

**LONG TERM PERSPECTIVES ON DEVELOPMENT IMPACTS
IN RURAL ETHIOPIA: WIDE3 STAGE 3**

**STAGE 3 ANNEX 1:
THE SOCIAL COMPLEXITY
METHODOLOGY**

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Social complexity methodology draft

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1. Introduction

The WIDE research covers twenty communities in Ethiopia selected as exemplars of different types of rural livelihood system. WIDE1 research was conducted in fifteen of the communities in 1994/5 and WIDE2 in all twenty in 2003. WIDE3 was undertaken in three stages between 2010 and 2013. The Stage 3 report focuses on six communities which are located in places with different kinds of agricultural potential: they include two kinds of coffee-based livelihood system, three crop-based systems (maize, *tef*, and potatoes/wheat), and one livestock-led system. In the summary report we explore the trajectories of these communities leading up to and under the EPRDF regime and assess the roles played by government development interventions in those trajectories. The communities are conceptualised as open and dynamic complex social systems nested in, and historically co-evolving with, the larger country system. The historical trajectory of this larger system has been partially constructed and driven by social interactions in and among the myriad rural and urban community systems geographically spread over Ethiopia's landscape.

Rapid and non-linear social changes are hard to study using conventional methodologies and there has been a surge of interest among policy theorists¹ in adapting and using mental models and methods developed in complexity science and theory which can handle both change and continuity. This Annex describes the WIDE3 methodology which has been progressively developed during the three research stages between 2009 and 2014 using the increasingly popular complexity paradigm. Complexity social science provides a paradigm for exploring both change and continuity, and when used with case-based methods can lead to innovative and practical policy-relevant conclusions. In the complexity framework which underpins the study described here the communities are conceptualised as 'dynamic open complex systems' co-evolving on path-dependent trajectories with internal sub-systems, for example households and people, overlapping contextual systems, for example wider clan and religious systems, and encompassing systems, for example the Region and the country as a whole. The WIDE3 data is being used in two ways: to conduct comparative case analysis of the communities in 2010-13 to identify different types of rural community, and, in conjunction with the WIDE1 and WIDE2 data, to investigate the longer-term cumulative impacts of development interventions and wider modernisation processes on the trajectories of the communities and the life qualities of their different kinds of member.

The Annex is organised under twelve headings. Section 2 provides summary information about the twenty research sites while the remainder of the paper describes the steps in WIDE3 research process which link underlying philosophical assumptions with policy-relevant conclusions. Section 3 outlines the Foundation of Knowledge Framework (Bevan 2007 & 2009) which identifies nine different linked aspects of knowledge generation which all empirical researchers ought to address transparently². Section 4 describes the research domain and questions, Section 5 the use of theoretical frameworks, Section 6 the substantive theory, Section 7 the research strategy, and Section 8 the fieldwork process and making of the database. Section 9 outlines the interpretation and analysis process and Section 10 provides examples of the five different types of research 'answer' we have been producing. Section 11, describes the structure of the final report and Section 12 how we tried to engage with policymakers so that our findings could inform *praxis*.

2. The WIDE research

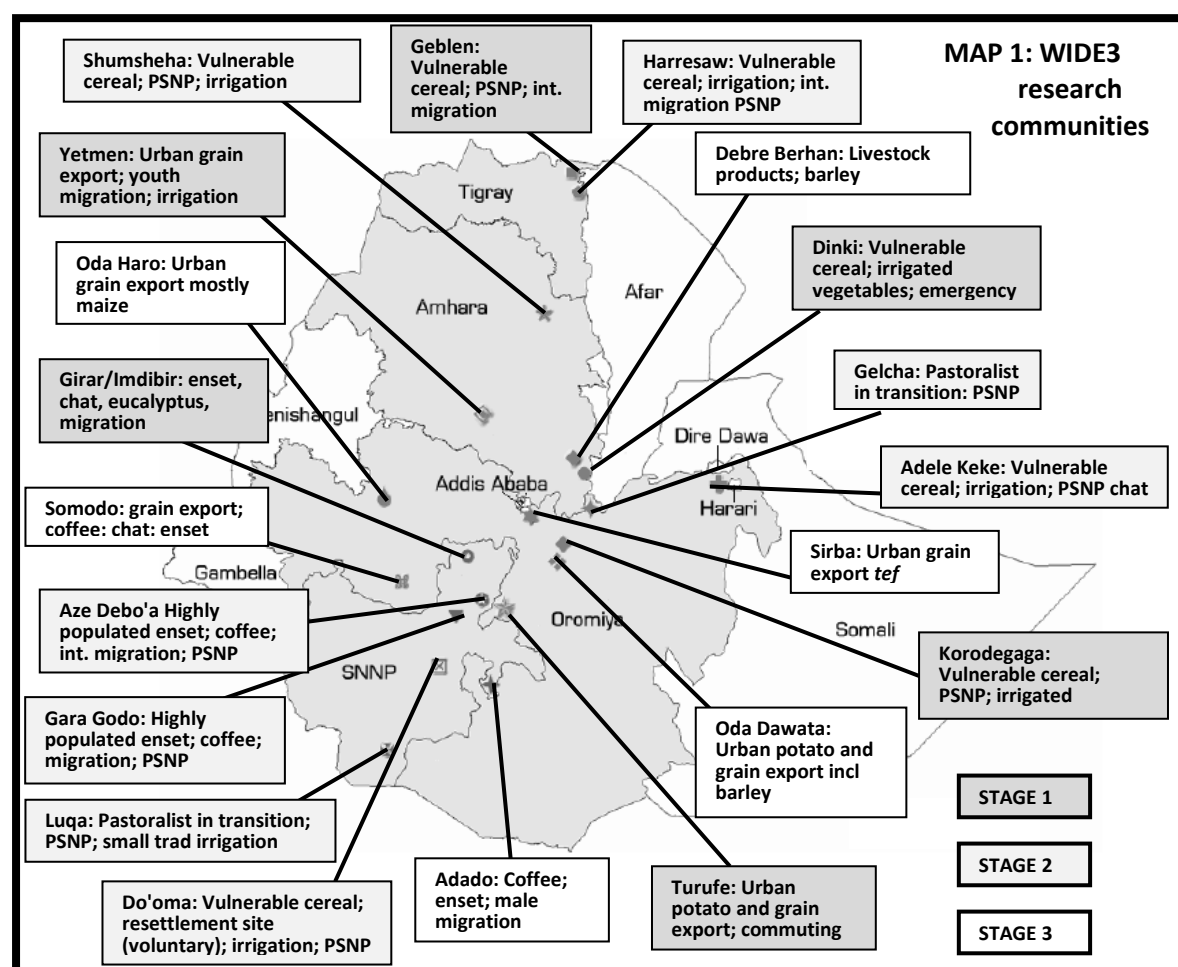
WIDE research began in 1994 as a comparative study of fifteen rural communities which had been

¹ In the UK for example see Byrne and Callaghan 2014, Pawson 2013, and Ramalingam 2013.

² The framework was used by Sumner and Tribe to structure a book on theories and methods for research and practice in international development studies (2008).

selected as exemplars of the main agriculturalist livelihood systems in Ethiopia by economists planning the Ethiopian Rural Household Survey³. Parallel qualitative fieldwork by Ethiopian social scientists using secondary sources, rapid assessment techniques, and protocol-guided semi-structured interviews produced fifteen 'Ethiopian Village Studies' (Bevan and Pankhurst, 1996) which later became known as WIDE1 (Wellbeing and Illbeing Dynamics in Ethiopia). In 2003 the WIDE2⁴ fieldwork was undertaken in the fifteen WIDE1 communities plus three agriculturalist sites which had been added to the Ethiopian Rural Household Survey community panel in 1999, and two pastoralist communities where Ph.D. research had taken place in the 1990s (see Map 1 and Table 1).

Map 1: The Twenty WIDE research communities



Between 2010 and 2013 a donor group in Addis Ababa⁵ funded new fieldwork in the twenty sites (WIDE3) which has been conducted in three stages: Stage 1 in six sites in early 2010; Stage 2 in eight sites in late 2011; and Stage 3 in six sites in spring and autumn 2013.

³ Ethiopian Rural Household Survey <http://www.ifpri.org/dataset/ethiopian-rural-household-surveys-erhs>. The WIDE1 research was financed by the UK Overseas Development Administration and the lead researchers were Philippa Bevan and Alula Pankhurst.

⁴ WIDE2 fieldwork was conducted for a month in each site under the aegis of the 2002-7 ESRC-funded Wellbeing in Developing Countries (WeD) Research Programme at the University of Bath <http://www.welldev.org.uk/>. The lead researchers in WIDE2 were Bevan and Pankhurst.

⁵ The donors who contributed to the Joint Governance Assessment Measurement Trust Fund were DFID, CIDA and the Dutch and the project was managed by the World Bank. The lead researchers were Bevan, Pankhurst and Catherine Dom.

Table 1: The twenty WIDE3 sites

COMMUNITY	FIELD-WORK	LOCATION	LIVELIHOOD BASE*	IDENTITY GROUPS	REGION
<i>DROUGHT-PRONE AND REGULARLY DEPENDENT ON FOOD/CASH-FOR-WORK</i>					
Gara Godo	Late 2011	Remotish but new municipality	Drought-prone & highly-populated; gardens – cash-crop coffee, root crops, fruit & vegetables; other land grain; agricultural & urban migration; PSNP	1 ethnicity 2 religions	SNNP
Aze Debo'a	Late 2011	Near zone town but remotish	Drought-prone & highly-populated; gardens – cash-crop coffee, root crops, fruit & vegetables; also grain; illegal migration to South Africa; PSNP	1 ethnicity 1 religion	SNNP
Luqa	Late 2011	Very remote	Vulnerable pastoralist + small irrigation + Emergency Food Aid (EFA)	1 ethnicity 2 religions	SNNP
Do'oma	Late 2011	Nr <i>wereda</i> town but very remote	Vulnerable cereal + some irrigation + agricultural and urban migration + PSNP	3 ethnicities 2 religions	SNNP
Adele Keke	Late 2011	Near rapidly expanding Haramaya & on main road	Cash-crop <i>chat</i> [some exported to the Gulf] + vulnerable cereal; irrigation + PSNP; commuting for urban work	1 ethnicity 1 religion	Oromia
Gelcha	Late 2011	Near town & main road but remote	Pastoralist in transition + small irrigation + PSNP	3 ethnicities 2 religions	Oromia
Korodegaga	Early 2010	Remotish	Vulnerable cereal + some irrigation + migration + PSNP	1 ethnicity 1 religion	Oromia
Shumsheha	Late 2011	Peri-urbanish - near Lalibela town	Vulnerable cereal - sorghum, teff, beans, some irrigation + migration + PSNP	1 ethnicity 2 religions	Amhara
Dinki	Early 2010	Quite remote	Vulnerable cereal + some irrigation + migration + EFA	2 ethnicities 2 religions	Amhara
Geblen	Early 2010	Quite remote	Livestock – central role but vulnerable to drought; vulnerable cereal + a little irrigation + migration + PSNP	2 ethnicities 2 religions	Tigray
Harresaw	Late 2011	Quite remote	Vulnerable cereal + some irrigation + illegal migration to Saudi Arabia + PSNP	1 ethnicity 1 religion	Tigray
<i>INDEPENDENT ECONOMIES IN AREAS WITH ADEQUATE RAIN</i>					
Girar	Early 2010	Outskirts of <i>wereda</i> town but remotish	Highly populated; gardens - <i>enset</i> + cash-crop <i>chat</i> & eucalyptus+ migration	1 ethnicity 4 religions	SNNP
Adado	2013	Quite remote	Gardens: cash-crop coffee, <i>enset</i> , barley, maize	1 ethnicity 1+ religions	SNNP
Turufe	Early 2010	Peri-urban - increasingly near to expanding Shashemene	Food surplus & cash crop potatoes & grain; commuting for urban work	5+ ethnicities 4 religions	Oromia
Sirba	2013	Industrialising - on main highway between Bishoftu and Mojo – 20km to each	Food surplus + cash crop grain (<i>teff</i> , wheat)	1 ethnicity; 3 religions	Oromia
Oda Dawata	2013	On main road between Adama and Asela	Food surplus + cash crop potatoes & wheat	1 ethnicity, 3 religions	Oromia
Oda Haro	2013	Remotish – 16 km east of Bako	Food surplus + cash crop grain (maize+), oilseed, peppers, <i>chat</i> in 2003	2+ ethnicities; 3 religions	Oromia
Somodo	2013	Peri-urbanish – 5 km from main road Jimma-Gambella; 20 km from <i>wereda</i> town	Food surplus + cash crop coffee, <i>chat</i> , and grain in 2003	2+ ethnicities; 5 religions	Oromia
Kormagefia	2013	Peri-urbanish - near Debre Berhan town	Livestock – central role. In good years some crops sold for cash - barley, beans, wheat	1 ethnicity 1 religion	Amhara
Yetmen	Early 2010	On allweather road but remotish	Food surplus + cash crop grain; new irrigated vegetables; agricultural migration	1 ethnicity 1 religion	Amhara

* Livestock played roles in the livelihood systems of all sites

3. The Foundations of Knowledge Framework

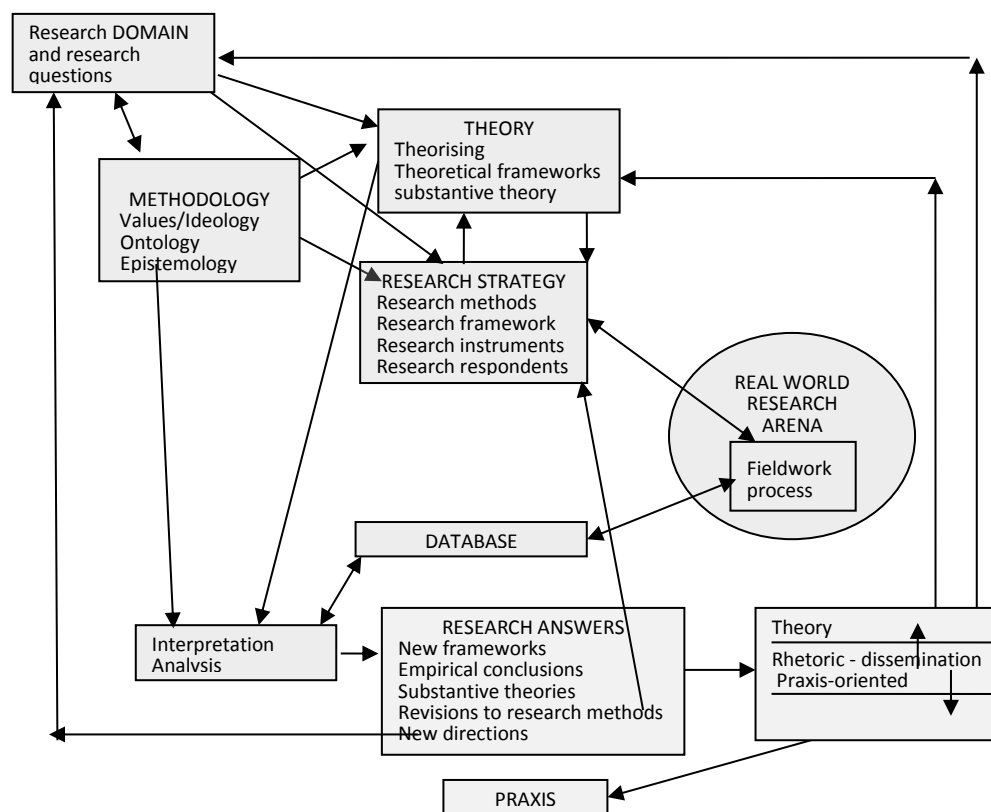
Sound empirical research frameworks require transparent philosophical and methodological foundations and those designing research projects should be in a position to justify their choice of stance in nine scientific areas. These are:

1. Domain or focus of study: what exactly are you interested in?
2. Values/ideology: why are you interested?
3. Ontology: how do you understand the nature of reality?

