* narrative since they are tightly interlinked in the policy documents and are linked to similar causes and visions. Natural resource management constituted the basis for the *Environmental rehabilitation* narrative, and food security, disaster prevention and preparedness, and vulnerability became the *Food security and resilience* narrative. Based on these three overarching themes, more detailed narratives were drawn out using the analytical framework described in Section 4.2.

Choice of policy documents
Policy documents were chosen that cover the entire agricultural sector (excluding e.g. the Seed sector strategy or the Climate-resilient green economy strategy), and are the most recent policy documents (excluding e.g. GTP I). This is since the analysis covers the agricultural sector as a whole, including priorities across areas, and focuses on current narratives.
Respondent interviews
Selection of respondents
The criteria for selection were actors that aim for a change of status quo in Ethiopian agriculture; act at national level (which e.g. excludes actors operating only at local scale); focus on smallholder agriculture; and work broadly with agricultural issues (which excludes actors focusing on a narrower topic, e.g. biodiversity).

I aimed to interview respondents as high up as possible in the hierarchy. For the non-state actors, this was always possible. For the state actors, however, I interviewed persons at lower level. This was directors (i.e. heads of directorates) in most cases, and sometimes senior technical experts. The primary implication of this was that I had to interview more people in order to get a good overview of the organisation. In a few cases, the interviewees had a bit more limited insights into the strategic operation of the organisation. In order to cover as much as possible of the relevant work at MoA and ATA, five respondents were interviewed from each. The directorates selected were related to the production system (which e.g. excludes marketing and gender). At MoA, the two largest production-related programmes (the Agricultural Growth Programme and the Sustainable Land Management Programme) were included, since these donor-funded programmes are an important part of the federal ministry’s mandate. The extension directorate was also included since it is highlighted in the government’s policy documents as one of the key means to achieve a transformation, and was highlighted as very important in most expert interviews. At ATA, the Agricultural Commercialisation Clusters directorate was included since it is ATA’s key strategic intervention in the coming five year period.

As for the non-state actors, those were selected who emphasise sustainability in agricultural development. This was quite broadly interpreted, but included actors who either work explicitly with sustainable intensification, or with approaches that see production and sustainability as parallel goals. The assessment of potential green actors to include was primarily based on publicly available information such as the organisation’s webpage. The aim was to cover all such actors operating in the field. For certain actor groups (such as the private sector, research institutes and donors) there were many actors, and a selection was then made based on how strongly focused they were on sustainability. This was also assessed based on publicly available information, and confirmed with experts (see Appendix IV for a list of the experts).
Interview conditions
All interviews were carried out at a place chosen by the interviewee, usually their office. Certain interviewees did not wish to be recorded, and detailed notes were then taken under the interview. In order to ensure reliability, the interviews were transcribed as soon as possible after the interview (always within one hour from the end of the interview). Sending the interview transcripts to the interviewees for review also enabled a reliability check.

Although I asked for 1-1½ h interviews, certain respondents only had time for a 30 minute interview. Since this was anticipated, the interview questions were prioritised according to importance (further explained in Appendix VI) and only the issues of highest importance were covered. This, however, means that certain interviews were more in-depth than others. There were certain language barriers in a small number of interviews, which was, however, not judged to considerably affect the results.

Ethical considerations
For expert interviews, informants signed a consent form including information regarding anonymity and confidentiality. They also received a plain language description of the study, and an oral explanation of the study. Respondents received the same plain language description and consent form but without signing, since that act was judged to be potentially intimidating in the context (based on recommendations by local contacts). The information was gone through orally at the start of the interview, and the interviewees were given time to read it through. They were also encouraged to ask questions. The interview transcripts were sent out to all interviewees for review, and all revisions received within a month from sending were accepted.

Since the study was carried out in an oppressive context, issues of anonymity and confidentiality were given careful thought, and a precautionary principle has been applied in cases of doubt when presenting the results and interviewees, giving the interviewees a high degree of anonymity.
## Appendix III – Results summary across respondents

### Summary of interview results MoA and ATA

<table>
<thead>
<tr>
<th>Type of actor</th>
<th>Ministry of Agriculture</th>
<th>Agricultural Transformation Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus areas</strong></td>
<td>Agriculture, food security, natural resource management, irrigation, research and extension, etc.</td>
<td>Agricultural transformation, primarily in the highland regions.</td>
</tr>
<tr>
<td><strong>Mode of operation</strong></td>
<td>Coordinate policy implementation, scale &quot;best practices&quot;, implement donor-funded programmes.</td>
<td>Diagnostic work, policy development, innovation, coordination. Ensure implementation by building partners' capacity, consulting and communication, creating ownership and accountability, and piloting.</td>
</tr>
<tr>
<td><strong>Resources†</strong></td>
<td>Adequate physical resources such as computers, connectivity and physical space. Severe constraints in terms of human resources.</td>
<td>Strong human resources, especially analytical capacity. Political leverage. No implementation capacity.</td>
</tr>
</tbody>
</table>
### Summary of interview results for green niche actors

