

LONG TERM PERSPECTIVES ON DEVELOPMENT IMPACTS IN RURAL ETHIOPIA: TRANSITION WIDE3-4



WIDE METHODOLOGY IN 2016

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Introduction	1
Paper 1: WIDE methodology and the Foundations of Knowledge Framework	2
THE FOUNDATIONS OF KNOWLEDGE FRAMEWORK	2
RESEARCH DOMAIN AND IDEOLOGICAL POSITION	2
ONTOLOGY	3
<i>The world really is complex.....</i>	3
<i>Complex social systems are structured and energised by social action</i>	3
<i>Control parameters</i>	4
<i>Complex social system dynamics</i>	4
EPISTEMOLOGY	4
THEORY	5
RESEARCH STRATEGY	5
FIELDWORK AND DATABASE	6
INTERPRETATION AND ANALYSIS	6
RESEARCH ANSWERS, DISSEMINATION AND PRACTICE.....	6
REFERENCES	7
Paper 2: The WIDE research methodology	8
THE RESEARCH APPROACH.....	8
<i>Why a long-term perspective on the impacts of development?</i>	8
<i>Why a focus on communities?</i>	9
<i>Why qualitative data and a case-based approach?.....</i>	9
<i>Why a complexity social science methodology?</i>	11
THE RESEARCH DESIGN.....	12
<i>The communities.....</i>	12
<i>The development interventions</i>	14
<i>The research instruments and fieldwork.....</i>	15
<i>Case-based interpretation and analysis of the data</i>	16
<i>The research findings</i>	16
<i>References.....</i>	17
Paper 3: Website page - Methodology	18
THE WIDE RESEARCH APPROACH	18
COMMUNITIES	18
COMPLEXITY APPROACH – SEVEN PERSPECTIVES ON THE EVOLVING COMMUNITIES.....	18
THE SYNCHRONIC APPROACH TO COMMUNITIES	18
THE DIACHRONIC APPROACH TO COMMUNITIES	19
DEVELOPMENT INTERVENTIONS	19
RESEARCH INSTRUMENTS AND FIELDWORK.....	20
CASE-BASED INTERPRETATION AND ANALYSIS OF THE DATA	20
RESEARCH ANSWERS	20
WIDE-RELATED METHODOLOGY PUBLICATIONS	21
GUIDE TO USING THE WIDE DATA	21
GUIDE FOR IMPLEMENTING A SIMILAR LONGITUDINAL COMPLEXITY COMMUNITY STUDY	21
THE ‘READ MORES’	21
<i>The WIDE research approach.....</i>	21
<i>Communities co-evolving</i>	25
<i>The material eco-system</i>	27
<i>Five domains of power</i>	27
<i>Household systems.....</i>	29
<i>Different kinds of people.....</i>	30
<i>Social interactions in the context of durable structures of inequality.....</i>	31
<i>Control parameters.....</i>	31
<i>How significant rural change happens.....</i>	32
<i>List of potential interventions in 2013</i>	34
<i>Development intervention frameworks</i>	36

<i>Modernisation variates</i>	42
<i>References</i>	43
Paper 4: Guide to using the WIDE data and community reports	44
THE WEBSITE	44
THE WIDE1 DATA	44
WIDE3 DATA	44
<i>The research officers</i>	44
<i>The communities</i>	44
<i>The WIDE3 households</i>	49
<i>The people interviewed</i>	49
<i>The modules</i>	49
<i>The report documents</i>	53
<i>The photographs</i>	53
<i>The community reports</i>	53
Paper 5: Guide to planning and implementing a similar study	54
INTRODUCTION	54
DESIGNING THE BASELINE STUDY	54
CHOOSING THE COMMUNITIES	55
USING THE MULTIPLE PERSPECTIVES.....	55
THE FIELDWORK PROCESS AND THE MAKING OF THE DATABASE	61
<i>Constructing the fieldwork calendar</i>	61
<i>Choosing, training and working with the field officers</i>	61
<i>Making and recording the data</i>	61
INTERPRETING AND ANALYSING THE DATA	62
CONCLUSION	62
REFERENCES	62
Paper 6: Policy-related research projects which could be usefully undertaken in the near future .	63
INTRODUCTION	63
POTENTIAL SERIES III DISCUSSION BRIEFS	63
<i>Potential topics</i>	63
<i>A protocol to aid the ordering of data for the evidence base</i>	63
POTENTIAL NEW FIELDWORK PROJECTS.....	64
APPENDIX 1: EXAMPLE - MATERNAL AND INFANT HEALTH AND WELL-BEING	64
<i>Step 1: Design the abstract conceptual framework</i>	64
<i>Step 2: Make a conceptual matrix for each of the five areas identified in the conceptual framework</i>	65
<i>Step 3: Data analysis 1 - use the conceptual matrix to design the data description matrices</i>	66
<i>Step 4: Data analysis 2: populate the data description matrices using the available data</i>	66
<i>Step 5: Data analysis 3 - data immersion and familiarisation with each community narrative</i>	66
<i>Step 6: Data analysis 4 –use the data description matrices to create data pattern matrices</i>	66
<i>Step 6: Data analysis 5- select key issues to create and explore 20-community truth tables</i>	67
<i>Step 7: Identify policy issues for discussion with government and development partners</i>	67
APPENDIX 2: EXAMPLE - EXPERIENCES OF DROUGHT 2015-16.....	73
<i>Learning from WIDE1-3 data</i>	73
<i>Designing a new research project</i>	73
Paper 7: Ways of approaching a WIDE4 round of research	75
WHAT DO WE WANT TO KNOW?	75
HOW DO WE PAY ATTENTION TO URBAN AREAS?	75
DO WE ADD ANY NEW COMMUNITIES?	75
HOW DO WE MANAGE A WIDE4?.....	75
REFERENCES	76
APPENDIX 1: POTENTIAL RESEARCH SITES FOR WIDE4.....	76
<i>Tigray Central</i>	77
<i>Tigray West</i>	77
<i>Afar</i>	78

<i>Beneshangul</i>	79
<i>Gambella</i>	79
<i>Somali</i>	80
APPENDIX 2: ONE SCENARIO OF TEAM ORGANISATION FOR WIDE4	80
<i>Teams</i>	80
<i>Staff</i>	81
<i>Fieldwork plan</i>	82
<i>Work plan</i>	82
 Box 1: Table of Contents from the Stage 3 Oda Dawata Community Report	55
 Figure 1: The Foundations of Knowledge Framework	2
Figure 2: Synchronic and diachronic approaches to the WIDE data	12
Figure 3: Co-evolution of communities, country, households and people	26
Figure 4: Community trajectories	26
Figure 5: The five functional sub-systems / domains of power / fields of action.....	28
Figure 6: Participation in the different fields of action by different kind of household member	30
Figure 7 Cultural disconnects between top-down and local cultural repertoires	38
Figure 8: Social interactions in the development interface.....	39
Figure 9: Data journey - from interviewee to NVivo software package.....	61
 Table 1: The five domains of power / fields of action / functional sub-systems.....	13
Table 2: Parameters guiding rural community trajectories	14
Table 3: Community control parameters and selected development interventions	14
Table 4: The five domains of power / fields of action / functional sub-systems	27
Table 5: Parameters guiding rural community trajectories	31
Table 6: Forces affecting control parameters 1991-2013.....	33
Table 7: A list of development interventions potentially entering rural communities in 2013	34
Table 8: Community control parameters and selected development interventions	36
Table 9: Framework for comparing intervention design and implementation	41
Table 10: Modernisation variate master list.....	42
Table 11: Types of household interviewed in the three WIDE3 Stages.....	49
Table 12: The modules in the three WIDE3 stages	49
Table 13: Modules and interviewees and specific topics list for Stage 2	50
Table 14: Stage 2 Module 1 list of topics covered	52
Table 15: The modules in the three WIDE3 stages	60