4. Epistemology: how can you know about that reality?
5. Theory: how do you understand/explain your object of study?
6. Research strategies: how can you establish what is really happening?
7. Research answers: what (kinds of) conclusions do you want to draw from your research?
8. Rhetoric: how do you inform (which) others about your conclusions?
9. Praxis: what to do? who should do it?

The Foundations of Knowledge Framework (FoKF) shows how these different knowledge areas are linked (Figure 1). In the remainder of this section we very briefly describe the WIDE3 approach to each of these knowledge foundations, returning to the most interesting in greater depth in the remainder of the Annex.

Figure 1: The Foundations of Knowledge Framework



3.1. Research domain and ideological position

The WIDE3 *research domain* is modernisation and change in Ethiopia's rural communities since 1991 with a particular focus on the roles played by development interventions since 2003. Our *ideological* commitment is to empirical research that is (1) relevant for improving the life chances of the poorest and most vulnerable people (2) scientifically important and (3) helps well-motivated practitioners at all levels to understand how their area of intervention really works, including potential unintended consequences of their actions, in order that they can act more efficiently and equitably.

3.2. Ontology

3.2.1. The world really is complex

Our complexity social science approach⁶ pays attention to ontology – what is the world *really* like? Complexity scientists like Coveny and Highfield (1995) have provided much evidence that the world *really* is complex. ‘The story of the universe is one of unfolding complexity. (p328) ...Energy and chemical elements produced by the stars have led to the emergence of intricate structures as organised as crystals and human brains (p10) ...Life is an emergent property which arises when physico-chemical systems are organised and interact in particular ways. ... A city is an emergent property of millions of human beings (p330)’.

Complexity theory provides a ‘framework for understanding which asserts the ontological position that much of the world and most of the social world consists of complex systems ... complexity theory is an ontologically founded framework for understanding and not a theory of causation, although it can ... generate theories of causation’ (Byrne and Callaghan, 2014: 8). From complexity ontology we take a number of key messages. Parts are related, inter-dependent and inter-act. Complex systems are characterised by emergence; the whole is more or less than the sum of the parts. ‘Emergence means that something new comes into being. We have a change of kind rather than just a change of degree... p 13 .. Emergent phenomena are not explicable in terms of that from which they emerge p18 ‘ (Byrne, 1998). A simple example is water – H₂O – a molecule emerging from a combination of hydrogen and oxygen atoms. Degrees of connectivity among parts vary across systems leading to differences in overall resilience and adaptability to external changes. Degrees of connectivity also vary across different areas within one system, affecting the intensity of (negative and positive) feedback processes.

3.2.2. Complex social systems are structured and energised by social action

Dynamic and open complex social systems (DOCSSYs) have material, technological, social, economic, political and cultural dimensions and are constituted by elements in structured relationships. Social systems have nested sub-systems, are nested in larger ‘super-systems’, and inter-sect and interact with other systems. Each of these systems are constituted by a network of relationships among people playing different roles in the structure.

Social change processes depend on people acting and thinking in new ways; social continuity is found where things go on much as usual. From an ‘action perspective’ the social structures of the community are *socially constructed* by sequences of social actions and interactions by (historically-made) community members with other people and the place system in the community. However, from a structures perspective people’s choices and actions are shaped by the pre-existing structures. Some of these are embodied in people and some are not but manifest for example in material structures, norms, and relationships. Bringing these two perspectives together we can imagine an iterative process as time passes: structures guide but do not determine the actions through which, in the next time period, the structures are reproduced or changed. A third ‘relationship perspective’ recognises that people do not act alone in the ongoing social construction of open material and social systems and the empirical exploration of these processes must take account of social relationships and inter-actions among the people involved.

Social action can be seen as taking two forms, described here under the headings of *habitus* and agency (Byrne and Callaghan, 2014: Chapter 5). *Habitus* is a system of dispositions or pre-conscious orientations to action arising from regular participation in a structure or network of relationships: through this socialisation dispositions become ‘embodied’ in people’s bodies and minds and when these orientations determine actions people reproduce the world as it is without knowing what they

⁶ For more on this see Bevan 2010a and 2010b.

are doing or wanting to do so. For example, a farmer may use the same kind of plough his father used without much thought and a mother feeding butter to her newborn will do it in the way she has seen other women do it. *Agency* describes action based on mental reflexive decision-making processes. People ponder possible courses of action before choosing the one to follow. The farmer decides it is worth experimenting with a broad bedmaker plough, the potential mother wonders what the butter might do to her baby's digestive system. Some actions are almost totally guided by *habitus* and some by agency but many involve mixes and actions that began as agency convert to habitus through regular repetitions. One purpose of many development interventions in Ethiopia is to replace people's customary orientations to action deemed to be 'anti-development' with modern reflexive orientations.

3.2.3. Control parameters

Control parameters of complex systems are those aspects of its internal structure and context which working together as a *configuration* have a governing influence on its state at a particular point in time. Both system and context have other contributing aspects which are not part of the dominating configuration; however, if they change they have the potential to move the system to a different state.

3.2.4. Complex social system dynamics

People are organised in unequally structured co-evolving systems which, in Ethiopia, include, among many others, households, communities, livelihood systems, kingroups, lineages, clans, other community-initiated organisations, formal and informal enterprises, government development interventions, towns and cities, NGOs, political parties, national and international donor systems, government systems, the country system as a whole, diaspora systems, world religious movements, international commodity markets and transnational companies.

Encompassing, encompassed and intersecting systems co-evolve: a change in a key aspect or parameter of one system is likely to lead to adaptation in others. Initial conditions matter and trajectories are path dependent. Degrees of connectivity can change through time.

3.3. Epistemology

Knowledge is imbricated in historically-changing complex systems, so that what we can know is contingent and provisional, pertaining to a the context we are working in. However, this does not mean that 'anything goes'. The WIDE team is committed to the institutionalised values and methodological rules of social science which include logical thinking and the testing of ideas against reality through rigorous and transparent empirical enquiry, including in this project establishing an Evidence Base to which we and others can turn if questions arise.

Complexity theory tells us a number of things of relevance about ways to know about complex systems. One relates to system boundaries which 'are simultaneously a function of the activity of the system itself, and a product of the strategy of description involved... we frame the system by describing it in a certain way (for a certain reason) but we are constrained where the frame can be drawn' (Cilliers 2001:141). Some complex systems, like rural communities, depend on activities which are spatially based, while others, like development interventions, link the activities of entities which are located in different places.

Social complexity research is usually exploratory, the aim being to identify (1) patterned similarities and differences among the complex systems under study and (2) common processes and mechanisms which play out differently in different contexts, rather than 'laws' or generalisations. Frameworks and methods depend strongly on the research questions. There is continuous interaction and iteration between ideas and the field. As explained further below data are seen as 'traces' of the passage of the communities and their sub-systems through time. Quantitative data

tell you *how much* of the research object of interest there was at the time of measurement, while qualitative data tell you *what kind* of thing it was.

‘More than one description of a complex system is possible. Different descriptions will decompose the system in different ways’ (Cilliers, 2005: 257). As shown below a multiple perspectives framework can generate rich structured datasets which can be used to establish how system, parts and context have worked together.

3.4. Theory

Theorising uses the ideas and theories of other scholars; ‘building on the shoulders of giants’. *Theoretical frameworks* are exploratory tools which clarify concepts and identify key processes linking them. The FoKF is one theoretical framework used in this chapter and the others we have used are set out in Section 4. They are developed through theorising and in the dialogue between ideas and evidence and provide guides for the design of research instruments and the interpretation and analysis process. *Substantive theories* are to do with causal understanding or explanation. In complex social systems causation is complex; what happens is usually the result of the interaction of multiple internal and contextual causal mechanisms (Mouzelis, 1995).

A fundamental theoretical framework for understanding longitudinal complexity-oriented research processes distinguishes between synchronic and diachronic analysis. Complex systems evolve through time and their past is co-responsible for their current state. ‘An analysis of a complex system that ignores the dimension of time is incomplete, or at most a synchronic snapshot of a diachronic process’ (Cilliers, 1998: 40).

3.5. Research strategy

Our research strategy depends on *case-based methods* which fit well with the complexity paradigm since they do not depend on any assumption of linearity as most standard variable-based methods do. Also they can combine qualitative and case-based quantitative interpretation in an integrated fashion. Case-based quantitative analysis uses a conception of measurement that depends on *classification* which fits with the way in which people think. In everyday life we constantly use (stereo)typing to guide our responses to other people and their actions, events and so on. A case-based quantitative approach is contrasted with a traditional quantitative approach where variables (particular features of cases, for example education, income etc) are seen as causal agents while cases (people, households, firms, countries) are seen simply as sites for measuring variables. Analysis of quantitative data becomes a contest between disembodied variables to see which are ‘significant’. Byrne argues that the term ‘variable’ is often used in a way that implies that measurements, such as education measured by years of schooling or income, are substances or forces with causal powers. But variables are not real; ‘(w)hat exists are complex systems.. which involve both the social and the natural, and which are subject to modification on the basis of human action, both individual and social (2002: 31). What we measure are quantitative traces and what we describe are qualitative traces of the systems which make up reality’ (*ibid*: 32).

Byrne also argues that ‘integrated accounts constructed around a complexity frame offer the best narratives for describing change (2001:74)’. In order to achieve such accounts he advocates the use of four processes:

1. *Exploring*: descriptive measurement of variate traces and examination of the patterns generated by the measurements in conjunction with exploration of qualitative materials (which might be texts, photos, artefacts)
2. *Classifying*: sorting of things into kinds on a proto-typical basis (Bowker and Starr, 1999) and (temporary) identification of meaningful boundaries of a system or ensemble of similar systems

3. *Interpreting*: measures and narratives in a search for meaning
4. *Ordering*: things sorted and positioned along the dimension of time and procedures for documenting changes and when they occurred.

The research strategy involves using the theoretical frameworks to develop a *research design* which identifies

1. What to ask about.
2. How to ask; including potentially surveys, protocols to guide semi-structured interviews, participation observation, photographs and the collection of documents.
3. Who to ask.

3.6. Fieldwork and database

In comparative community research such as this once the cases have been selected and the research instruments designed the *fieldwork* process involves time planning, training of fieldworkers, field supervision, and planning and implementation of the data journey from fieldworker notes to the *database*.

3.7. Interpretation and analysis

Comparative case-based analysis of qualitative data can take four forms (Tilly, 1985). One case can be analysed in terms of (1) its location in a larger system or (2) its internal dynamics. Two or more cases can be compared in a search for (3) diversities and/or (4) regularities. We are using all four approaches:

1. *Structural location*: communities are spatially, economically, politically, culturally and historically located in wider complex systems. The relationships which each community has with these encompassing systems have a bearing on both the substance and the style of what happens.
2. *Internal dynamics*: since communities are historically located each is on a trajectory constructed by the path- dependent actions and social interactions of the actors involved. Community trajectories can change direction as a result of internally-initiated changes, linked internal and contextual changes, or big changes in context.
3. *Diversities and regularities*: increasing interest in case-based research (e.g. George and Bennett, 2005; Byrne and Ragin, 2009⁷) has led to recommended procedures for different types of cross-case comparison to identify common causal mechanisms, produce descriptive typologies sorting cases into different kinds, and typological theory development.

3.8. Research answers, dissemination and practice

There are five kinds of *research answer*: empirical conclusions, new theoretical frameworks, substantive theories, revisions to research methods, and new questions. For *dissemination* these answers have to be presented in *rhetorical* styles appropriate to different kinds of audience; academics, government and donor development policy designers, implementers and evaluators, other practitioners, and hopefully in due course the communities under research, and the general public via various forms of media.

⁷ The handbook edited by Byrne and Ragin contains examples of a range of case-based methods and techniques including explanatory typologies in qualitative analysis, cluster analysis, correspondence analysis, classifications, Bayesian methods, configurational analysis including Qualitative Comparative Analysis (QCA), fuzzy-set analysis, neural network analysis, choice of different types of cases for comparison (e.g. most different cases with a similar outcome; most similar cases with a different outcome), computer-based qualitative methods, ethnographic case studies, and a systems approach to multiple case study.

The complexity social science framework is highly suitable for *praxis*⁸-related research. 'Complexity is essentially a frame of reference - a way of understanding what things are like, how they work, and how they might be made to work.' (Byrne, 2002: 8). Policymakers should establish what is possible (and not possible) in the future for different kinds of system/case which they plan to target with interventions.

The discussion has already covered our three elements of the FokF: ideological position, ontology and epistemology. In the remainder of the paper we describe the WIDE approach to the other elements in more detail.

4. The WIDE3 research domain and research questions

Our *research domain* is modernisation and change in Ethiopia's rural communities since 1991 with a particular focus on the roles played by development interventions since 2003.