<table>
<thead>
<tr>
<th>Type of actor</th>
<th>NGO 1</th>
<th>NGO 2</th>
<th>NGO 3 (charity)</th>
<th>Research institute</th>
<th>Research institute</th>
<th>Action research project</th>
<th>International development cooperation agency (Implementer)</th>
<th>Network</th>
<th>Private entrepreneur</th>
<th>Private entrepreneur</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mode of operation</strong></td>
<td>Programmes in various parts of Ethiopia. Sustain their efforts by ensuring strong community commitment. Work with innovative methods and processes.</td>
<td>Work with farming communities, extension and local research. Projects are mainly based in Tigray, but several interventions have been scaled up nationally.</td>
<td>Programmes in highland areas. Work with a group approach, developing scalable models.</td>
<td>Research in development (research in close collaboration with development partners).</td>
<td>Mainly research and promote the mandate crops. Also develop scalable models for sustainable intensification and natural resource management.</td>
<td>Work in two phases, spanning 10 years in total. Action research in the first phase. Scaling and backstopping through continued research in the second phase.</td>
<td>Technical support to the government programme SLM/P.</td>
<td>Build environmental governance structures. Bring actors together.</td>
<td>Promotes EM through private business. Works with development partners and research to promote ecological approaches, particularly through rural entrepreneurship.</td>
<td>Develops small-holder farm implements, promotes them, and trains farmers.</td>
</tr>
<tr>
<td><strong>Relation to government system</strong></td>
<td>Openly critical towards government policy, but work closely with government structures.</td>
<td>Work closely with various levels of government.</td>
<td>Work with government research. Align with government policy. Government is key scaling partner.</td>
<td>Close collaboration with extension, policy makers, and government research.</td>
<td>Work with local administrative system, local research, ATA and other government actors. Government is a key partner.</td>
<td>Always aligned with government policy, working closely with government.</td>
<td>See government as a key partner, and their main “beneficiary”. Align with policy</td>
<td>Works closely with extension, and sees government system as the key partner. But has challenges with bureaucracy and regulations.</td>
<td>Works closely with the government, and tries to advise them. The government is the first-hand choice partner for scaling.</td>
<td></td>
</tr>
<tr>
<td><strong>Approach towards scaling</strong></td>
<td>Work to institutionalise their approach into the government system.</td>
<td>Very strategic scaling processes. Good timing with national and international processes. Work in strategic partnerships to enable scaling.</td>
<td>Are more explicitly about project sustainability than scaling, but have managed to scale through the government.</td>
<td>Build context-specific evidence and work in close partnership with NGOs and government.</td>
<td>Work with extension, farmers, government research and NGOs for out-scaling, and with EJAR, ATA and policy makers for up-scaling.</td>
<td>Have a very explicit scaling model. Work strategically with partners from the outset. Build credible evidence in the first phase, in order to convince scaling partners for the second phase.</td>
<td>Promote out-scaling in the coming phase, by stimulating exchange between districts, and creating incentives for learning among extensionists.</td>
<td>Develop a scalable governance model and generate evidence that it works. Work bottom-up but align with policy to enable scaling. Focus on small number of sites to develop well-functioning, successful cases</td>
<td>Promotes rural entrepreneurship, and promotes EM as a business venture.</td>
<td>Has set up collaboration with farmers’ unions (through MoA) in a first step. Plans to scale through rural entrepreneurs in the future.</td>
</tr>
<tr>
<td><strong>Social network†</strong></td>
<td>Have a good &quot;sleeping&quot; social network, which is however not actively used. Work in partnerships with other NGOs, networks, and donors, but lack a common forum.</td>
<td>Can draw on very good social network including personal contacts, nationally and internationally. Strategic partnership-building, mainly with extension and local universities.</td>
<td>Work in partnerships with market actors, extension system, and NGOs. Have worked with and scaled through ATA.</td>
<td>Work with other research centres, government research, NGO’s, and government ministries. Try to include all levels of government in their research.</td>
<td>Work closely with government research and extension. Also work with other research institutes, NGOs and private sector actors, such as input suppliers and agro-processors.</td>
<td>Good personal contacts with ministries and policy-makers, which they can use to informally navigate the system. Have network internationally and nationally. Very strategic when choosing partners.</td>
<td>Have a long-standing collaboration with MoA. Other partners in SLMP are e.g. donors.</td>
<td>As a bridging organisation, partnerships are crucial. Network members are from knowledge institutions and civil society. Other partners industry, government, farmers associations. Have links with research.</td>
<td>Strong personal network after a long career. Good contacts within MoA and with other actors. Works with various kinds of partners: NGOs, development partners, research, extension. But lacks a common forum.</td>
<td>Good social network at MoA and in government research. Has mobilised international support and funding. Collaborates with NGOs, is developing partnerships with cooperatives and model farmers.</td>
</tr>
</tbody>
</table>

† Please note that the results on resources and social network are not comprehensive for individual actors, as this issue was too large to be fully covered during the interviews (see Appendix I for details). It should therefore not be compared across individual actors, but is intended to highlight some key patterns across actors. MoA’s resources are not based on interview data, but on an analysis by Tadesse and Tsegaye (2014)
Appendix IV – List of interviewees