Introduction

This collection of 7 papers summarises the state of the Ethiopia WIDE methodology in September 2016, provides links to more detailed writing, and offers some preliminary guides for taking the methodology forward inside Ethiopia and beyond. The process of developing the methodology began in 1994 with WIDE1, which was planned as a one-off study of fifteen rural communities. Subsequent theoretical work interacting with the empirical work in 2003 (WIDE2) and 2010-13 (WIDE3) has produced the complexity-informed methodology for studying rural communities in developing countries which is described here.

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?

[Paper 1](#) shows how these different knowledge areas are linked and briefly describes the WIDE3 approach to each of these knowledge foundations.

[Paper 2](#) is a description of the state of the methodology in September 2016 which was written as a draft for the book collection of papers currently being put together (ed Pankhurst, forthcoming).

[Paper 3](#) is a facsimile of the [Methodology page on the Ethiopia WIDE website](#). There is some overlap with the contents of Paper 2.

[Paper 4](#) is a guide to using the WIDE data and reports which are available to all on the new website.

[Paper 5](#) is a guide to planning and implementing a similar longitudinal complexity-informed rural community study.

[Paper 6](#) contains suggestions for policy-related research projects which could be usefully undertaken in the near future.

[Paper 7](#) considers ways of approaching a WIDE4 round of research in the existing communities and the possibility of adding some new ones.

Paper 1: WIDE methodology and the Foundations of Knowledge Framework

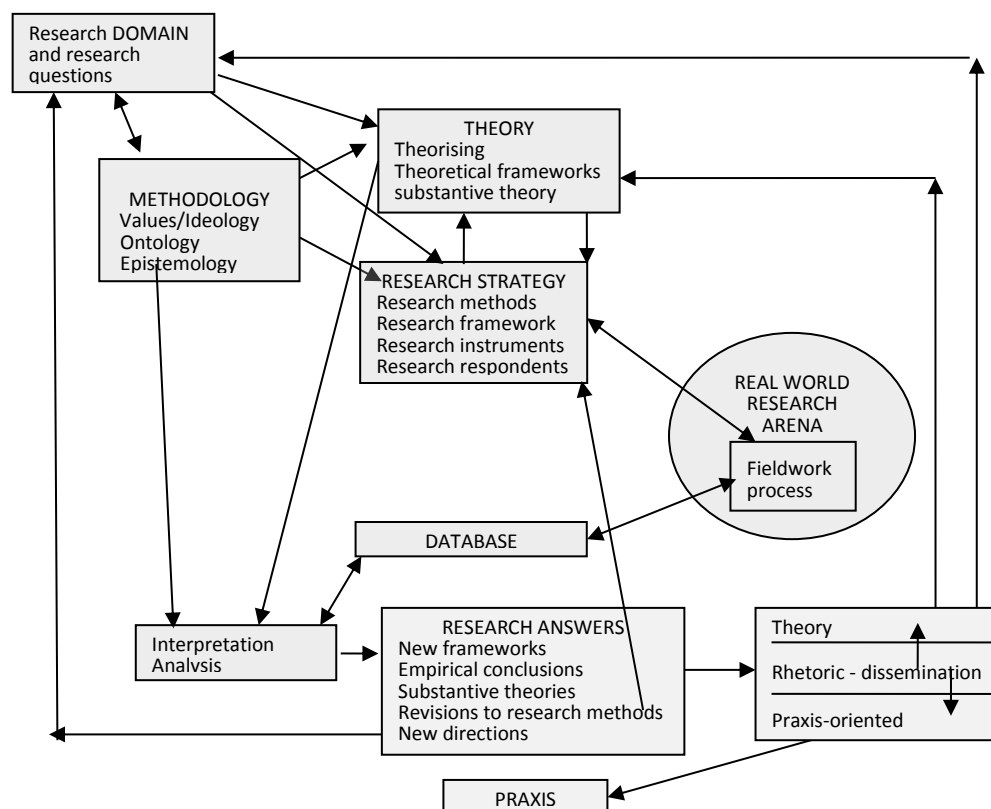
The Foundations of Knowledge Framework

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:

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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) (Bevan, 2009) shows how these different knowledge areas are linked (Figure 1). In the remainder of this paper we very briefly describe the WIDE3 approach to each of these knowledge foundations.

Figure 1: The Foundations of Knowledge Framework



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.

Ontology

The world really is complex

Our complexity social science approach 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.

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

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.

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.

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.

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.

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).

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.

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*.

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, 2009¹) 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.

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.

The complexity social science framework is highly suitable for *praxis*²-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.

¹ 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.

² '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*

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For more on how the Foundations of Knowledge Framework informed the WIDE3 research see the [Methodology Annex](#) to the Stage 3 Final Report.

Paper 2: The WIDE research methodology

The research approach

The WIDE research can be characterised by three main features: 1) a long-term perspective, 2) a focus at the community level and 3) a qualitative data and case-based methodology. The conceptual framework is based on the complexity social science approach described below. To date the research methods have evolved over three phases from 1994 to 2013, notable changes being the involvement of female researchers from WIDE2 in 2003, and a greater focus on the role of development interventions in WIDE3.

Why a long-term perspective on the impacts of development?

There are four reasons why we have taken a long-term perspective on development in Ethiopia, comparing communities in 1995, 2003 and 2010-13. *First*, we have been able to identify and describe substantive and inter-dependent changes in the local economies, politics, societies and cultures of each of these communities. *Second*, by analysing the communities using a complexity system lens, as described below, we have been able to develop ideas about where each of these communities might be heading in the next few years. *Third*, by focusing on the period since 2003, which has seen a considerable increase in government activities and related aid-funding, we have been able to explore the impact on the communities of the combined and interacting contributions of a stream of interventions in the infrastructure, livelihoods, environment, social protection, health, education, governance, justice and social equity sectors, some of which is explored in chapters in this book. *Fourth*, we have also been able to explore the combined impact of these interventions on different kinds of community member distinguished by genderage, wealth, and other locally salient status markers (see Pankhurst and Bevan 2007 and the chapter on inequalities in this book).