The WIDE3 *research questions* are:

1. In each community what were the *key features of the development situation* at the time of fieldwork?
2. In what ways have the development situations of the communities changed since the mid-1990s? What *modernisation processes* were involved in each of *their trajectories*?
3. What *differences were made* to the trajectories and the communities by *development interventions* and the interactions among them since 2003?
4. What similarities and differences can we identify in these impacts? How did they *vary among different types of community* and what are the reasons?
5. How did what happened fit with *government and donor models* of how development *should* happen?
6. What do the *longer-term trajectories* of these communities look like? Where have they come from and where might they be going in the next few years?
7. In what ways have recent *social interactions*, relationships and processes across the development interface between government and community affected the *implementation and achievements* of the various government and donor programmes?
8. What have been the impacts of modernisation as a whole, and recent development interventions in particular, on the *lives of the different kinds of people* who live in the communities?

5. Theoretical frameworks

We have developed frameworks for exploring how the WIDE rural community systems work, how individual development interventions work, the trajectories of the communities from past to future and the contribution to those trajectories of the simultaneous and sequenced 'web of interventions'.

The communities co-evolve with three other types of Dynamic Open Complex Social System (DOCSSY) each on path-dependent trajectories: (1) *encompassing systems*, for example the wereda, Region, Ethiopia (2) *nested systems*, for example households and people and (3) *intersecting systems*, for example value chains, clan organisations, party structures, Muslim *wahabi* networks, diasporas and development interventions. Given that the social world is constituted by many overlapping DOCSSYs complexity researchers must choose the one they are going to take as their primary focus; the chosen social system may be spatially bounded, as in the case of communities, or

⁸ 'the process by which a theory, lesson, or skill is enacted, practised, embodied, or realised. "Praxis" may also refer to the act of engaging, applying, exercising, realizing, or practising ideas' *Wikipedia*

connect people in different places, as in the case of individual development interventions.

In considering *development intervention systems* we focus on the system elements which operate at community level. While each intervention system connects people across different government levels, at the community level the system inter-sects and co-evolves with the community system, its nested and intersecting functional sub-systems, and the other development intervention systems operating in the community.

5.1. Dynamic, open and complex community systems: synchronic and diachronic perspectives

Community systems are spatially-defined entities. The thousands of rural community systems found in the mountains, valleys, plains and deserts of Ethiopia are sub-systems of Ethiopia's macro system. Ethiopia, with a population of over 90 million, has around 30,000 *kebele* which are the smallest administrative unit and the site of intervention implementation. The boundaries of the community systems in which we conducted the WIDE3 fieldwork coincided with local kebele or sub-kebele boundaries in 2013⁹. The three stages of WIDE provide data on the community structures and histories in 1995 (for three communities), 2003 and 2010-2013; each piece of qualitative and quantitative data can be viewed as an *evidence trace* of the trajectory of the community at the time it refers to.

Synchronic analyses of complex systems are 'snapshots' focusing on a point or short period in time and using an 'all-at-once' logic to consider the *structure* of the system. Meaning comes from difference and similarity and from (dis)connections and patterns. *Diachronic analyses* are 'videos' following the 'sequential logic of a road' and can answer two questions: why a current state was born of a prior state and why a certain state progressed to some future state. The focus is on *process* and meaning comes from the narrative produced through the tracing of plot and sequence.

Figure 2: Synchronic and diachronic analyses

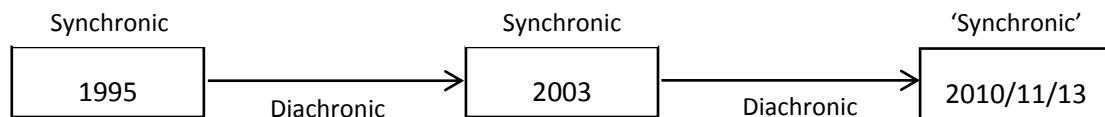


Figure 2 shows how we could conduct comparative synchronic analyses of the communities in 1995, 2003, and 2010/11/13 and diachronic 'process-tracing'¹⁰ of the trends and events driving community trajectories between 1995 and 2003 and 2003 and 2010/11/13. We can also compare the three sets of WIDE3 communities in early 2010, later 2011 and spring 2013 to identify common trends and idiosyncratic changes over the three years 2010-13.

5.1.1. Synchronic perspectives on community structures

Using Cilliers' suggestion that more than one description of a complex system is possible we have looked at the communities from seven (synchronic) perspectives. Four of these involve different de-constructions of the structures of the system into (1) material structures of 'place' and 'people' systems; (2) five intersecting functional sub-systems; (3) nested household systems themselves constructed by people; and (4) structures of durable inequality.

⁹ In some cases these were not totally coincident with the boundaries of the communities studied in 1995 and/or 2003.

¹⁰ Process-tracing is a method used regularly by American political scientists to trace the sequencing and importance of trends and events in the lead up to an outcome that has been theoretically chosen to be of interest.

With the focus on action we have looked at (5) social actors and (6) social interactions. And (7) we have considered the way the communities work as a whole under the influence of configurations of internal control parameters found in the material and functional sub-systems and external control parameters found in encompassing systems such as the wereda and country as a whole and/or in elements of the intersecting functional sub-systems which are located outside the community.

The material system of place and people: the community eco-system

The community ecosystems are constituted by living organisms (plants, microbes and animals including human beings) and the structured non-living elements of the environment including rocks, minerals, soils, water, and air. The base of the community system is its unique piece of geographical territory. This territory contains a *material system* which has boundaries established as a result of politico-administrative decisions although these may have been affected by features of the landscape such as rivers, escarpments and gullies. Within the boundaries at any point in time the *place system* is constituted through (1) interactions among local manifestations of larger material systems - altitude, climate, topography, geology, and ecology and (2) material legacies of previous human interactions with the territory including land and water use, environmental degradation or re-habilitation, settlement patterns, roads, buildings and technological infrastructure. The people system is constituted by the population of material historically-constructed human beings and their current embodied physical and mental human resources and liabilities.

Five intersecting functional sub-systems: livelihoods, lives, society, culture and politics

Community members are active in five institutional settings or sub-systems which are simultaneously domains of power and fields of action. Each community system has five intersecting and inter-acting structured sub-systems through which community members perform the different functions required for the community system to remain in business. They structure and guide activities in the fields of livelihoods, human re/pro/duction, societal organisation, politics, and cultural ideas. These systems are not fully contained within the community territory as they depend upon interactions and relationships with wider systems including for example value chains, kin or clan systems, party hierarchies, national development programmes and world religions. While these functional systems are not directly visible to the human eye the day-to-day actions and social interactions among community members which constitute them are in principle visible and further traces of their existence are found in, for example, fields of wheat, primary schools, funerals, elections, and religious sermons.

In the *livelihoods* field people are organised to work to produce, exchange and consume various goods and services. Rural livelihood systems extend beyond the spatial boundaries of the community as various inputs are brought in from outside and products distributed through external markets and other networks. People also work in the *human re/pro/duction* field to produce new people, and invest in and service existing ones; contributions from/to the community context involve wider kin networks, health and education services, domestic technology producers etc. The *society* system is where people invest in their social relationships creating, reproducing and adapting organisations and networks for various purposes; many of these extend beyond community boundaries. The creation, reproduction and adaptation of the system of *cultural ideas* requires thinking and dissemination work related to ideas, values, norms and more formal rules; many new ideas come from outside and some of those generated within the community are exported. Finally through the *political* system people work to manage the community as a whole, particularly in the areas of decision-making, implementation of government and community decisions, everyday governance, security and justice. They also work to maintain or change the ways these things are done in the community and beyond and/or the leaders in charge of doing them.

The structures in each of the functional sub-systems allocate the roles which different kinds of

people have to perform if the sub-systems are to be reproduced or adapted. These sub-systems themselves contain a number of smaller sub-systems within which the different roles are organised. The important elements in the five sub-systems are:

Livelihoods sub-system

- smallholder agriculture and agricultural employment
- non-farm business and non-farm employment
- migration and remittances

Human re/pro/duction sub-system

- 'producing' people: pregnancy, birth
- 'producing' people by investing in them: child-rearing, informal learning, training, formal education
- 'reproducing' (maintaining) people: domestic work, food consumption
- 'reproducing' people: housing, household assets, water, and sanitation
- 'reducing' people: illness, conflict, later ageing

Societal sub-system

- social networks: e.g. kin networks,
- social institutions: marriage, circumcision, inheritance, land/labour/oxen exchanges e.g. sharecropping, etc
- social organisations: including households, *iddir*, *equb*, clan organisations, work-groups, religious congregations, etc

Politics sub-system

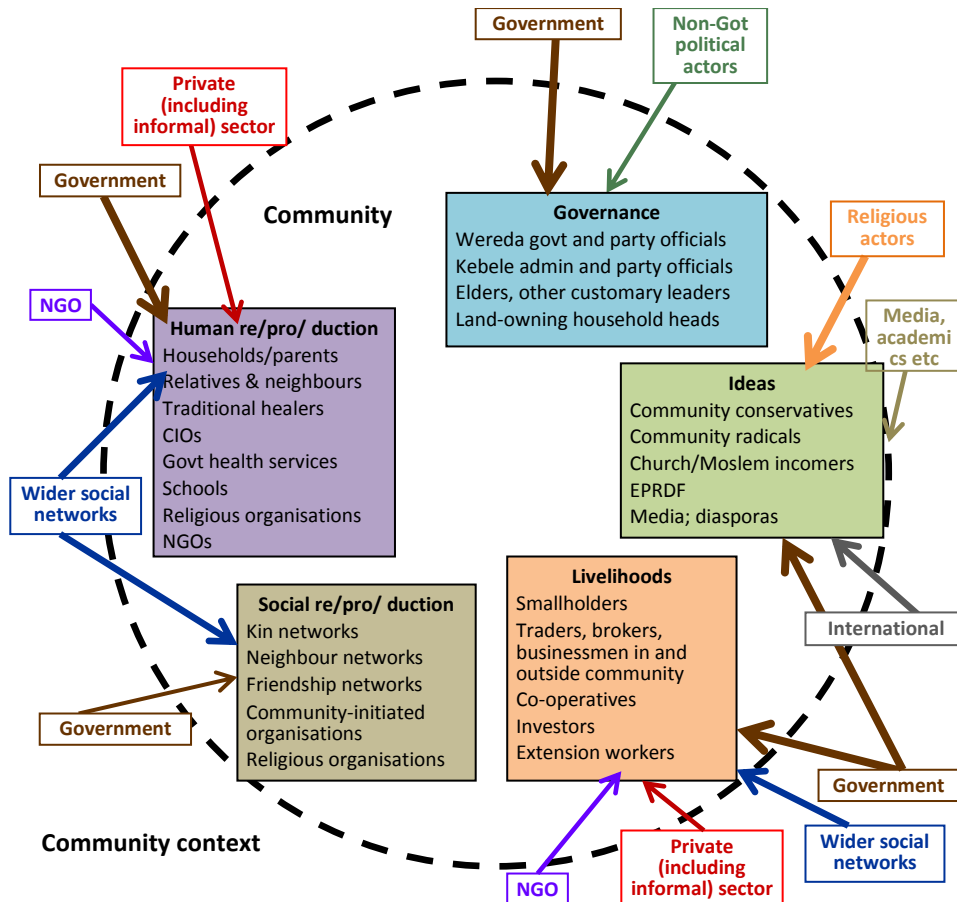
- community-initiated structures for decision-making and implementation
- *kebele* structures
- everyday governance
- security and justice

Cultural ideas sub-system

- local customary repertoires
- local modern repertoires
- in-coming ideologies, religions, cultures and other ideas

These functional sub-systems can be seen as five *fields of action* in which different kinds of community member are active in different ways. In these communities most farmers are adult men; the most-important human re/producers - baby-makers, small-child-rearers, and people-maintainers - are female albeit often operating to a degree under the authority of a husband; leading elders are older men; leading religious leaders are male; important political leaders are male. The five sub-systems/fields of action are also *domains of power*; all are hierarchically and unequally organised. In the economy there are rich, middle-wealth and poor smallholders, landless labourers, rich traders, petty traders, commuters, migrants etc and considerable differences in household wealth and incomes. Households into which children are born and raised are hierarchically organised in terms of gender age and resources and opportunities are not equally distributed among family members. Society's structures include organisations with hierarchies which are also strongly linked with differences in genderage. Cultural ideas about superiority and inferiority may be attached to ethnicity, religion, craftwork, descendancy from 'slaves', and poverty. Control and influence over many decisions affecting the community are in the hands of adult male landowners. Richer men are likely to be the active leaders in most or all of the five systems with some elite members having key roles in more than one of the sub-systems (Figure 3).

Figure 3: Five domains of power & internal and external role players



The functional sub-systems overlap and inter-penetrate synchronically as a result of two mechanisms. *First*, a *real action* never takes place in only one of the fields. For example, a man ploughing in a livelihood role is also playing a societal role as for example smallholder, share-cropper, ox-sharer. A woman feeding her newborn infant butter is using the local customary repertoire of ideas. *Second*, these sub-systems are also energised through *social interactions* which always have implications for more than one sub-system. For example for a smallholder to produce and harvest crops labour must be organised for different tasks at different times of year through the societal system; the farmer might use household labour for some tasks, maybe a group labour-sharing arrangement with established norms for others, and someone in his/her network who is willing to do daily labour for yet others.