Expert interviews

<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Main interview topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Food Policy Research Institute</td>
<td>Agricultural policy.</td>
</tr>
<tr>
<td>Independent (has e.g. been closely involved in agricultural policy-making processes)</td>
<td>Policy processes. Agricultural and rural development policy. Governance (e.g. roles and mandates of different state actors).</td>
</tr>
<tr>
<td>Ethiopian Institute for Agricultural Research</td>
<td>Natural resource management policy and governance.</td>
</tr>
<tr>
<td>Water and Land Resources Centre</td>
<td>Historical overview of Ethiopian production system. Soil and water conservation in Ethiopia.</td>
</tr>
<tr>
<td>Alliance for a Green Revolution in Africa</td>
<td>Extension. Innovation and the private sector in agriculture.</td>
</tr>
</tbody>
</table>

Respondent interviewees

State actors

<table>
<thead>
<tr>
<th>Name of organisation</th>
<th>Directorate</th>
<th>Respondent no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MoA</td>
<td>Extension</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Soil Fertility Improvement</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Agricultural Growth Programme</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Natural Resource Management</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Sustainable Land Management Programme</td>
<td>5</td>
</tr>
<tr>
<td>ATA</td>
<td>Production &amp; Productivity</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Environmentally Sustainable and Inclusive Growth</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Sustainable Land Management (previously Soil Health and Fertility)</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Agricultural Commercialisation Clusters</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Climate Change and Disaster Risk Management (previously Climate and Environment)</td>
<td>10</td>
</tr>
</tbody>
</table>

At ATA, respondents were Directors and Senior Directors. At MoA, respondents were Director General, Director, Senior experts, and Technical advisor.
## Non-state actors

<table>
<thead>
<tr>
<th>Name of organisation</th>
<th>Type of actor</th>
<th>Respondent no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute for Sustainable Development</td>
<td>Ethiopian NGO</td>
<td>11</td>
</tr>
<tr>
<td>MELCA</td>
<td>Ethiopian NGO</td>
<td>12</td>
</tr>
<tr>
<td>Self Help Africa</td>
<td>International NGO (charity)</td>
<td>13</td>
</tr>
<tr>
<td>World Agroforestry Centre</td>
<td>International research institute</td>
<td>14</td>
</tr>
<tr>
<td>ICRISAT</td>
<td>International research institute</td>
<td>15</td>
</tr>
<tr>
<td>Africa RISING</td>
<td>Action research programme</td>
<td>16</td>
</tr>
<tr>
<td>GIZ</td>
<td>International development cooperation agency (implementer)</td>
<td>17</td>
</tr>
<tr>
<td>Horn of Africa Regional Environmental Network and Centre (HoAREC-N)</td>
<td>Regional network</td>
<td>18</td>
</tr>
<tr>
<td>Gedion Shone</td>
<td>Private entrepreneur</td>
<td>19</td>
</tr>
<tr>
<td>Aybar Engineering PLC</td>
<td>Private entrepreneur</td>
<td>20</td>
</tr>
</tbody>
</table>
Appendix VI – Respondent interview guide

P1 and P2 indicates order of priority. When time was limited, only these questions were asked. Please note that the interview guide was used as a memory aid rather than a protocol.

Narrative
P1. What do you perceive to be the main problems/challenges in Ethiopian smallholder agriculture?

   What are the reasons (causes) behind these problems?

   How can these problems be solved?

P2. What would you want Ethiopian agriculture to look like in 15 years?

   How do you envision the future of farmers currently reliant on subsistence farming?

Action strategies
P1. What do you see as the role of yourself and your organisation in this development? What impact do you seek to have with your work?

P1. What are the different kinds of activities that you are carrying out in order to achieve this?

   Why these?

   Who are the different target groups that you direct your activities at?

   What are the main criteria when selecting which approaches to work on?

   What do you see as your key challenges? What will be crucial for you in order to overcome this?

   Do you have any ambition to scale up your activities?

P1. What are the next steps for your organisation? How do you hope to proceed your work in the future?

Social networks
P1. Do you collaborate with, or receive support from, other actors? What is the nature of the collaboration?

   How did you go about to set up these collaborations?
How come you set up a collaboration with them? Do you think that these collaborations have been beneficial for you? In what way? Are there any particular skills or resources that these actors have that you find particularly valuable?

Are there any actors that you currently have no or little collaboration with, but would like to increase cooperation with? Why these? What do you think it would take to have them interested?

P1. Are you part of any networks?

Resources
P1. What are currently your major constraints for reaching the impact you aim for (within own organisation, in terms of skills, knowledge and different kinds of resources - human, social, natural, financial)?

Do you currently have any strategy to address this?

P1. What are your key strengths in terms of skills, knowledge and resources? In what way are they useful?

P1. Over the years, how has your organisation been funded? Is funding a problem?

What is the educational background of the staff members?

Do you have any challenges in recruiting qualified staff members?