Most country-specific assessments of development interventions depend on one of three approaches. The *first* is monitoring and evaluation of individual sector development programmes and projects in relation to goals set at the outset. This can provide a view of the relatively immediate impacts of a particular intervention at a particular time. The *second* involves measuring, and sometimes extrapolating, differences in administrative and survey-generated statistics between different years used as indicators of general economic development and sector progress. Recently there has been growing interest and investment in a *third* approach at project level: the Random Controlled Trial. Here potential beneficiaries are randomly assigned to a 'treatment group' and a 'control group' and quantitative analyses of the outcomes are used to establish the degree of difference made by the intervention. All these approaches have their uses. However, they do not provide information and analysis that is useful for the strategic planning of future interventions in country contexts marked by considerable internal livelihood diversity and rapid change. This is the gap that research like ours is designed to fill.

We have been exploring how, in a variety of places, different kinds of planned intervention have interacted with each other, and with other ongoing events, deep community structures, and wider modernisation processes, such as the spread of modern communications and ideas, the thickening of markets, and the building of the state. Our data have also been used to identify gaps and problems with current interventions, synergies when interventions in different sectors support each other, 'antergies' when one intervention confounds another, and short and longer-term unanticipated consequences of interventions considered individually and as sets. Also, our tracking of the trajectories of the communities into the future is related to an agenda for policy design which takes account of potential change or stasis at community levels during the period when the intervention is in place. With the right information policymakers could intervene to prevent, encourage or compensate for the anticipated changes. Where stasis is predicted the use of the framework can support identification of the factors involved in blocking desirable change.

Why a focus on communities?

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 2013³. The three stages of WIDE provide data on the community structures and histories in 1995 (for fifteen 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.

We adopted a focus on communities for six main reasons. *First*, in the absence of dramatic changes in the wider context, this is the level at which development does, or does not, happen in poor rural societies. *Second*, the policy interface between government and society in rural Ethiopia is found at community level; policies, programmes and projects will only produce development if they lead to changes in local ideas, practices, community institutions and structures. *Third*, communities work as complex open social systems constituted by inter-acting economic, political, social, cultural and human sub-systems. A significant change in any of these sub-systems will cause adaptive change in the others, resulting either in positive feedback effects which reinforce the original change or negative feedback effects, which dampen the momentum of the original change. Such negative feedback mechanisms are key factors in 'poverty traps'. *Fourth*, communities are on individual trajectories and the aim of development interventions is to re-direct them onto developmental paths. *Fifth*, while in recent years development interventions have been aimed at the economic development of households and the human development of individuals, these interventions are all delivered by government structures through the prism of the community, in which different kinds of household and individual evolve in social, economic, cultural and political relationships and interactions with each other, often involving inequality, adverse incorporation and exclusion (see chapter on inequalities).

Finally, Ethiopia's rural livelihood systems, as noted earlier, are quite diverse, even within *weredas*, posing deep problems for the macro-design and implementation of economic policies and programmes appropriate to particular local conditions, especially since there is currently little accessible information about how local livelihood systems and communities work and the relative prevalence of different types. While there are regular criticisms of 'one-size-fits-all' approaches to development interventions, such approaches actually fit well with the current analytical framework used by government and donors. This mostly relies on quantitative data on households and individuals, and seeks to generalise rather than identify the differences which matter. We have not yet seen the development of a rigorous practical methodology for developing a set of 'sizes' to fit the different types of livelihood, *kebele*, and *wereda* which constitute the 'all'. A national research and evaluation focus on communities would allow for the accumulation of knowledge, which could be used to develop and monitor a portfolio of programmes in the different sectors appropriate to the different initial conditions found in differing types of community.

Why qualitative data and a case-based approach?

Improvements in computer capacities and speeds have led to rapidly growing interest in case-based approaches to empirical research, a related useful literature, and software programmes for linking interpretations of qualitative data with analyses of quantitative data.

The complexity social science approach which underpins the WIDE3 programme relies on case-based methods which have been the subject of a Handbook (Byrne and Ragin 2009), which contains

³ In some cases these were not totally coincident with the boundaries of the communities studied in 1995 and/or 2003. In one case, Dinki, the 1995 *kebele* had become a *got* in a much larger *kebele* by 2010.

examples of a range of case-based methods and techniques⁴. Byrne 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 in a practical complexity social science: exploring, classifying, interpreting and ordering.

A possible charge that will be made by those who are not convinced by the conclusions we have drawn from the research is that they are 'anecdotal' because the data lying behind them (1) only refer to twenty sites which are not 'representative' of Ethiopia's rural communities and (2) have been 'collected' through procedures which have not 'controlled for' interviewer bias.

With regard to the first charge we fully accept that these communities are not 'representative' in the way that an appropriately-sized sample selected randomly would be. However, they were chosen by economists designing a conventional random sample household survey⁵ for quantitative analysis as 'exemplars' of different types of rural community, and we have applied some well-accepted case-based methods to the data. Through a process of case analysis and comparison we have provided narratives for each community,⁶ looked for commonalities and differences across the sites in relation to modernisation processes and the impact of interventions on the communities and people within them, and located each of them in the wider Ethiopian context through a process of typologising, which we hope can be expanded.

With regard to the charge of interviewer bias we would argue that empirical data are not 'given' or 'collected'; whether they are based on surveys, interviews, or participant observation they are always made and recorded by people involved in a process of interaction with other people. Furthermore, all data analysis, including the most technical of econometrics, relies on processes of interpretation involving many judgments. During the process of making our data the skilled, experienced and trained fieldworkers had to translate questions and probes in English into the appropriate local language, informants had to interpret and answer the questions in the light of their particular experiences, the fieldworkers had to engage in dialogues with the informants to follow-up on potentially interesting topics, translate the answers into notes and the notes into written narratives. Finally, we, the report writers, had to make some sense of a vast set of narratives coming from the perspectives of a range of different people involved in the development of the community including *wereda* officials, *kebele* officials, elders, militia, women's association leaders, ruling party members, opposition party supporters, farmers and their wives, women heading households, rich, middle wealth, poor and very poor people, health centre employees, extension workers and teachers, old people, young men and women, and children.

Given this complexity, how have we worked to maximise the validity of our conclusions? *First*, our qualitative data were made using protocols which contain instructions about the broad questions to be asked discursively with probes to make sure important aspects are not missed, details of what kinds of people should be asked to respond, and a space for the interviewer to follow-up interesting responses and add observational data and comments. The design is theory-based. Protocols produce narrative data about the case in question. Protocols can be applied in any number of cases and the narrative data can be coded and quantified. Types of respondent appropriate to the question are selected e.g. rich/poor, teacher/student/parent and asking the same questions of people of different types provides multiple perspectives and allows comparative analysis.

⁴ These include 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.

⁵ The Ethiopian Rural Household Survey <https://www.ifpri.org/publication/ethiopian-rural-household-surveys-erhs-1989-2009> accessed 28/09/16

⁶ See twenty Community Reports on the Ethiopia WIDE website <http://ethiopiawide.net/publications> accessed 29/09/16.