Nested sub-systems: households and people

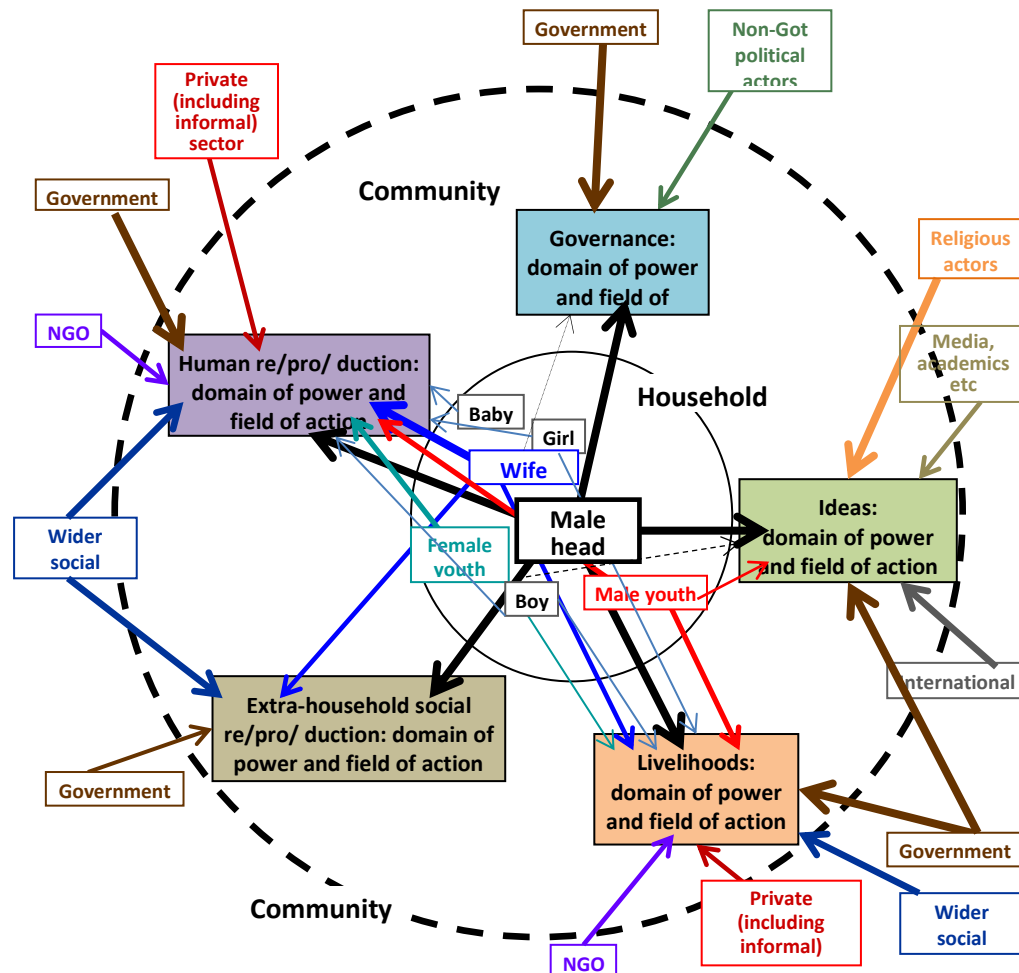
The two important nested dynamic open complex systems constitutive of the community are *household systems* of different types spatially located in different parts of the territory which themselves are constituted by human systems or *people* of different genderages playing the different roles described above.

Social interactions - inter-sections among households, people and the functional sub-systems

Households are important social organisations in the social re/pro/duction or society domain of power; people invest considerable time and energy in creating new households and managing social relationships within them as they age and evolve. They also play an important role in co-ordinating

the activities of members in the five functional fields to fulfil the economic, human re/pro/duction, , cultural, political and extra-household social re/pro/duction functions required for the particular type of household system to remain in business. Figure 4 shows the different participation of household members in the different functional domains.

Figure 4: Five community domains of power: who was active where?



Durable structures of inequality

The topics of interest here are class, status and power structures and elite formation. How is the community structured in terms of class, wealth/poverty, and income? What forms do genderage¹¹ inequalities and relations take? What other community-specific status markers structure inequality? Who wields power? Who are the community elites?

Social actors

Each social actor has a genderage, class/wealth position, ethnicity, religion, maybe other community-relevant social statuses, a personality, accumulated human resources and liabilities, and

¹¹ In variable-oriented research gender and age are seen as independent causal variables which have separate independent effects on whatever the outcome under consideration. When the focus is on cases gender and age taken together describe different kinds of people with different kinds of bodies, minds and aspirations: for example what old women, adolescent boys, and five-year old girls do and their relations with other kinds of people in many respects are different.

a personal history. How are individuals constrained and enabled by their histories, the roles open to them in the different fields of action, and their relative power positions in local structures of inequality? What are the consequences in terms of well- and ill- being?

Control parameters in rural community systems

The material, functional and nested sub-systems and the encompassing systems contain potential 'control parameters' which are those aspects of the community system and its context that, working together as a *configuration*, have a governing influence on its trajectory at the point in time when the synchronic snapshot of the state of the system is taken in an empirical research process¹². The communities are contained within, and contribute to the constitution of, larger encompassing systems, including wereda, zones, Regions, the country as a whole, and the global system. From the perspective of each community system these are contexts; events and actions originating in them have the potential to set off change processes within the communities. Events and actions in community systems can also set off change processes in the encompassing systems that constitute part of their environment/context.

Internal to the community there are important community-specific parameters related to the material systems of Place and People and the five functional sub-systems. There are also external control parameters in the community *context*, which includes elements in encompassing systems like the wereda and non-spatial systems like the international coffee value chain which intersects with livelihood systems in coffee-producing communities. Table 2 identifies the control parameters which were important in guiding the trajectories of the fourteen communities studied in Stages 1 and 2. At a point in time the empirical content and contribution of each parameter to the governing configuration will vary across different community types.

Table 2: Parameters guiding rural community trajectories

Control parameter areas		Parameters identified as potentially important for the communities studied
Internal parameters	1. Place	1. Terrain, settlement, climate, ecology 2. Remoteness - connections with wider world
	2. People	3. Current human resources & aspirations and well-/ill-being
	3. The state of the local economy	4. Farming system 5. Livelihood diversification 6. Economic institutions
	4. The state of the local human re/pro/duction system	7. Human re/pro/duction institutions
	5. Social integration	8. Community fault-lines & organised collective agency
	6. Cultural integration	9. Cultural repertoires of ideas
	7. Political integration	10. Government-society relations & political settlement
Contextual parameters	8. External aspects of intersecting functional systems	11. E.g. market systems, education systems, wider religious systems, clan organisations
	9. Encompassing meso systems	12. State of meso system: economy, society, culture, politics
	10. Encompassing macro systems	13. State of country system: economy, society, culture, politics

In different types of community actual manifestations of these abstractly-described control parameters take different forms. For example, pastoralists occupy a different kind of Place from

¹² In times of rapid change configurations can change rapidly.

fishermen. Also in different types of system, or at different times in the life of one system, different selective mix or configuration of control parameters may be important in guiding trajectories. For example in a crisis period in a 'fragile community' relationships and activities in the political domain may be very important, while in a remote but stable community customary cultural ideas may play a leading role.

Summarising, the core analytic framework which lies at the heart of WIDE3 data-making and interpretato-analysis processes de-constructs the community systems into (1) material systems of place and people (2) five intersecting functional sub-systems also viewed as fields of action and domains of power and (3) nested household systems with nested people. The functional sub-systems or domains are unequally structured; different kinds of household and person participate in, and benefit and suffer from, them, in different ways. All the sub-systems operate together inter-actively and with aspects of the community context which include both encompassing systems and external elements of the five functional sub-systems. At any point in time, key aspects in the ten control parameter areas listed in Table 2 and the relationships among them determine the current state of the community system.

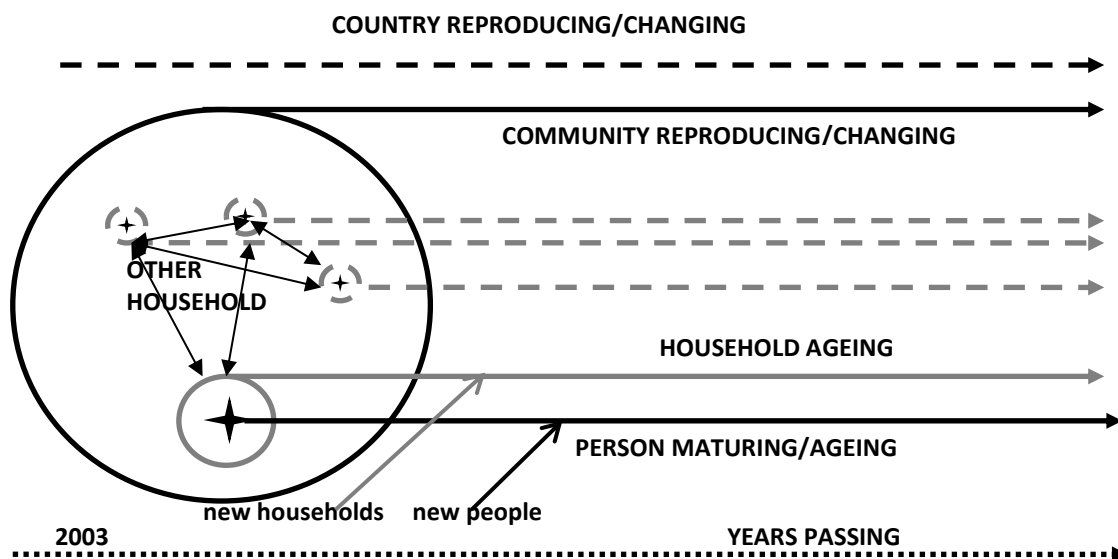
These complexity synchronic perspectives have been used to develop conceptual frameworks to underpin the design of the set of research instruments, the choice of fieldwork respondents and the analytic frameworks for interpreting and analysing the qualitative data. The main methodological processes used in the WIDE3 synchronic exploration are (1) comparisons exploring similarities and differences in community features to enable (2) identification of *common mechanisms* at work in all the communities and (3) *classification* of communities into kinds or types at the points in time when the data were made on the basis of control parameter mix.

5.1.1. Diachronic perspective on community structures and trajectories

The community co-evolving with context and sub-systems

Figure 5 depicts a community co-evolving with its households and people and wider context. Communities do not have life cycles as households and people do. The trajectory followed by each community system is the result of interactions among (1) a stream of external happenings to which people organised in household sub-systems have to respond and (2) creative activities generated from within the community.

Figure 5: Co-evolution of communities, country, households and people



Households can be seen as involved in a 'struggle for existence' through which they occupy an economic niche for longer or shorter periods. Those with greater wealth, status and political connection are likely to do better in the competition for positional advantage and leverage; those that are poor, socially marginalised, and politically irrelevant are likely to remain excluded and/or adversely incorporated. However, given the uncertainties of rural life, customary institutional arrangements for co-operation, and the important contribution to success of individual character, motivation and skills, there are varying levels of intra-generational and inter-generational social mobility both upwards and downwards.

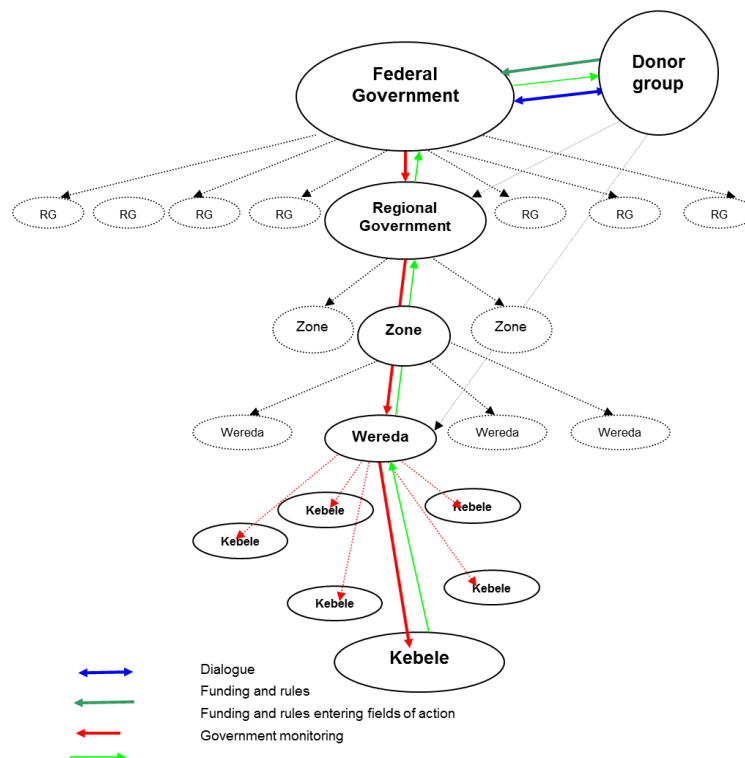
Men and women, youth and children 'co-evolving' with their communities and households are affected by what happens to each. Individual consequences depend on community trajectory, household trajectory, genderage, class-wealth, status, political connection, education, health, personal characteristics and chance. The complex of choices different kinds of people make individually and collectively in response to what happens to them also has consequences for them as well as the future trajectory of each community and, taking all communities together, for the country.

5.2. Dynamic, open and complex development intervention systems

5.2.1. Development interventions in Ethiopia

Development interventions are dynamic open complex social systems which are inserted into fluid community systems (Pawson, 2013) with the intention of bringing changes to people, institutions and the place. They intersect and co-evolve with government bureaucracies at different hierarchical levels, and with other development interventions, community sub-systems, and in some cases with donor and NGO bureaucracies. They combine macro-level design, monitoring and evaluation with an implementation chain which fans out from the Federal Government through Regional Governments, zones, wereda and kebele (see Figure 6).

Figure 6: The policy journey



For the three communities for which we have data in 1995, Adado, Sirba and Kormargefia, we have compared the government systems in place in the main sectors in 1995 with those in place in 2013. To structure the discussion we were guided by the familiar internal control parameter area headings which are repeated in Table 4, column 1 below:

Management of the place

- Environment
- Infrastructure
- Land planning

Supporting people

- Women
- Youth

Human re/pro/duction services

- Drinking water
- Health services
- Education

Government services to support livelihoods

- Agricultural extension services
- Co-operatives
- Credit

Working with the community

Introducing modern ideas

Kebele and party organisation

As Table 3 shows the WIDE rural communities have recently been on the receiving end of a stream of top-down government development interventions designed to make changes to the seven community sub-systems described above: Place, People, Human re/pro/duction systems, Livelihood systems, Societal systems, Cultural ideas, and Politics.

Table 3: A list of development interventions potentially entering rural communities in 2013

Interventions related to the community place	
Land use and infrastructure	1. Community land planning: villagisation, smallholder farming, communal grazing/forest, kebele centre/town, markets, investors
	2. Investment in public buildings
	3. Investment in internal roads: new roads; bridges, maintenance
	4. Investment in external roads: new roads, bridges, maintenance
	5. Feeder roads: new roads, bridges, maintenance
	6. Electricity: from the grid to the community, within the community
	7. Phones: masts and maintenance, network capacity
	8. TV/radio: masts, programmes and restrictions ; <i>regulation</i>
	9. Investment in irrigation: infrastructure, wells, pumps, drip irrigation, etc
Environment	10. Watershed management including erosion and flood prevention, water for people & livestock, irrigation
	11. Interventions aimed at the local ecology: tree-planting, animal protection
	12. Interventions specifically related to climate change
	13. Soil interventions: fertilisers, lime, compost, crop rotation, mixed crops
Interventions to change people's opportunities and wellbeing	
Interventions to improve young people's lives	14. Youth co-operatives, extension advice, inputs, targeted credit, training (mostly aimed at young men)
	15. HIV/AIDS clubs; youth clubs,
Interventions to improve young men's lives	16. Boys school clubs
	17. Male sports opportunities
Interventions to improve young women's lives	18. Banning of female circumcision: awareness-raising, legislation, implementation
	19. Adolescent reproductive health
	20. Girls clubs at school
	21. Positive discrimination education and govt jobs;
	22. Female sports opportunities

	23. Interventions related to marriage age, choice etc
Interventions to improve adult women's lives	24. Women's livelihood interventions: women's co-operatives, extension advice, inputs, targeted credit, training
	25. Women's empowerment: Women's property rights: widows, divorcées, daughters
	26. Women's security: rape, abduction, domestic male violence – legislation and implementation
Livelihood interventions	
Land	27. Smallholder land access regulation: registration, leasing, share-cropping rules, inheritance, compensation
	28. Investor access to land: Regional, zonal, wereda, kebele procedures and implementation
	29. Urban land access: rules and implementation
Farming	30. Irrigation-related interventions
	31. Other farm technology interventions
	32. Crop extension advice and resource provision: use of inputs, farming technologies & techniques etc
	33. Livestock extension & vet services: fattening, dairy cows, cross-breeds, vet, chickens, bees, etc
	34. Grazing land management and fodder interventions
	35. Inputs regulation & Service Co-operatives: fertilisers, improved seeds, pesticides, SC regulation
	36. Output sales regulation & Service/coffee co-operatives
	37. Interventions to promote labour co-operation: 1-5s
	38. Interventions affecting agricultural employment
	39. Producer co-operatives: potentially - mobilisation, registration, land access, credit access, training
Non-farm interventions	40. Non-farm packages
Migration	41. Migration policies: advice on migration; measures to control illegal migration; management of legal migration
Credit	42. Credit and saving: Regional MFIs, RUSACCOs, other - rules
Taxes	43. Land taxes: setting of differential rates; tax collection
	44. Licences & income tax: registration; individual decisions about annual tax; tax collection
	45. Market taxes: rates; collection
Interventions to change the human re/pro/duction system	
Social protection and inclusion	46. Social protection interventions: food aid; oil & sugar subsidies; targeted orphans, very poor, disabled, etc
	47. Interventions to help landless, very poor, orphans, disabled people, old people etc
	48. Interventions to help un(der)employed people
	49. Social exclusion interventions: craftworkers, 'slaves'
Education	50. Pre-school interventions: kindergartens, Grade 0s
	51. Primary school interventions: buildings, teachers, equipment, attendance, accountability, community contributions, exams, 1-5s
	52. Secondary school interventions: buildings, teachers, equipment, accountability, community contributions, exams, 1-5s
	53. TVET and private colleges: buildings, teachers, courses, government financial support for students, regulation of private colleges, Certificate of Competence exams
	54. Universities: buildings, teachers, courses, government financial support for students, regulation of private universities, certificate of competence
	55. Functional adult literacy interventions
Domestic work interventions	56. Interventions to improve domestic technologies: grain mills, improved stoves, access to fuel
Leisure	57. Leisure-related interventions: reducing saints' days; watershed management programme completion parties
Population control	58. Family planning: pills, injections, implants, condoms
Mother, infant and child health	59. Pregnancy, birth, infant care: ante- and post-natal care; clean and safe deliveries; other mother and child services
	60. Child nutrition: malnutrition interventions; breast-feeding to 6 months; general nutritional education;
	61. Children's health: vaccinations,
Nutrition	62. General nutrition: food aid/subsidies: subsidised sugar and oil; teaching
Safe water	63. Safe water: protected springs, wells, reservoirs, pipes, taps – construction and maintenance
Preventive health services	64. Health Post and extension orgn: building, equipment, staff and their skills, packages, drugs,
	65. Hygiene and environmental sanitation: latrine, hand-washing, cleanliness, solid and liquid waste packages
Curative health services	66. Disease prevention & control: malaria, TB, HIV/AIDS etc
	67. Interventions regulating private and traditional practitioners
	68. Health centres and hospitals including reproductive health services

	Interventions relating to politics
Governance structures	69. Kebele cabinet: Criteria for kebele chair and voluntary cabinet, selection, instructions, reporting, <i>gimgema</i> , buildings, resources
	70. Party organisation: core leadership, cells, party membership, selection of officials, instructions, reporting, <i>gimgema</i> , party newspaper
	71. Kebele committees: which committees, selection of chairs and members, follow-up
	72. Kebele council: selection of candidates for election, elections, accountability?
	73. Model farmers: selection, duties, privileges
	74. Other models: selection, duties, privileges
	75. Sub-kebele organisation: sub-kebele structures, selection of officials, instructions, <i>gimgema</i>
	76. Household head Development Teams: Selection of DT areas and officials, instructions, <i>gimgema</i>
	77. Women's Development Teams: Selection of officials, instructions, <i>gimgema</i>
	78. HH head 1-5s: mapping of members; instructions to 1-5 head, reporting, <i>gimgema</i>
	79. Women's 1-5s: mapping of members; instructions to 1-5 head, reporting, <i>gimgema</i>
Community contributions	80. Women's organisations: Association, League and Federation organisation; choice of leaders; instructions; monitoring; duties and privileges
	81. Youth organisations: Association, League and Federation organisation; choice of leaders; instructions; monitoring; duties and privileges
Accountability	82. Contributions in cash & kind: regular cash contributions to the kebele; one-off cash and in-kind contributions for kebele, wereda, regional, federal expenditures
	83. Work contributions: Public Works, work for kebele officials busy in meetings
Community planning	84. Elections: organising elections; mobilising community members to register and vote; warning off Opposition parties
	85. Accountability: targets, reporting, <i>gimgema</i>
Army recruitment	86. Planning for the community: wereda-kebele interactions; wereda-community interactions; kebele-community interactions
	87. Conscription: mobilisation of army recruits; organisation of support for families
	Interventions to change aspects of society
Security and justice	88. Policing - militia, community & wereda police – staffing and implementation
	89. Security – peace and security committee, controlling dissent; party cells & 1-5s
	90. Justice - social court: building, staff, stationery etc; use of elders, <i>iddir</i> – see below
	91. Wereda court: building, staff etc
Elite creation	92. Elite creation interventions: selection of kebele officials, champion and model farmers, customary leaders to work with govt
Involvement of community-initiated organisations in government work	93. Involvement of elders in interventions by government
	94. Involvement of <i>iddir</i> in interventions by government
	95. Involvement of religious leaders in interventions by government
	96. Involvement of other leaders in interventions by government
Policies related to religion	97. Policies related to religion: preaching religious tolerance; managing religious conflicts; controlling religious extremism
NGO management	98. NGO involvement: activities; consequences of controlling international funding; managing NGO involvement
	Interventions to change people's ideas directly
Government and party awaring activities	99. Government awaring activities: trainings; kebele and sub-kebele meetings; messages sent to 1-5s via DTs; annual plan meetings assessing last year and planning next one; use of <i>iddir</i> and religious meetings; via schools
	100. Party propaganda & meetings: cell meetings; party newspaper
Government management & regulation of other information sources	101. Government activities to reduce incoming dissenting voices
	102. Government radio & TV; regulation of other broadcasters
Interventions to reduce HTPs	103. Interventions to reduce HTPs

From this long list of development interventions we selected 13 to consider in depth using the frameworks described below. Table 4 organises a list of these showing which of the community control parameters each is designed to influence in the first instance. We also comment briefly in the Summary Report on each of the development interventions not selected.

Table 4: Community control parameters and selected development interventions

	Control parameters	Development interventions selected	Dis not selected
1. Place	1. Terrain, settlement, climate	1. Watershed management, zero-grazing, tree-planting	Land use Irrigation infrastructure Soil interventions
	2. Connections with wider world	2. Internal, feeder and external roads	Electricity Mobile phones TV & radio infrastructure Small rural town interventions
2. People	3. Human resources & aspirations	3. Youth interventions 4. Women interventions	Interventions for poor & excluded Child-focused interventions (other than primary education)
3. Livelihood system	4. Farming system	5. Crop extension	Access to farming land Livestock extension & vets
	5. Livelihood diversification	6. Migration regulation	Non-farm extension
	6. Economic institutions	7. Credit 8. Taxes & contributions	Co-operatives (PCs & SCs)
4. Lives system	7. Human re/pro-duction institutions	9. Safe water 10. Health extension 11. Primary education	Pre-school, secondary, post-secondary education; Functional adult literacy Child health, curative services
5. Societal system	8. Community fault-lines & organised collective agency		Govt engagement with elites, ROs and CIOs Physical security Political security Justice
6. Cultural ideas system	9. Cultural repertoires of ideas	12. Government 'awaring' and party propaganda	Government regulation of other ideas Interventions to reduce other HTPs
7. Political system	10. Govt-soc rel'ns & political settlement	13. Kebele and party organisation	Elections Accountability Planning for community

It is useful, however, to use one set of frameworks for looking at individual interventions and another set for exploring how all the interventions entering a community as time passes interact with each other and with other forces for change in an attempt to tease out how they have contributed to the community's overall direction.

5.2.2. Frameworks for exploring individual development interventions

Local appropriateness of federal-level designs

Development interventions are attempts to change the way in which people behave and the physical and social landscapes within which they are working. Their success partly depends on how well they connect with the place, people, and functional sub-systems in the particular community. For each intervention we have asked how appropriate the design is for the different types of community. We have focused on material (dis)connects, timing (dis)connects and cultural (dis)connects in aims and assumptions related to the field which the interventions are implemented.

Material (dis) connects

How well do place-related interventions chime with the local place? For example. does the fertiliser provides by government suit the soil type? Does the community have a watershed which would benefit from a watershed management intervention?

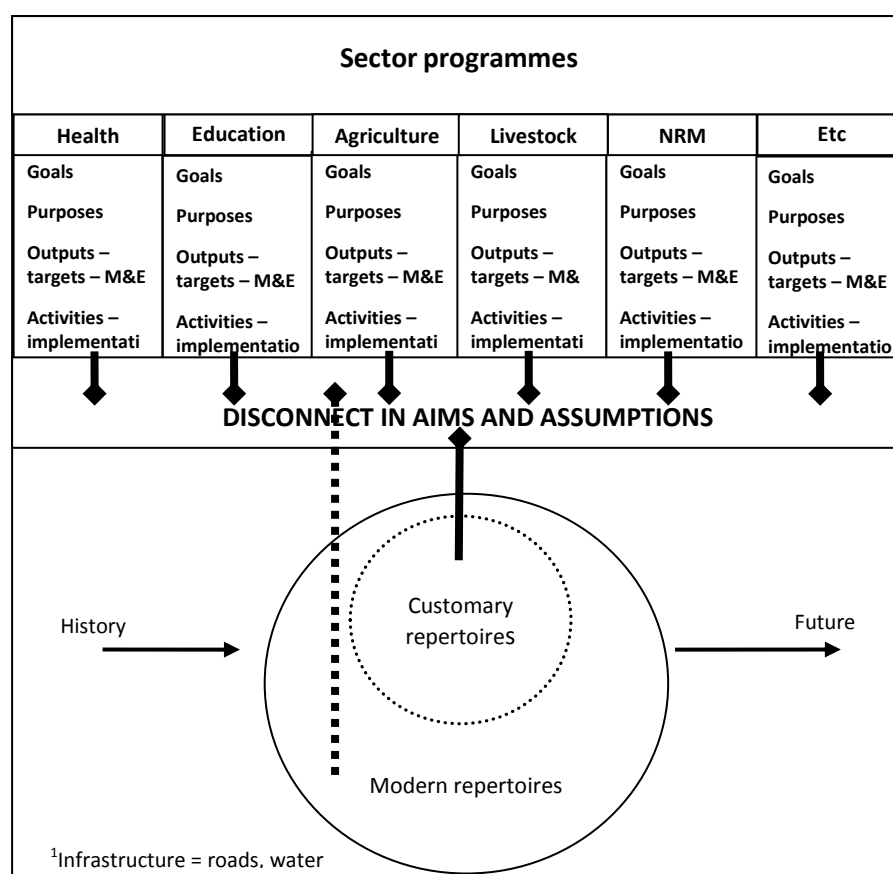
Timing (dis)connects

How responsive is the programme design to relevant local structured time rhythms affecting different control parameters? A simple example is the frequent clash between nationally-designed school timetables and local daily and seasonal demands for household labour.

Cultural (dis)connects

Figure 7 depicts potential cultural (dis)connects between the aims and assumptions implicit in the mental models (ideas) and institutional designs (norms and rules) associated with top-down sector policies and programmes and local beliefs, values, norms and ways of doing things which we are calling cultural repertoires.

Figure 7 Cultural disconnects between top-down and local cultural repertoires



Theories of change implicit in development intervention design

Each development programme is designed to produce changes in people, institutions, and/or the material environment which will supposedly lead to the achievement of certain outcomes. Each programme contains more or less explicit theories of how the combination of the planned resources and activities will produce the desired changes and outcomes. Each programme strategy can be deconstructed in terms of a designed intervention configuration of social construction, mechanisms and outcomes. The same framework can be used to explore what actually happened when the intervention was implemented.

Social construction

We have considered the context or social construction of the development interventions under three headings:

Social actors

Here we have identified the social actors given roles in the design of each intervention and how they are meant to behave and relate .

Institutional location

This includes the planned intervention system, rules, and routines

Resourcing

These are the material infrastructures and inputs used in the social construction of the intervention. What material and human resources are assumed to be available?

Mechanisms

Potential mechanisms include legislation, administrative *fiat*, incentives, pressure from others, targets, threats, fines, imprisonment, awaring, training, targeting 'models', learning by doing, learning by copying.

Outcomes

What are the planned consequences for people, institutions, community place?