Second, we set in place a data interpretation/analysis process where first we built descriptive evidence bases combining answers from all the modules and which referred back to them. These evidence bases were revised after the fieldworkers had read and commented on them and were used in a process involving a first stage of interpretation and abstraction to construct Final Report annexes. Drafts written by each of the report writers were read by the others; when facts or conclusions were challenged the writer had to refer back to the data in the modules and if necessary make changes to the annex

Why a complexity social science methodology?

Using ideas from complexity science and theory our complexity social science approach⁷ pays attention to ontology – what is the world *really* like? and epistemology – how can we know about it? In relation to that part of the world we are looking at here – rural communities and their members – we conceptualise them as complex social and human systems which are *open*, as they depend on and interact with their environments, and *dynamic*, as they co-evolve with the open systems which make them up, constitute their contexts, and overlap with them. Our approach to knowledge is that it too is imbricated in historically changing complex systems, so that what we can know is contingent and provisional, pertaining to a particular context and a certain time-frame. However, this does not mean that ‘anything goes’. We are committed to the institutionalised values and methodological rules of social science which include establishing an Evidence Base to which we can return if questions arise.

From complexity ontology we take a number of key messages. Initial conditions matter and trajectories are path dependent. Systems and their elements have different timeframes and co-evolve. Systems can change rapidly but systems with strong ‘control parameters’⁸ (see below) are resistant to change. Complex social systems have material, technological, social, economic, political and cultural dimensions and are constituted by elements in relationships. Structurally embedded heterogeneous *creative* agents with interests are organised in unequally structured sub-systems. In the development world these sub-systems include households, communities, kingroups, formal and informal enterprises, NGOs, political parties, donors, government, transnational companies etc. System structures involve unequal role, relationship and resource structures and have varying connectivity in different parts of the system. In some parts networks of relationship may be dense, in others there may be structural holes, and some people may be excluded from participation in many areas of the system.

Complexity theory tells us a number of things of relevance about ways to know about complex systems. Research is usually exploratory rather than confirmatory, the aim being to identify common processes and mechanisms rather than ‘laws’ or generalisations. Frameworks and methods depend strongly on the research question. There is continuous interaction and iteration between ideas and the field. Quantitative and qualitative data are seen as different kinds of ‘traces’ of the passage of the communities through time/history. Quantitative data tells you *how much* of the research object of interest there is while qualitative data tells you *what kind* of thing it is. More than one description of a complex system is possible; different descriptions decompose the system in different ways.

Complexity social science is particularly useful for informing policy.⁹ It is essentially a frame of reference for understanding what things are like, how they work, and how they might be made to work better. When complex systems are far from equilibrium and potentially ready to move in a new direction, there is a period of ‘chaos’, where they seem to dither between potential alternative futures or ‘attractor states’ before settling for one. Accumulation of knowledge and understanding

⁷ For more on this see Bevan 2009.

⁸ In the case of rural communities these might include the weather, a well-entrenched culture, and/or a hierarchical unequal power structure.

⁹ See for instance Bevan 2010a.

about transitions in communities that have already made them could be used to design interventions promoting potential good transitions and deterring bad ones.

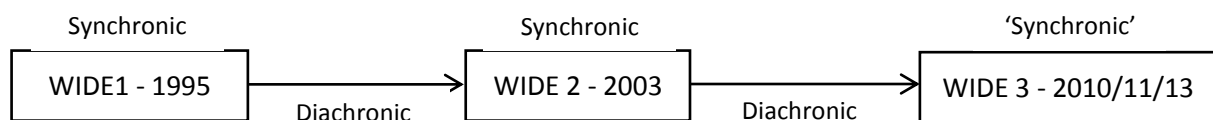
Different types of community are on different development trajectories and what may be a possible development future for one type will not be possible for another type. Typologies and typological theorising can be used to identify ensembles of communities in similar situations and their control parameters and to explore what the more successful are doing that might be copied by the others, which might be something relatively simple.

The research design

The communities

The communities were conceptualised as open and dynamic complex socio-material systems moving through time and co-evolving with other nested, encompassing, and over-lapping complex systems. The longitudinal data on the twenty communities was interpreted and analysed from both *synchronic and diachronic standpoints*.

Figure 2: Synchronic and diachronic approaches to the WIDE data



From a synchronic perspective each research visit to the WIDE communities produced ‘snapshots’ focusing on a short period of time, providing thick descriptions of each of the communities, and the chance to use comparative case-based analyses of the data. From a diachronic perspective the trajectory followed by each community is the result of (1) interactions among a stream of external happenings to which people organised in household sub-systems have constantly to respond and (2) creative activities generated within the community.

Synchronic data interpretation and analysis

To gather information to aid understanding about how a complex system is working it is useful to view it from multiple perspectives (Cilliers, 2005: 257). To explore how the communities were working at the time of the WIDE3 fieldwork we adopted seven perspectives which guided the questions we asked. One looked at the community as a whole, and another at the community in its wider context. The other five ‘de-constructed’ the communities in different ways:

1. The evolving community eco-system: the socio-material system of place and people;
2. Five evolving and inter-penetrating functional sub-systems which are simultaneously domains of power, institutional settings and fields of action – livelihoods, human re/pro/duction, social re/pro/duction, community management, ideas (see Table 1);
3. Different kinds of open and dynamic complex household system following household life cycles;
4. Different kinds of open and dynamic people – genderaged social actors growing older;
5. Different kinds of historically-influenced social interaction among different kinds of social actors.

Table 1: The five domains of power / fields of action / functional sub-systems

<i>Livelihoods</i>	Smallholder agriculture and agricultural employment
	Non-farm business and non-farm employment
	Migration and remittances
<i>Human re/pro/duction</i>	'Producing' people: pregnancy, birth, child-rearing
	'Producing' people: learning, training, formal education
	'Reproducing' (maintaining) people: domestic work, food consumption
	'Reproducing' people: housing, household assets, water, and sanitation
	'Reducing' people: illness, conflict, ageing
<i>Social re/pro/duction</i>	Social networks
	Social institutions: marriage, circumcision, inheritance, land/labour/oxen exchanges
	Social organisations (including households)
<i>Community management</i>	community-initiated structures for decision-making and implementation
	<i>Kebele</i> (community government) structures
	<i>Wereda</i> (district) structures
<i>Ideas</i>	Local customary repertoires
	Local modern repertoires
	In-coming ideologies, religions, cultures and other ideas

The theoretical frameworks related to the five community de-constructions described above were used to design the set of research instruments, the choice of fieldwork respondents, and the analytic matrices for interpreting and analysing the qualitative data to produce structured thick descriptions and case-based comparisons. This work allowed us to (1) identify common mechanisms at work in all the communities; (2) classify the communities into different kinds or types depending on the topic of interest; and (3) pick out the factors underlying the differences among the types. We were also able to consider the ways the communities worked as a whole under the influence of community-specific configurations of internal and external control parameters. The synchronic analysis of the WIDE3 data also produced many policy relevant research outputs.¹⁰

Diachronic data interpretation and analysis

Communities are spatially, economically, politically, culturally and historically located in wider complex systems. The relationships which each community has with these over-lapping and encompassing systems have a bearing on both the substance and the style of what happens. 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.

Social change processes depend on people acting and thinking in new ways; social continuity is found where things go on much as usual. The trajectory followed by each community depends on (1) interactions among a stream of external happenings to which people organised in household sub-systems have constantly to respond and (2) creative activities generated within the community

In the longer-run as time passes in each community a configuration of internal and contextual locally salient inter-acting control parameters guides its trajectory. A significant change in one parameter has potential consequences for others and may set off a chain of knock-on effects. During WIDE3 we identified ten control parameter areas which were important for guiding the trajectories of these rural communities (see Table 2)

¹⁰ See the Ethiopia Wide website <http://ethiopiawide.net/publications/>

Table 2: Parameters guiding rural community trajectories

Control parameter areas		Parameters identified as potentially important for the communities studied
Internal parameters	1. Place	Terrain, settlement, climate, ecology Remoteness - connections with wider world
	2. People	Current human resources/liabilities Aspirations Personal relations
	3. Lives	Human re/pro/duction infrastructures and institutions
	4. Livelihoods	Farming system
		Livelihood diversification
		Economic institutions
	5. Social relations	Community fault-lines Organised collective agency
	6. Cultural ideas	Customary cultural repertoire Modern cultural repertoires
	7. Politics	Political settlement Government-society relations Opposition party organisation
Contextual parameters	8. External aspects of intersecting functional systems	Economic – e.g. international coffee prices
		Lives – e.g. contraceptive provision, food aid systems
		Social – e.g. diasporas
		Cultural imports – e.g. religious, political, modernisation ideologies
		Political – e.g. EPRDF party
	9. Encompassing meso systems	State of meso system: economy, society, culture, politics Government plans for the wider area
	10. Encompassing macro systems	State of country system: economy, society, culture, politics State of Horn of Africa systems State of global systems

The development interventions

Government development interventions are designed to change community control parameters with the aim of triggering a development process within the community. Table 3 links the major interventions with the relevant control parameters.

Table 3: Community control parameters and selected development interventions

Parameter areas	Control parameters	Main development interventions
1. Place system	Terrain, settlement, climate	Watershed management, zero-grazing, tree-planting, land use Irrigation infrastructure, soil interventions
	Connections with wider world	Internal, feeder and external roads Electricity Mobile phones TV & radio infrastructure Small rural town interventions
2. People system	Human resources Aspirations Personal relations	Youth interventions Women interventions Interventions for poor & excluded Child-focused interventions (other than primary education)
3. Lives system	Human re/pro-duction infrastructures and institutions	Safe water Health extension Primary education Pre-school, secondary, post-secondary education; Functional adult literacy Child health, curative services
4. Livelihood system	Farming system	Access to farming land Crop extension Livestock extension & vets
	Livelihood diversification	Migration regulation Non-farm extension

Parameter areas	Control parameters	Main development interventions
	Economic institutions	Credit Taxes & contributions Co-operatives (PCs & SCs)
5. Societal system	Community fault-lines & organised collective agency	Govt engagement with elites, ROs and CIOs Physical security Political security Justice
6. Cultural ideas system	Customary cultural repertoire Modern cultural repertoire	Government 'awaring' and party propaganda Government regulation of other ideas Interventions to reduce 'Harmful Traditional Practices'
7. Political system	Political settlement Government-society relations Opposition party organisations	Kebele and party organisation Elections Accountability measures including reporting upwards Planning for the community
8. External systems overlapping with functional systems	Economic – e.g. international coffee prices	
	Lives – e.g. contraceptive provision, food aid systems	
	Social – e.g. diasporas	
	Cultural imports –e.g. religious, political, modernisation ideologies	
	Political – e.g. EPRDF party	
9. Encompassing meso systems	State of meso system: economy, society, culture, politics Government plans for the wider area	
10. Encompassing macro system	State of country system: economy, society, culture, politics State of Horn of Africa systems State of global systems	

Development interventions were conceptualised as dynamic open complex socio-material systems which are inserted into fluid community systems with the intention of bringing changes to people, institutions and the physical landscape. They combine macro-level design and monitoring and evaluation with an implementation chain which fans out from the Federal Government, through Regional Governments, zones, wereda and kebeles. 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.

This framework focused attention on three research areas for which conceptual frameworks were developed. The first was the development interface where paid government officials, unpaid volunteers in official government positions and different kinds of ordinary community members interact in relation to each intervention. The second framework described the 'web of interventions'; the ways in which at the community level each development intervention system inter-sects and co-evolves with the community system, relevant functional sub-systems, and the other development intervention systems operating in the community. Using the third framework we looked at how interactions among different interventions produced synergies and their opposite, antergies.

The success of an individual intervention depends partly on how well it connects practically with the place, people, and functional sub-systems in the particular community; development interface disconnects may be material, cultural and/or related to time rhythms. Theories of change implicit in an intervention include assumptions about what social actors will do, the institutional contexts, the human, material social and cultural resources available, which mechanisms of change will be effective, and what the outcomes will be. For a number of reasons development interventions are never implemented as planned (Pawson 2013).

The research instruments and fieldwork

The theoretical frameworks for place, people, family, economy, society, culture, polity and development interventions were used to produce a list of modernisation variates which informed the research instruments. These instruments were organised in modules which, in all three stages of

WIDE3, provided wereda and kebele perspectives; community histories since 2003; in-depth household interviews; interviews with young people; and interviews with key informants. Other modules varied across the three stages to fit the sets of communities in each stage. For example, the eight communities studied in Stage 2 were all drought-prone and a PSNP module was developed for those with Productive Safety Net Programmes.

In each community a male and a female research officer conducted separate interviews, many covering the same questions providing gendered perspectives on many topics. Interviewees included rich, middle-wealth and poor men, women and youngsters, government employees working in the *wereda* and *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 various kinds of vulnerable and excluded people.

Case-based interpretation and analysis of the data

In our Stage reports, discussion briefs, policy presentations, and academic publications we have considered a number of different kinds of case including:

- Complex social systems as cases: e.g. communities; households; people; *iddir*; clans
- Domains of power/functional sub-systems as cases: e.g. livelihood systems; cultural repertoires
- Complex social processes as cases: e.g. female circumcision, migration
- Modernisation features as cases: e.g. irrigation, urbanisation
- Development interventions as cases: e.g. internal road programmes, local education interventions

Thick description of individual cases makes them meaningful to outsiders; one of many examples is the twenty long community narratives, another is the household stories in those community reports, and a third the interviews with young people provided in full in the website database.