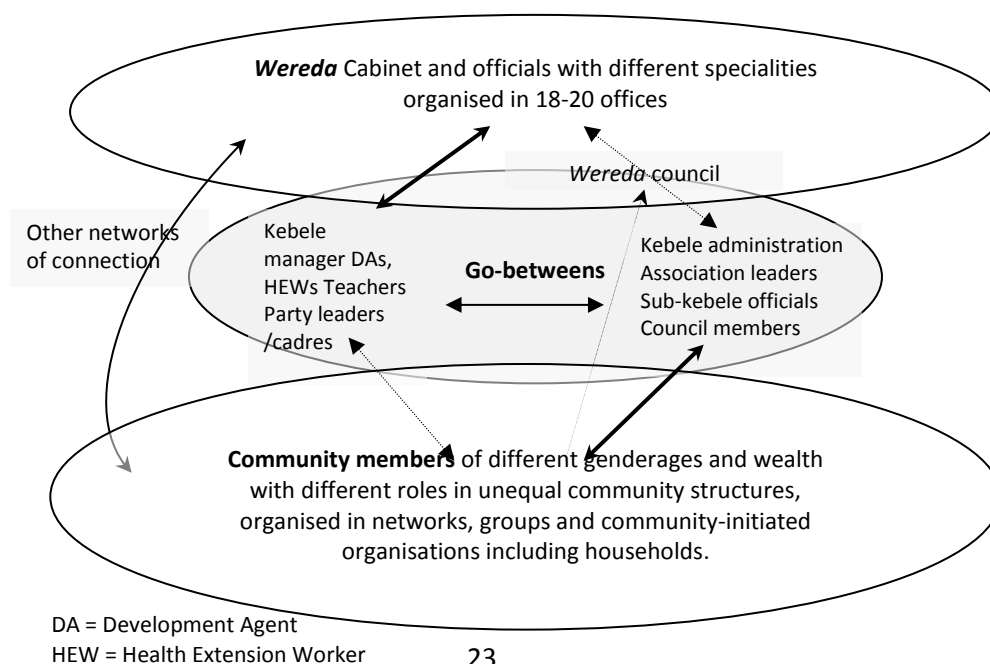
Intervention implementation

For a number of reasons development interventions are never implemented as planned. These fall into two main categories. The first relates to the social construction of the interventions through actions and interactions in the development interface while the second relates to the passage of time including (1) internal system dynamics as time passes and (2) streams of interactions with other interventions and other relevant things going on with no intervention connections.

Social interactions in the development interface and the CMO framework

The development interface

Figure 8: Social interactions in the development interface



The cultural contradictions between top-down and community development models are not easily resolved and they cause difficulties for those whose official positions require them to bridge the cultural divide. Figure 8 shows the key development players in the *wereda*, *kebele*, and communities and identifies a set of 'go-between' government employees who work in the development interface space interacting with *wereda* officials and community members. *Kebele* managers, Development Agents (Agriculture, Livestock and Natural Resources), Health Extension Workers and teachers mostly, though not always, come from outside the community. They are employed by the *wereda* and given performance objectives (targets) which, if not met, may have repercussions for their careers. A second set of 'go-betweens' – *kebele* and sub-*kebele* officials and *kebele* Council members – are (s)elected from within the community and embedded in community networks and structures whilst by their function they are also linked to higher government structures and increasingly to party structures. They are unpaid 'go-between' government volunteers. This framework was used in Stage 2 to design new questions and inform data interpretation.

There are four types of response that members of a community can make in the face of planned change from above: exit, voice, loyalty, foot-dragging. We have started to explore these different responses.

The CMO framework described above in relation to intervention design can also be used to deconstruct the implementation of an intervention.

Social construction

Players and activities

Interventions in rural communities are socially constructed by the actions of, and interactions among, the local implementers some of whom are (1) government employees while others are (2) unpaid (s)elected 'kebele volunteers'; (3) the direct 'beneficiaries' and (4) other members of their households and in some cases (5) community contributors of resources and work and/or (6) others directly affected by the intervention while not benefiting.

Potential beneficiaries have lives outside intervention programmes and may also be expected to participate in a considerable number of different interventions; given that implementation requires the use of household resources and time they will often have to prioritise. Furthermore, participation in different interventions usually requires different combinations of resources, time and attitude on the part of implementers and other people in the beneficiary's network. For example to send a child to school regularly parents must believe education is a good idea, have enough resources and time to cover the direct and opportunity costs throughout the school year or be willing to suffer a loss of household work or income, and the child must want to go to school. A school must have been constructed in the past, teachers must attend, there must be government resources for equipment and books, etc.

People not included in the intervention whose interests will be affected also have a role to play. For example, the success of the recent campaign for an increase in safe infant deliveries will depend not only on providing enough maternity beds, staff and equipment in health centres and ambulances and changing the minds and behaviour of pregnant women, but also on changed minds and behaviour on the part of husbands, mothers-in-law and traditional birth attendants, as well as neighbours expected to carry the women to waiting ambulances, HEWs and kebele officials expected to devote time and energy to the campaign, wereda officials expected to allocate scarce funds to fuel and drivers, health centre officials expected to treat rural women in labour with kindness and respect, and in some places households expected to contribute grain for customary ceremonies after

delivery.

The behaviour of relatives, people likely to be harmed by the interventions, and intervention contributors may be targeted using the social mechanisms described above. For example, husbands in one community were told in meetings about the importance of taking their wives to the health centre for deliveries. In one of the WIDE3 communities TBAs were banned from attending deliveries under threat of punishment, while in another they were rewarded every time they took a mother in labour to the Health Centre. In some communities those who did not participate in watershed work were threatened with fines.

In addition there are a number of interventions, such as watershed management or the building of a Farmers' Training centre or a school classroom, which have collective (though not universal) benefits but depend on individual contributions in cash, kind, and/or work.

Another mechanism at work is that potential beneficiaries are influenced by opinion leaders and reference groups in the community. At one extreme an intervention may evoke *co-operative* individual or collective responses among the majority of intended beneficiaries and others and at the other it may be met with overt or covert *resistance*. In some cases responses may be more *complex* with acceptance of some aspects of the intervention and not others, or due to a clash of interests acceptance by some and resistance by others.

The other aspects of the social construction are (1) institutional location which includes systems, rules, divisions of labour and routines and (2) the infrastructure and resources for implementing the intervention.

Mechanisms

Development interventions rely on one or a mix of social mechanisms for changing minds, bodies and behaviour of beneficiaries, implementers and others including legislation, administrative fiat, incentives, persuasion, coercion, learning by doing, copying, targets etc

People will react to the social mechanisms differently. Threats may frighten some people into new behaviour but antagonise others into overt or covert resistance or foot-dragging. Constant persuasion or 'awaring' may change some minds but not others. Incentives may be taken up by some people but not be large enough for others compared with anticipated costs and opportunity costs. People may conform to legal restrictions and decisions made by government fiat or they may find ways to avoid being affected by their implementation. Differences in reasoning as to how to respond may derive from differences in circumstance, priorities, past experiences and/or personality. As a result of these differences no intervention is going to work according to simple theories of change.

The successful implementation of all interventions depends on changed behaviour on the part of other people involved in the particular intervention sub-system including those charged with implementation. Social mechanisms for getting implementing officials to do what they are meant to include instructions, targets, reporting, *gimgema*, opportunities for training, promotion and demotion and the way these are used has consequences for the progress of the intervention.

Consequences

Interventions have consequences during and after implementation for people, place, institutions and community-government relations. Table 5 describes the framework used in relation to the 13 selected interventions for comparing design and implementation.

Table 5: Framework for comparing intervention design and implementation

Development intervention processes		Theory of change in design	Implementation realities
Social construction planning	Roles of implementers, beneficiaries etc		
	Material infrastructure & inputs		
	Systems, rules and routines		
	Time-frame for activities, inputs, outcomes		
Social mechanisms for influencing the behaviour of beneficiaries and other community members	Legislation and administrative <i>fiat</i>		
	Material & status incentives		
	Targets		
	Threats, fines & imprisonment		
	'Awaring' and training		
	Dialogue and participation		
	Targeting models, learning by doing & copying		
	Organising and mobilising pressure from others		
Social mechanisms for influencing the behaviour of intervention implementers	Instructions		
	Targets & reporting		
	<i>Gimgema</i>		
	Opportunities for training		
	Promotion and demotion		
Outcomes	Place outcomes		
	People outcomes		
	Functional sub-system outcomes		
Collective responses to the interventions	Co-operation		
	Resistance		
	Complexity		

6. Substantive theory

6.1. How significant rural community change happens

One implication of the overlap and inter-penetration of sub-systems and their particular control parameters is that a significant change in one of them has potential consequences for others and may set off a chain of knock-on effects which reverberate through the system in the form of second, third and subsequent order feedback effects. Negative feedback loops dampen the longer-run impact of the change while positive feedback loops increase it.

As time passes community systems evolve through myriad day-by-day actions and interactions in the five fields some confined within the community and some involving outsiders. Some of these are '*habitus* actions' and some are 'agency actions'. In most places at most times most inter/actions are routine and reproduce the system but as time passes new actions, events and/or patterns of collective behaviour may trigger a change process reverberating through the community system's sub-systems. The impact of these reverberations on the overall control parameter pattern and trajectory of the community depends on the magnitude of the changes generated from within or outside and the operation of feedback loops among the sub-systems/control parameters.

One source of potential change lies in material system processes: volcanos and earthquakes, unusual weather, people and livestock epidemics, new roads, etc have secondary and subsequent knock-on effects on people and the operation of the functional social systems. Considering the people system population growth or decline over the years and changes in demographic structures, for example large youth and/or male migration, can also set of change processes in the social systems. Structures are also subject to transformation as a result of human agency, for example charismatic leadership and/or collective agency. Changes may also originate in any of the functional sub-systems.

During periods when complex social systems do not really change any changes in control parameters and/or context are dealt with through a complex set of feedback processes that lead to the system reproducing itself in much the same way. For community systems on stable trajectories for some while there are a number of ways in which change may be triggered. One is a huge and sudden event or intervention from outside such as an imperial conquest, the imposition of military socialism, the provision of large pieces of land to investors, a pandemic or the discovery of oil. At the other extreme myriad cumulative small changes in one or more of the control parameters over a long period may, in complexity social science language, push the community further 'from equilibrium' until it reaches a 'tipping point' and is ready to be sent in a new direction by a relatively small new event or intervention. In between these two extremes meso changes to one or more control parameters may lead to relatively rapid moves towards disequilibrium and change, for example green revolution changes combined with irrigation potential and increasing market demand or rapid urban expansion eating away at the borders of an adjacent rural *kebele*.

Thinking in this dynamic and non-linear way has led us to re-consider the concept of 'outcomes' and draw a distinction between *real outcomes*, whose identification in a longer-term historical process requires some theoretical work and argumentation, and *measured outcomes* which emerge from fieldwork data made using questions about what is happening 'now' or was happening five years ago whose answers may or may not coincide with a real outcome. In our study of the trajectories of whole communities over twenty years or so we have been faced with a stream of large numbers of real outcomes of different kinds, for example a bad harvest, a new kebele cabinet, a decline in the birth rate. This stream of inter-acting outcomes serially affected the community places, people and the five different fields of action, in a process through which, as time passed, 'outcomes' became contributing 'causes' in processes leading to later outcomes.

Most of our data refer to 1995, 2003 and 2013 giving us snapshots of outcomes in the control parameter areas in these three years. We have used these snapshots together with the patchy reports we have of happenings in the years in between to create narratives of continuity and change between 1995 and 2013 and, as discussed under the Substantive Theory heading identify important causes of significant changes.

There are four real and very significant potential outcomes of interest in 2013 relating to the trajectories of the communities since 1995. *First* the community may have undergone some changes during the period leading up to the outcomes but the overall pattern and trajectory remained roughly the same (Outcome 1); *second* the overall pattern may have changed in some way but the trajectory remained roughly the same (Outcome 2); *third* the overall pattern had changed so much that it was clear that the direction of the community was bound to change but not clear in what way (Outcome 3); *fourth*, there had been a transformation to a new state with a new overall pattern and trajectory (Outcome 4); *fifth* the system has ceased to exist in any recognisable form (Outcome 5). We have used the control parameter framework to identify the larger consequences or outcomes for the Stage 3 community trajectories of the complex outcome-cause-outcome...etc streams they experienced between the early 1990s and 2015.

A comparison of dominating control parameter configurations in 1995 (3 communities), 2003 and 2013 has allowed us to identify forces for change and continuity, including development interventions, in the Stage 3 communities and this analysis can be extended to all twenty WIDE

communities (Table 6).

Table 6: Forces affecting control parameters 1991-2013

Control parameter areas	Potential parameters identified as important for the communities studied	Forces for continuity/change to control parameters in each community 1991-2013
1. Place	Terrain, settlement, climate, ecology Connections with wider world	
2. People	Current human resources & aspirations	
3. The state of the local economy	Farming system Livelihood diversification Economic institutions	
4. The state of the local human re/pro/duction system	Human re/pro/duction institutions	
5. Social integration	Community fault-lines & organised collective agency	
6. Cultural integration	Cultural repertoires of ideas	
7. Political integration	Government-society relations & political settlement	
8. External aspects of intersecting functional systems	E.g. market systems, education systems, wider religious systems, clan organisations	
9. Encompassing meso systems	State of meso system: economy, society, culture, politics	
10. Encompassing macro systems	State of country system: economy, society, culture, politics	

7. Research strategy

7.1. Case-based research methods

In the original research design we chose as cases three kinds of open and dynamic complex social system: the communities and the households and people which constitute them¹³. As shown below this choice had implications for how we asked our questions and to whom we put them. We also had to deconstruct the research questions into manageable ‘variates’ whose traces at the time of the research we would be measuring quantitatively or qualitatively.

7.2. Research instruments - what we asked about

We used the seven perspectives framework in a number of ways. For example, the ‘Modernisation variate master list’¹⁴, i.e. traces of modernisation processes (Table 7) was used to design questions and organise the Modernisation Evidence Bases matrices for 1995, 2003 and 2011. The *community features* list relates to the community as a whole in its context; the *livelihoods* list to the livelihoods domain of power; the *lives* list to the human re/pro/duction domain; and the *society and government* list to the social re/pro/duction, community management, and ideas domains.

¹³ In Section 8, Research Answers, under ‘New Directions’ I describe how we used the Stage 2 data to analyse control parameters and sub-parameters as cases.

¹⁴ Most of these topics were covered in the 1995 Village Studies (WIDE1) and a large number of them in WIDE2 in 2003.

Table 7: Modernisation variate master list

N.B There is no read-across the columns which are presented thus to save space.