Comparison of cases involved sorting them into types on the basis of the data about the particular case of interest. This process produced many interesting results about similarities and differences among the communities. A further step was to look for patterned connections with parameters identified as potentially important through theoretical argument, for example community remoteness, livelihood system, religion, etc.

The research findings

Over the three Stages and since their completion in 2013 we have produced research ‘answers’ of a number of different kinds¹¹:

1. Many synchronic and diachronic empirical conclusions – as the Summary Reports and Annexes for each of the three Stages show;
2. Many policy discussion documents and powerpoint presentations;
3. Some new conceptual directions – for example in Stage 2 considering policy-relevant variates such as irrigation and internal roads as cases which can be typed and taking this insight further in Stage 3 and beyond;
4. A number of new theoretical frameworks which can be used by other researchers;
5. Recognition of the importance of durable structures of inequality in these rural communities;

¹¹ These can all be found on the Publications page of the Ethiopia WIDE website <http://ethiopiawide.net/publications/> accessed 28/09/16.

6. The development of substantive theory in relation to community control parameters and future forces for change;
7. Improvements to research methods and fieldwork practice after each Stage.

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Paper 3: Website page - Methodology

The WIDE research approach

Since 1994 the WIDE research approach has been characterised by:

- A long-term perspective
- A focus at community level
- A qualitative and case-based methodology
- A complexity social science approach [read more](#)

Communities

were conceptualised as open and dynamic complex socio-material systems moving through time and co-evolving with other nested, encompassing, and over-lapping complex systems [read more](#)

This complexity social science approach encouraged attention to:

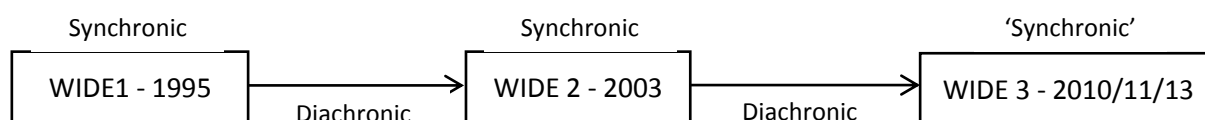
- what the communities were like and how they worked in 1994/5, 2003, and 2010/13
- change and continuity in the trajectories of each community in the period 1995-2010/13
- the potential different trajectories of the communities into the future

Complexity approach – seven perspectives on the evolving communities

Complex systems can be described from multiple perspectives; we used seven to guide the questions that we asked. One looked at the community as a whole, and another at the community in its wider context. The other five ‘de-constructed’ the communities in different ways:

- The evolving community eco-system: the socio-material system of place and people - [read more](#)
- Five evolving and inter-penetrating functional sub-systems which are simultaneously domains of power, institutional settings and fields of action – family, society, economy, culture, politics - [read more](#)
- Different kinds of open and dynamic complex household system following household life cycles- [read more](#)
- Different kinds of open and dynamic people – gendered biologically-constituted social actors growing older – [read more](#)
- Different kinds of social interaction in the context of durable structures of inequality – [read more](#)

Complex systems evolve through time and their past is co-responsible for their current state; in interpreting and analysing the longitudinal data we used synchronic and diachronic perspectives



The synchronic approach to communities

- Theoretical frameworks arising from the seven perspectives were used to design the set of research instruments, the choice of fieldwork respondents, and the analytic frameworks for interpreting and analysing the qualitative data.
- Each research visit to the WIDE communities produced ‘snapshots’ focusing on a short period of time, providing *thick descriptions* of each of the communities, and the chance to use *comparative case-based analyses* of the data
- In comparative analyses we have explored similarities and differences in a range of community features, allowing us to (1) identify common mechanisms at work in all the communities; (2) classify the communities into different kinds or types depending on the topic of interest; and (3)

- pick out the factors underlying the differences among the types.
- The data were also used to consider the way the communities worked as a whole under the influence of community-specific configurations of internal and external control parameters *see below*
- The synchronic analysis of the WIDE3 data has also produced many [policy relevant research outputs](#)

The diachronic approach to communities

- Communities are spatially, economically, politically, culturally and historically located in wider complex systems. Community trajectories can change direction as a result of internally-initiated changes, linked internal and contextual changes, or big changes in context.
- 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. Different parameters are dominant in different kinds of communities and can change through time. A significant change in one parameter is likely to lead to adaptation in others.
- We identified ten control parameter areas as important for guiding the trajectories of these rural communities and used the framework with the WIDE data to assess the trajectories of each of the communities [read more](#)
- We have also used the framework to draw some conclusions about how significant rural social change happens [read more](#)
- In addition to supporting conclusions about community trajectories the data from the three fieldwork rounds has been used to explore many aspects of community change and continuity between 1995 and 2010/13
- For example, changes in the family, society, economy, culture and politics; changes in people's ideas and practices; changes in control parameters guiding the path of the communities in 1995, 2003, and 2010/13; changes in development interventions... [see the twenty Final Reports for more](#)

Development interventions

were conceptualised as dynamic open complex socio-material systems which are inserted into fluid community systems with the intention of bringing changes to people, institutions and the physical landscape.

In 2013 we identified 103 different interventions potentially entering the WIDE3 communities [see list](#)

They combine macro-level design and monitoring and evaluation with an implementation chain which fans out from the Federal Government, through Regional Governments, zones, wereda and kebeles.

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.

The complexity social science approach to development interventions encouraged attention to:

- how the purpose of interventions is to change community control parameters
- the development interface where paid government officials, unpaid volunteers in official government positions, and different kinds of ordinary community members interact in relation to each intervention
- the ways in which at the community level each development intervention system inter-sects and co-evolves with the community system, relevant functional sub-systems, and the other development intervention systems operating in the community.

- how interactions among different interventions can involve synergies and antergies
- how the success of an individual intervention depends partly on how well it connects with the place, people, and functional sub-systems in the particular community; development interface disconnects may be material, cultural and/or related to time rhythms
- how theories of change implicit in an intervention include assumptions about: what social actors will do; institutional contexts; the human, material social and cultural resources available; which mechanisms of change will be effective; what the outcomes will be
- why development interventions are never implemented as planned

[Read more](#)

Research instruments and fieldwork

- The theoretical frameworks for place, people, family, economy, society, culture, polity were used to produce a list of modernisation variates which were the focus of the research instruments [read more](#)
- The instruments were organised in modules which in all three stages of WIDE3 provided wereda and kebele perspectives; community histories since 2003; in-depth household interviews; interviews with young people; and interviews with key informants. Other modules varied across the three stages *the modules will be available in due course*
- In each community trained male and female social scientists conducted separate interviews, many providing different perspectives on the same questions. Interviewees included rich, middle-wealth and poor men, women and youngsters, government employees working in the *wereda* and *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 various kinds of vulnerable and excluded people.

Case-based interpretation and analysis of the data

Examples of different kinds of case include:

- Complex social systems as cases: e.g. communities; households; people; *iddir*; clans
- Domains of power/functional sub-systems as cases: e.g. livelihood systems; cultural repertoires; community management systems
- Complex social processes as cases: e.g. female circumcision; migration;
- Modernisation features as cases: e.g. irrigation; urbanisation
- Development interventions as cases: e.g. internal road programmes; local education interventions

The interpretation and analysis process began with the writing of individual book-length community case studies [Click here for the community reports](#)

Comparison of community and other types of cases involved sorting them into types on the basis of the data about the case of interest. This process produced many interesting results about similarities and differences among the communities and the factors lying behind them.

A further step was to look for patterned connections with parameters identified as potentially important through theoretical argument, for example community remoteness, livelihood system, religion, household poverty etc.

Research answers

Over the three Stages these have included:

1. Many empirical conclusions – as the Summary Reports for Stages 1 [link](#), 2 [link](#) and 3 [link](#) show
2. Many policy discussion documents and powerpoint presentations [link](#)

3. New theoretical frameworks *see the [Methodology Annexes in the three Final Reports](#)*
4. Some new conceptual directions – for example in Stage 2 considering policy-relevant variates such as irrigation and internal roads as cases which can be typed and taking this insight further in Stage 3
5. Recognition of the importance of durable structures of inequality in these rural communities
6. The development of substantive theory in relation to rural social change *see above*
7. Improvements to research methods and fieldwork practice after each Stage
8. New research questions

WIDE-related methodology publications

Stage 3 Final report Annex on Methodology April 2014
 Stage 3 Inception Methodology paper April 2013
 Stage 2 Final report Annex on Methodology February 2013
 Stage 2 Inception Methodology paper January 2012
 Stage 1 Final report Annex on Methodology August 2010
 Stage 1 Inception Methodology paper December 2009

Bevan, P. 2014 '[Researching Social Change and Continuity](#): a Complexity-Informed Study of Twenty Rural Community Cases in Ethiopia 1994-2015', in (ed) L. Camfield, *Methodological Challenges and New Approaches to Research in International Development*, London: Palgrave.

Bevan, P. 2014 Powerpoint presentation '[Change and continuity in rural Ethiopia 1994](#) (and before) to 2013 (and beyond): a longitudinal study of twenty communities using complexity methods' ESRC Seminar Series: Complexity and Method in the Social Sciences.

Guide to using the WIDE data

Download here

Guide for implementing a similar longitudinal complexity community study

Download here

The 'read mores'

The WIDE research approach

The WIDE research can be characterised by three main features: 1) a long-term perspective, 2) a focus at the community level and 3) a qualitative data and case-based methodology. The conceptual framework is based on the complexity social science approach described below. To date the research methods have evolved over three phases from 1994 to 2013, notable changes being the involvement of female researchers from WIDE2 in 2003, and a greater focus on the role of development interventions in WIDE3.

Why a long-term perspective on the impacts of development?

There are four reasons why we have taken a long-term perspective on development in Ethiopia, comparing communities in 1995, 2003 and 2010-13. *First*, we have been able to identify and describe substantive and inter-dependent changes in the local economies, politics, societies and cultures of each of these communities. *Second*, by analysing the communities using a complexity system lens, as described below, we have been able to develop ideas about where each of these communities might be heading in the next few years. *Third*, by focusing on the period since 2003, which has seen a considerable increase in government activities and related aid-funding, we have been able to explore the impact on the communities of the combined and interacting contributions of a stream of interventions in the infrastructure, livelihoods, environment, social protection, health, education, governance, justice and social equity sectors, some of which is explored in chapters in this book. *Fourth*, we have also been able to explore the combined impact of these interventions on

different kinds of community member distinguished by genderage, wealth, and other locally salient status markers (see Pankhurst and Bevan 2007 and the chapter on inequalities in this book).

Most country-specific assessments of development interventions depend on one of three approaches. The *first* is monitoring and evaluation of individual sector development programmes and projects in relation to goals set at the outset. This can provide a view of the relatively immediate impacts of a particular intervention at a particular time. The *second* involves measuring, and sometimes extrapolating, differences in administrative and survey-generated statistics between different years used as indicators of general economic development and sector progress. Recently there has been growing interest and investment in a *third* approach at project level: the Random Controlled Trial. Here potential beneficiaries are randomly assigned to a 'treatment group' and a 'control group' and quantitative analyses of the outcomes are used to establish the degree of difference made by the intervention. All these approaches have their uses. However, they do not provide information and analysis that is useful for the strategic planning of future interventions in country contexts marked by considerable internal livelihood diversity and rapid change. This is the gap that research like ours is designed to fill.

We have been exploring how, in a variety of places, different kinds of planned intervention have interacted with each other, and with other ongoing events, deep community structures, and wider modernisation processes, such as the spread of modern communications and ideas, the thickening of markets, and the building of the state. Our data have also been used to identify gaps and problems with current interventions, synergies when interventions in different sectors support each other, 'antergies' when one intervention confounds another, and short and longer-term unanticipated consequences of interventions considered individually and as sets. Also, our tracking of the trajectories of the communities into the future is related to an agenda for policy design which takes account of potential change or stasis at community levels during the period when the intervention is in place. With the right information policymakers could intervene to prevent, encourage or compensate for the anticipated changes. Where stasis is predicted the use of the framework can support identification of the factors involved in blocking desirable change.

Why a focus on communities?

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 2013¹². The three stages of WIDE provide data on the community structures and histories in 1995 (for fifteen 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.

We adopted a focus on communities for six main reasons. *First*, in the absence of dramatic changes in the wider context, this is the level at which development does, or does not, happen in poor rural societies. *Second*, the policy interface between government and society in rural Ethiopia is found at community level; policies, programmes and projects will only produce development if they lead to changes in local ideas, practices, community institutions and structures. *Third*, communities work as complex open social systems constituted by inter-acting economic, political, social, cultural and human sub-systems. A significant change in any of these sub-systems will cause adaptive change in the others, resulting either in positive feedback effects which reinforce the original change or negative feedback effects, which dampen the momentum of the original change. Such negative

¹² In some cases these were not totally coincident with the boundaries of the communities studied in 1995 and/or 2003. In one case, Dinki, the 1995 *kebele* had become a *got* in a much larger *kebele* by 2010.

feedback mechanisms are key factors in 'poverty traps'. *Fourth*, communities are on individual trajectories and the aim of development interventions is to re-direct them onto developmental paths. *Fifth*, while in recent years development interventions have been aimed at the economic development of households and the human development of individuals, these interventions are all delivered by government structures through the prism of the community, in which different kinds of household and individual evolve in social, economic, cultural and political relationships and interactions with each other, often involving inequality, adverse incorporation and exclusion (see chapter on inequalities).