LIVELIHOODS	LIVES	SOCIETY & GOVERNMENT
Terrain	Population	Elders roles and activities
Ecology + environment	Household types and inequalities	Religious organisations and activities
Weather	Wealth differences	Other community-initiated organisations and activities
Land use	Social protection	Physical safety and security
Settlement pattern	Class relationships	Group disagreements and conflicts
Urbanisation + public buildings	Genderage differences: children	Justice
Electricity	Genderage differences: youth	Informal welfare regime
Communications	Genderage differences: adults	Governance structures: <i>kebele</i> and sub- <i>kebele</i>
Roads and transport	Genderage differences: elderly dependents	Community and <i>kebele</i> leadership
Credit and saving	Marriage, widowhood and divorce	Government-community relations
Shocks leading to food insecurity	Gender and inheritance	Community modern repertoire of ideas
Smallholder farming - crops	Gender relationships: nurturing, income-earning, power relations	Community conservative repertoire of ideas
Smallholder farming - livestock	Inter-generational relationships	Incoming religious ideas
Irrigation	Elite-mass differences	Incoming government ideas
Other farm technologies	Social exclusion	Incoming urban ideas
Inward investors involved in farming	Other status differences and relationships	Incoming global ideas
Co-operative farming	Social participation	Key clashes of ideas
Agriculture market linkages - upstream	Housing	
Agriculture market linkages - downstream	Household assets	
Prices and inflation	Other consumer goods	
Agricultural labour	Domestic technologies	
Labour-sharing/co-operation	Household work + workers	
Diversification and non-farm activities	Leisure activities	
Migration	Clothes	
	Food, diet, nutrition	
	Drinking water	
	Common illnesses and treatment-seeking	
	Producing children	
	Raising children: non-formal learning	
	Pre-school education	
	ABE	
	Primary education	
	Secondary education	
	Technical and vocational training	
	University access	

7.3. Research instruments - how we asked

The *fieldwork* was conducted in two rounds separated by seven months by trained Ethiopian social scientists using the same protocols across the communities. In each site male and female Research Officers conducted separate interviews. Women and girls were always interviewed by the women fieldworkers but, given that there were more questions for men due to their greater representation in official positions, the women also interviewed some men. Respondents included *wereda* officials, *kebele* officials, and others who were particularly knowledgeable about the community and its history. There were in-depth interviews in each community with four male household heads and their wives from households of different wealths, plus rich and poor women heading households. There were also interviews with people knowledgeable about the communities' histories,

government employees working in the *kebele*, government volunteers from the community holding *kebele* Cabinet, Council, Committee and other official positions, leaders of community-initiated organisations, elders, religious leaders, clan leaders, model farmers, investors, traders, other business people, skilled workers, daily labourers, returned migrants, ex-soldiers, traditional health workers, and male and female teenagers.

The Research Officers were given Modules¹⁵ (Table 8) to guide semi-structured interviews. They also observed and participated in community life to deepen their knowledge and understanding of the community and took a wide range of photographs. The contents of the research instruments responded to inputs from donor and research officer workshops. Phase 1 fieldwork reports informed the design of the Phase 2 modules.

Table 8: The WIDE3 Stage 3 research modules

	Phase 1	
Module 1	Wereda perspective	Wereda administrator Head of the health office Head of the office responsible for credit and saving Head of the office responsible for drinking water Head of the women and child affairs office
Module 2	Community trajectory 2003-13	Knowledgeable people individually and/or in small informal groups
Module 3	Kebele perspective	Kebele chair Public Works organiser Cabinet information officer
Module 4	Farming	Successful Model Farmers
Module 5	Non-farming activities	Different kinds of trader People involved in manufacturing and service enterprises Key informant on employment
Module 6	Young people's perspective	Male and female rich, middle and poor 19 year-olds, 16 year-olds and 13 year-olds
Module 7	Households & interventions	Economically successful farmer and wife; successful business man and wife; middle wealth farmer and wife; poor farmer and wife; successful woman heading household; poor woman heading household
Module 8	Key informants' experiences & perspectives	Kebele manager DAs' group + vet HEWs' group Head teacher Youth leaders Development team leaders 1-5 leaders Woman leader Service Co-op leader Formal credit organiser Leading famer Woman Model farmer Leading trader of farm products Leading businessperson Best economist Urban linked opinion leader Irrigation expert Returned migrants Customary leaders Religious leaders NGO worker Research officer selected informants
Module 9	Fact sheet	Various respondents
Module 10	Fieldworker daily diary	Research officers
Module 11	Election notes	Research officers

¹⁵ Available in the Appendix to this Annex.

	Phase 2	
Modules 1-7	Important happenings since Fieldwork 1 in April	FW1 good informants; FW1 household respondents; youth political leader; 19 year-olds, 25 year-olds; kebele chair, kebele manager, party leader, traders; business(wo)man; DA; lead young farmer; model farmer; Sub-kebele, Development Team and 1-5 leaders
Module 8	Gaps from Fieldwork 1	Various respondents
Module 9	Fieldworker daily diary	Research officers
Module 10	Research officer topic if desired	Research officers
Module 11	Seasonality of activities	Various respondents

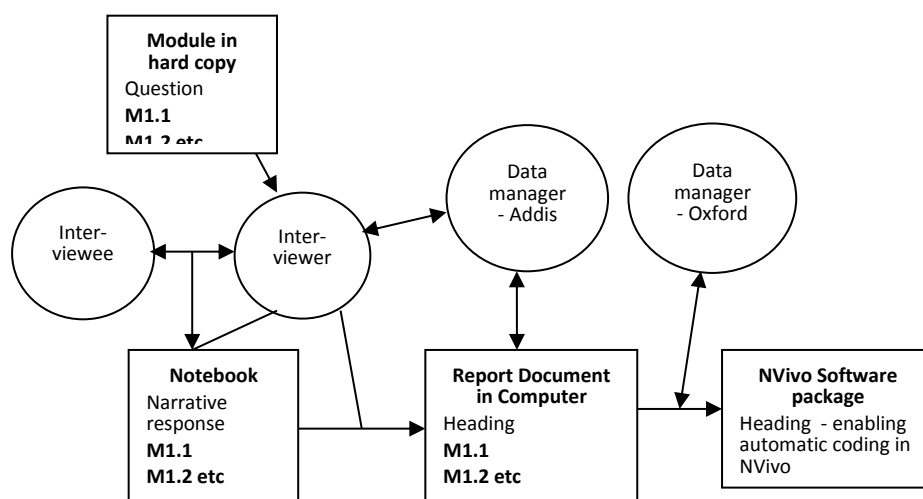
7.4. Research instruments - who we asked

In each site male and female Research Officers conducted separate interviews. Women and girls were always interviewed by the women fieldworkers but, given that there were more questions for men due to their greater representation in official positions, the women also interviewed some men. Respondents included *wereda* officials, *kebele* officials, and others who were particularly knowledgeable about the community and its history. The same questions about interventions were put to rich, middle-wealth and poor men and women and there were in-depth interviews in each community with four male household heads and their wives from households of different wealths, plus rich and poor women heading households. There were also interviews with government employees working in the *kebele*, government volunteers from the community holding *kebele* Cabinet, Council, Committee and other official positions, leaders of community-initiated organisations, elders, religious leaders, clan leaders, model farmers, investors, traders, other business people, skilled workers, daily labourers, returned migrants, ex-soldiers, traditional health workers, youth, and various kinds of vulnerable and excluded people.

8. Fieldwork process and the making of the database

The *fieldwork* has been conducted by trained Ethiopian social scientists; the WIDE1 fieldworkers were all male but in WIDE2 and WIDE 3 male and female researchers worked together in each site.

Figure 9: Data journey - from interviewee to NVivo software package



By Stage 3 eleven of the twelve researchers had worked on a previous WIDE project and were familiar with the approach. They used the Modules to guide interviews during which they wrote field notes which were used to produce Report Documents paralleling the Modules. Figure 9 shows the

journey which the Stage 2 data¹⁶, in the form of a narrative guided and set down by the Research Officer, made from the mouth of the interviewee to the database organised in the NVivo9 software package. Community lead researchers¹⁷ loaded the Report Documents into NVivo.

9. Interpretation and analysis

The interpretation and analysis process by the lead researchers began after the Phase 1 fieldwork with a Research Officer de-briefing workshop. This produced tentative findings which were shared with a network of people working for donors, NGOs or as researchers or consultants in a Rapid Briefing Note. In Stages 1 and 2 the feedback contributed to the design of the Phase 2 fieldwork which was followed by another de-briefing workshop and Rapid Briefing Note. The lead researchers (Catherine Dom, Anthea Gordon and Tom Lavers) then each wrote two *individual community case studies*. In Stage 3 most fieldwork was conducted in a longer Phase 1 which was followed by the writing and of draft community reports and a short Phase 2 to fill gaps and follow-up community-specific issues.

The community reports are organised under four main headings with detailed sub-headings: the community as a whole, households, structures of inequality, and fields of action/domains of power. They are revised following comments from the fieldworkers. They are book-length reports and a good read in their own right but they also form part of the evidence base for the Final report.

The *synchronic comparative analysis process* began in the de-briefing workshops and was taken forward in dissemination workshops in Addis Ababa following completion of the community reports. In the synchronic analysis of the consequences of modernisation processes on the state of each community in 2013 we used the Stage 3 data to describe the internal structures and contexts of each and comparative case-based analysis across the six sites to identify common mechanisms as well as differences associated with different types of community. The underlying method for comparison involves matrices - see example in the Appendix from Sirba 1995 - we have used the same format to organise the data for 2003 and 2013 - and done this for all sites. We have used them to identify changes through time in one site and compare sectoral changes/policies across the sites.

For the diachronic analysis of modernisation we developed narratives describing the long-term trajectories of each of the communities and compared the key parameters of importance in 2013 with those constitutive of their structures in 1995. We then compared the trajectories of all twenty WIDE3 communities to identify a smaller number of different types of trajectory followed by similar ensembles of communities.

We used the following questions to identify the key parameters constitutive of the states of each of the communities in 1995 and 2013 and for predicting their possible future states in the medium term.

Place

1. How easy is it to grow crops, keep livestock and live here?
2. How easy is it for people living in different places in the community to access people outside the community, markets, services, etc?

People and agency

3. What are the particular competences and aspirations of the men, women, male and female youth and children in the community?

¹⁶ In Stage 1 the programme was only used with data from two sites.

¹⁷ In Stage 2 Rebecca Carter, Catherine Dom, Alula Pankhurst and myself were each community leads for two sites.

Economy

4. What crops are produced and livestock reared with what agro-technologies and how well do the choices work with the place?
5. What off-farm economic opportunities are available and where? How do these fit with people's competences and aspirations?
6. How efficient are the local mixed economy institutions in organising the provision of farm and other inputs, choice of products and techniques, and sale of outputs?

Society

7. Considering identity group differences¹⁸, gender relations, adult-youth relations, and rich-poor relations how socially integrated/disunited is the community?

Cultural ideas

8. What are the main features of customary, modern and other important cultural repertoires? What is the balance of community support for each and what are the social characteristics of the main opinion leaders?

Polity

9. How strong is the political settlement between the community and the government and on what is it based? How do different kinds of people channel political aspirations and interests?

Wider context

10. What is the current state of the local meso-economy?
11. What is the state of relations with wider identity groups (friends and enemies) in the neighbourhood? How dangerous are potential or existing resource or other conflicts?
12. What is the current state of the macro economy and polity and national social and cultural integration? What might happen in the medium-term future?

In the synchronic analysis of the way development interventions were working in 2013 we brought all the responses we had on each intervention together and ordered them in terms of the community sub-system they were aimed at changing. We then prepared Evidence Base matrices and refined Annex 4 matrices to underpin our conclusions in Section 3.

In the diachronic analysis of interventions between 2003 and 2013 we compared what government was doing in 2003 and 2013 and used the first nine control parameter headings to identify the contributions which development interventions had made to the states of the communities in 2013.

10. Research answers

Our research answers have included:

1. New theoretical frameworks, for example those related to development interventions used in Stage 3
2. Many empirical conclusions – as the Summary Report shows
3. The development of substantive theory in relation to community control parameters and future forces for change
4. Revisions to research methods
5. Some new directions – for example considering policy-relevant variates such as irrigation and internal roads as cases which can be typed

¹⁸ For example ethnic, clan, lineage, and/or religious differences

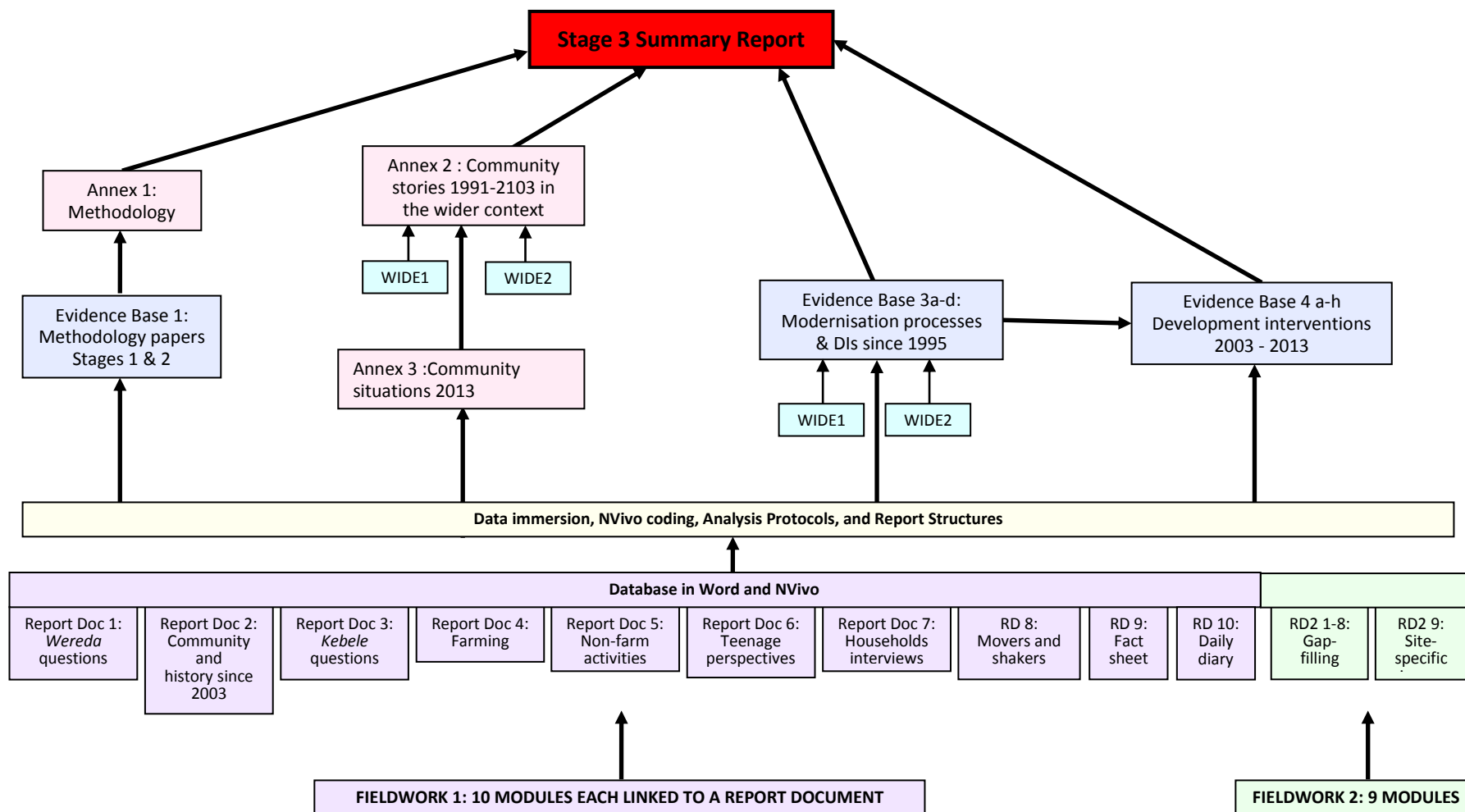
11. The writing of the final report

The writing of the final report began with the writing of long descriptions of each of the communities in 2013 organised using the analytic frameworks described above. These community descriptions are part of the Final Report (Annex 3). They have been used with the WIDE1 and WIDE2 data to construct the short community narratives in Annex 2. These two annexes summarise the evidence base for Section 2 of the summary report. Section 3 of the report on development interventions relies on the the three evidence bases listed in column3 of Table 9. The process involved in writing the summary report is depicted in Figure 10.

Table 9: Annexes and Evidence Bases in the Final Report

	Annexes	Evidence base
Methodology	Annex 1	Stages 1 and 2 Inception reports & Methodology papers Stage 3 Inception report
Modernisation & CP 1995-2013	Annex 2 Annex 3 Community Situation Reports	For each community: EB2a modernisation & DIs 1995 (only 3) EB2b Modernisation and DIs 2003 EB2c Modernisation and DIs 2013 FW1 EB2d Modernisation & DIs 2013 FW 2 WIDE2 For Adado, Sirba and Kormargefia WIDE1
Development interventions		For each community: EB3a Comparison of development interventions 2003-13 EB3b Implementation of DIs EB3c Household experiences of DIs

Figure 10: Stage 3 Final Report structure



12. Engaging with policymakers to try to inform *praxis*

12.1. Engagement with donors and government during the WIDE3 research

From the beginning of WIDE3 we assumed that our community-level research could be policy relevant by filling an information gap for government and their development partners. As funding was provided by a group of donors through the World Bank managed Joint Governance Assessment and Measurement (JGAM) Trust Fund, we thought that there indeed were donors who agreed that the research could play this role. On the government side we got clearance for the research from the Ethiopian Development Research Institute head, Ato Neway Gebreab, also Advisor to the Prime Minister. Accordingly at the outset we tried to engage jointly with donors based in Ethiopia, the Ethiopian government, academics and NGOs in Ethiopia, non-resident academics with an interest in Ethiopia, and UK-based academics with an interest in methods for development-related research.

We established a WIDE3 ‘worknet’ (inventing the term) in the hope that members drawn from these different constituencies would get involved in the project and contribute comments and ideas in workshops and meetings and via email – while we would feed them regularly in different ways. Our main vehicles were regular small workshops and meetings with Addis-based donors and government officials (separately, see below), Rapid Briefing Notes emerging during fieldwork de-briefings, presentations developed for workshops and meetings, the successive Final Reports and academic papers and presentations.

Table 10 lists the meetings with donors and government through the life of WIDE3 – including the very last meetings focused on ‘WIDE Discussion Briefs’, which we describe in the next section.

Table 10 Consultation meetings with donors and government throughout the life of WIDE3

Date	Research stage	Event
Nov-Dec 2009	WIDE3 Stage 1	Workshops and meetings to present the research Stage 1 plan and consult on key topics of interest, with 4 donor groups ¹⁹ <ul style="list-style-type: none"> • Crosscutting • PBS • PSNP • Governance
April 2010	WIDE3 Stage 1	Presentation of early findings from Stage 1 to the Netherlands Embassy , at their request
June 2010	WIDE3 Stage 1	Dissemination meetings/workshops on Stage 1 main findings for discussion, with 6 donor groups <ul style="list-style-type: none"> • 2 donor agencies (Netherlands, Irish Aid) • 4 donor groups (PBS, PSNP, RED/FS +, education and health)
September 2011	WIDE3 Stage 2	Consultation meetings to present Stage 2 plan and consult on key topics of relevance, with 7 donor groups : education, health, governance, PBS, PSNP, RED/FS, social equity
December 2011	WIDE3 Stage 1	Dissemination workshop convened by EDRI for government officials from various agencies, to present the Stage 1 findings and plan for Stage 2
February 2012	WIDE3 Stage 1	Meeting with Dr Abraham Tekeste, State Minister MOFEP , to present WIDE3 Stage 1 key findings and Stage 2 plan
June 2012	WIDE3 Stage 2	Dissemination meetings/workshops on Stage 2 main findings for discussion, with 6 donor groups <ul style="list-style-type: none"> • 3 donor agencies (DFID, Netherlands and Norway) • 3 donor groups (PBS, PSNP/HABP, RED/FS+)

¹⁹ A number of academics and NGO representatives attended some of these meetings.

Date	Research stage	Event
June 2012	WIDE3 Stage 2	Dissemination workshop convened by EDRI for government officials from various agencies, to present the Stage 2 preliminary findings and plan for Stage 3
November 2012	WIDE3 Stage 2	Panel session at the 18th International Conference of Ethiopian Studies (ICES) , <i>Ethiopia in Movement, Movements in Ethiopia</i> , in Dire Dawa <ul style="list-style-type: none"> • Presentation of 6 papers focusing on specific topics and communities drawing on Stage 2 findings
Feb/March 2013	WIDE3 Stage 3	Consultation meetings to present Stage 3 and consult on key topics of relevance, with 2 donor groups <ul style="list-style-type: none"> • RED/FS, PBS and PSNP donor groups • UNICEF on nutrition, health, education and social protection
May 2013	WIDE3 Stage 3	Dissemination focusing on Stage 2 findings and ongoing Stage 3 research with DFID
October 2013	WIDE3 Stage 3	Dissemination meetings/workshops on Stage 3 findings from first fieldwork with a view to inform second, gap-filling fieldwork, with 3 interest groups <ul style="list-style-type: none"> • DFID • Joint government-donor RED/FS workshop including inception presentation on livelihood-focused discussion briefs (see below) • Lecture on 'Service delivery in rural Ethiopia: 1995-2013' at Addis Ababa University
October 2013	WIDE3 Stage 3	Meeting with Dr Abraham Tekeste, State Minister MOFED , and Ato Tefera Deribew, Minister of Agriculture (separately) to present Stage 2 & Stage 3 main/preliminary findings and the discussion brief process
March 2014	WIDE3 All Stages	High Level Discussion Forum on Policy Implications of WIDE3 research findings – with senior government officials and focusing on five topics (see below)
March 2014	WIDE3 All Stages	Discussion Forum on WIDE3 briefs – with World Bank and other donors

The worknet, which by 2013 had around 100 members, played its role to some degree, with three limitations:

- First, the very high turnover of generally over-stretched donor and NGO employees meant that we often interacted with people who had no prior exposure to earlier stages of the research, which made substantive engagement more difficult.
- Second, early on in the course of the research we found that there was a disconnect between donor and government mental models about how development should be pursued, making dialogue between them uneasy. It therefore seemed that getting government and donors together in the same room might not be the best way for them to engage with the research. As a result, the worknet became a network of non-government actors; all but one of our dissemination meetings were bilateral (research team and either Government, or donors); and while we seized opportunities to have dedicated meetings with government officials we also send shorter outputs to those who were interested.
- Third, we faced a dearth of academics with time and/or inclination to get involved in this kind of research.

12.2. The WIDE Discussion Briefs

Reaching Stage 3 we started brainstorming on means (besides meetings, workshops and research outputs) to draw on the research evidence in ways that would be more directly useful to policy-making and implementation. A few key topics arising from discussions with government and other stakeholders were identified and in order to draw out implications from the research on these topics, the JGAM funding agencies and World Bank agreed to commission consultants within Ethiopia and abroad to write concise briefs on the following topics:

1. Unlocking agricultural growth
2. Farming and value chains
3. Work creation for the rural youth
4. Equitable service delivery
5. Transforming lives: women and men, girls and boys.
6. Models and realities of transformation.

The first three briefs were written by two members of the Economic Policy Analysis Unit (EPAU) of the Ethiopian Development Research Institute, the other three by international consultants known by us or other authors. Five of the briefs were discussed at a High Level Discussion Forum with senior Government officials on 6th March 2014 (the brief on ‘transforming lives’ was not ready in time and is under preparation at the time of writing this report). The World Bank convened the Forum and strictly kept to this convening role, leaving space for a discussion between Government officials, the authors of the briefs and the WIDE3 team²⁰. The following day the authors and the WIDE3 team held a meeting, also convened by the World Bank, for the JGAM donors and other interested partners²¹. Comments received at these meetings were taken into consideration by the authors to finalise the WIDE Discussion Briefs.

The agreed way forward is for the World Bank to submit the finalised briefs to the Government officials involved and seek their views on dissemination and any other actions that they would like to see being taken, going forward. We hope that this may include, among others, a joint GOE-DP discussion of the briefs. We outline in the next section what we see as possible other further steps.

While not painless the process of preparing these briefs brought up a number of lessons which we hope can be useful in further steps taken to bridge the WIDE3 research with policy-making and implementation in Ethiopia.

First, about the value of *independent* research – In the course of our rare but important interactions with Government officials it became clear that one of the major strengths of the WIDE3 research, as perceived by them, was its independence from donors’ agendas and policy discourses. Maintaining this independence was therefore important. This was a major factor in deciding that the process of engaging on the WIDE Discussion Briefs would start by bifurcated discussions first with government then with other stakeholders. We believe that this was a sensible decision – although as explained above, we do hope that a joint discussion will occur in future now that these separate discussions have been held. Going forward we believe that further thoughts should be given on how to strengthen independent, policy-relevant research in Ethiopia.

Second, on the *nature of the briefs* - While initially the papers prepared were called ‘policy briefs’, in the inception discussions the authors, the WIDE3 team and the WB agreed that the aim was not to come up with policy recommendations (which there is no shortage of in Ethiopia) but rather to draw on the WIDE3 evidence to bring policy and implementation questions and possible implications to the attention of policymakers, thereby contributing to current debates through discussions with government, donors, and other stakeholders. This understanding led us to rather call the papers ‘Discussion Briefs’.

The briefs were prepared in the spirit of the research – that is, “*telling the stories behind the numbers, which are needed in order to understand the numbers*”²². They aimed to be short and selective papers, focusing on specific points arising from the WIDE3 data and felt to require attention in relation to each topic. While the authors were familiar with the thrust of the

²⁰ The High Level Discussion Forum was attended by three of the Advisors of the Prime Minister, Ato Neway Gebreab, Ato Andreas Eshete and Ato Abay Tsehaye; Ato Abdul Fatah Abdullahi, Minister MOLSA; Ato Mekonnen Manyazewal, Head of the Planning Commission; Ato Wondirad Mandefro, State Minister of Agriculture; and two other MOFED representatives.

²¹ Present: DFID, Canadians, Netherlands, USAID, EU, PBS Secretariat and RED/FS Secretariat.

²² In the words of Dr Abraham Tekeste, State Minister of Finance, at one of our meetings with him.

government policies and programmes in their respective area of focus, the briefs were not intended to review these (the readership was expected to be familiar with them as well). The briefs were also expected to be fully based on the WIDE3 findings and to focus on current concerns regarding the implementation of policy. In inception discussions with the authors and in later discussions with the WB it was agreed that looking at the WIDE3 findings together with other bodies of evidence and taking a longitudinal perspective in order to document the evolution of policy and practice by drawing on earlier research round (WIDE1 and WIDE2) would be separate exercises. The briefs would therefore represent a first kind of product aimed to bridge between the WIDE research and policy-making and implementation in Ethiopia.

Third, on the *process* to develop them – It became clear in the course of the drafting process that the time required to prepare the Discussion Briefs had been seriously underestimated; and that the process of producing them to a standard that all involved parties would feel comfortable with had been somewhat underdeveloped. It was a real challenge for the authors, confronted with the richness and fine-grained and detailed nature of the WIDE data, to try to do justice to the diversity of contexts in the 20 communities while at the same time extracting some broader key findings and issues for discussion. It would also have been desirable to better map out at the outset the respective roles of, and the process of interaction between, the authors, the WIDE3 team, and the World Bank. Not doing so raised some frustration on all sides as roles were being played out at the same time as they were being explained to other actors.

For instance, while the briefs were said not to represent the views of the WIDE3 team, the World Bank or the JGAM donors, they were called WIDE briefs and the WIDE3 team was expected to provide inputs; but this was only made clear to the authors in the course of the process. The World Bank also decided to carry out an internal peer review of the draft briefs – with the stated objective of allowing identifying anything that might undermine the World Bank relationship with GOE. Again this was not foreseen at the outset, while the review brought additional work for the authors. More fundamentally, it was a fine line to tread for the authors, together with the WIDE3 team, to respond to comments at times reflecting the World Bank mental model and/or a lack of familiarity by some of the peer reviewers with the policymaking and policy dialogue context in Ethiopia, while maintaining the independence of the research and of the Discussion Briefs drawing on it.

12.3. Thinking ahead

At the closure of the WIDE3 project we see (at least) three main streams of work emerging, as follows:

- More could be done to draw on the existing data – both in terms of content (other topics etc.) and process (joint GOE-donor discussion, involvement of regional governments etc.) - to make the research findings more easily accessible to policymakers and practitioners in Ethiopia
- Both the GOE and donors expressed interest in the longitudinal nature of the research. This brought us to think about a subsequent round. We have suggested in earlier discussions that it would be interesting to do a rapid round of going back to all 20 villages in as short a period of time as possible, in 2015/16, with a view to establishing a baseline again at the closure of the GTP1 and the start of its successor.
- Thinking further ahead, we hope that the WIDE research can find an Ethiopian home and, in its current or in a simplified form, become institutionalised as one of the ways in which Government and its development partners follow up the long term impacts of development interventions and broader modernisation processes in Ethiopia.

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