Finally, Ethiopia's rural livelihood systems, as noted earlier, are quite diverse, even within *weredas*, posing deep problems for the macro-design and implementation of economic policies and programmes appropriate to particular local conditions, especially since there is currently little accessible information about how local livelihood systems and communities work and the relative prevalence of different types. While there are regular criticisms of 'one-size-fits-all' approaches to development interventions, such approaches actually fit well with the current analytical framework used by government and donors. This mostly relies on quantitative data on households and individuals, and seeks to generalise rather than identify the differences which matter. We have not yet seen the development of a rigorous practical methodology for developing a set of 'sizes' to fit the different types of livelihood, *kebele*, and *wereda* which constitute the 'all'. A national research and evaluation focus on communities would allow for the accumulation of knowledge, which could be used to develop and monitor a portfolio of programmes in the different sectors appropriate to the different initial conditions found in differing types of community.

Why qualitative data and a case-based approach?

Improvements in computer capacities and speeds have led to rapidly growing interest in case-based approaches to empirical research, a related useful literature, and software programmes for linking interpretations of qualitative data with analyses of quantitative data.

The complexity social science approach which underpins the WIDE3 programme relies on case-based methods which have been the subject of a Handbook (Byrne and Ragin 2009), which contains examples of a range of case-based methods and techniques¹³. Byrne 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 in a practical complexity social science: exploring, classifying, interpreting and ordering.

A possible charge that will be made by those who are not convinced by the conclusions we have drawn from the research is that they are 'anecdotal' because the data lying behind them (1) only refer to twenty sites which are not 'representative' of Ethiopia's rural communities and (2) have been 'collected' through procedures which have not 'controlled for' interviewer bias.

With regard to the first charge we fully accept that these communities are not 'representative' in the way that an appropriately-sized sample selected randomly would be. However, they were chosen by economists designing a conventional random sample household survey¹⁴ for quantitative analysis as 'exemplars' of different types of rural community, and we have applied some well-accepted case-based methods to the data. Through a process of case analysis and comparison we have provided

¹³ These include 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.

¹⁴ The Ethiopian Rural Household Survey <https://www.ifpri.org/publication/ethiopian-rural-household-surveys-erhs-1989-2009> accessed 28/09/16

narratives for each community,¹⁵ looked for commonalities and differences across the sites in relation to modernisation processes and the impact of interventions on the communities and people within them, and located each of them in the wider Ethiopian context through a process of typologising, which we hope can be expanded.

With regard to the charge of interviewer bias we would argue that empirical data are not 'given' or 'collected'; whether they are based on surveys, interviews, or participant observation they are always made and recorded by people involved in a process of interaction with other people. Furthermore, all data analysis, including the most technical of econometrics, relies on processes of interpretation involving many judgments. During the process of making our data the skilled, experienced and trained fieldworkers had to translate questions and probes in English into the appropriate local language, informants had to interpret and answer the questions in the light of their particular experiences, the fieldworkers had to engage in dialogues with the informants to follow-up on potentially interesting topics, translate the answers into notes and the notes into written narratives. Finally, we, the report writers, had to make some sense of a vast set of narratives coming from the perspectives of a range of different people involved in the development of the community including *wereda* officials, *kebele* officials, elders, militia, women's association leaders, ruling party members, opposition party supporters, farmers and their wives, women heading households, rich, middle wealth, poor and very poor people, health centre employees, extension workers and teachers, old people, young men and women, and children.

Given this complexity, how have we worked to maximise the validity of our conclusions? *First*, our qualitative data were made using protocols which contain instructions about the broad questions to be asked discursively with probes to make sure important aspects are not missed, details of what kinds of people should be asked to respond, and a space for the interviewer to follow-up interesting responses and add observational data and comments. The design is theory-based. Protocols produce narrative data about the case in question. Protocols can be applied in any number of cases and the narrative data can be coded and quantified. Types of respondent appropriate to the question are selected e.g. rich/poor, teacher/student/parent and asking the same questions of people of different types provides multiple perspectives and allows comparative analysis.

Second, we set in place a data interpretation/analysis process where first we built descriptive evidence bases combining answers from all the modules and which referred back to them. These evidence bases were revised after the fieldworkers had read and commented on them and were used in a process involving a first stage of interpretation and abstraction to construct Final Report annexes. Drafts written by each of the report writers were read by the others; when facts or conclusions were challenged the writer had to refer back to the data in the modules and if necessary make changes to the annex

Why a complexity social science methodology?

Using ideas from complexity science and theory our complexity social science approach¹⁶ pays attention to ontology – what is the world *really* like? and epistemology – how can we know about it? In relation to that part of the world we are looking at here – rural communities and their members – we conceptualise them as complex social and human systems which are *open*, as they depend on and interact with their environments, and *dynamic*, as they co-evolve with the open systems which make them up, constitute their contexts, and overlap with them. Our approach to knowledge is that it too is imbricated in historically changing complex systems, so that what we can know is contingent and provisional, pertaining to a particular context and a certain time-frame. However, this does not mean that 'anything goes'. We are committed to the institutionalised values and methodological

¹⁵ See twenty Community Reports on the Ethiopia WIDE website <http://ethiopiawide.net/publications> accessed 29/09/16.

¹⁶ For more on this see Bevan 2009.

rules of social science which include establishing an Evidence Base to which we can return if questions arise.

From complexity ontology we take a number of key messages. Initial conditions matter and trajectories are path dependent. Systems and their elements have different timeframes and co-evolve. Systems can change rapidly but systems with strong 'control parameters'¹⁷ (see below) are resistant to change. Complex social systems have material, technological, social, economic, political and cultural dimensions and are constituted by elements in relationships. Structurally embedded heterogeneous *creative* agents with interests are organised in unequally structured sub-systems. In the development world these sub-systems include households, communities, kingroups, formal and informal enterprises, NGOs, political parties, donors, government, transnational companies etc. System structures involve unequal role, relationship and resource structures and have varying connectivity in different parts of the system. In some parts networks of relationship may be dense, in others there may be structural holes, and some people may be excluded from participation in many areas of the system.

Complexity theory tells us a number of things of relevance about ways to know about complex systems. Research is usually exploratory rather than confirmatory, the aim being to identify common processes and mechanisms rather than 'laws' or generalisations. Frameworks and methods depend strongly on the research question. There is continuous interaction and iteration between ideas and the field. Quantitative and qualitative data are seen as different kinds of 'traces' of the passage of the communities through time/history. Quantitative data tells you *how much* of the research object of interest there is while qualitative data tells you *what kind* of thing it is. More than one description of a complex system is possible; different descriptions decompose the system in different ways.

Complexity social science is particularly useful for informing policy.¹⁸ It is essentially a frame of reference for understanding what things are like, how they work, and how they might be made to work better. When complex systems are far from equilibrium and potentially ready to move in a new direction, there is a period of 'chaos', where they seem to dither between potential alternative futures or 'attractor states' before settling for one. Accumulation of knowledge and understanding about transitions in communities that have already made them could be used to design interventions promoting potential good transitions and deterring bad ones.

Different types of community are on different development trajectories and what may be a possible development future for one type will not be possible for another type. Typologies and typological theorising can be used to identify ensembles of communities in similar situations and their control parameters and to explore what the more successful are doing that might be copied by the others, which might be something relatively simple.

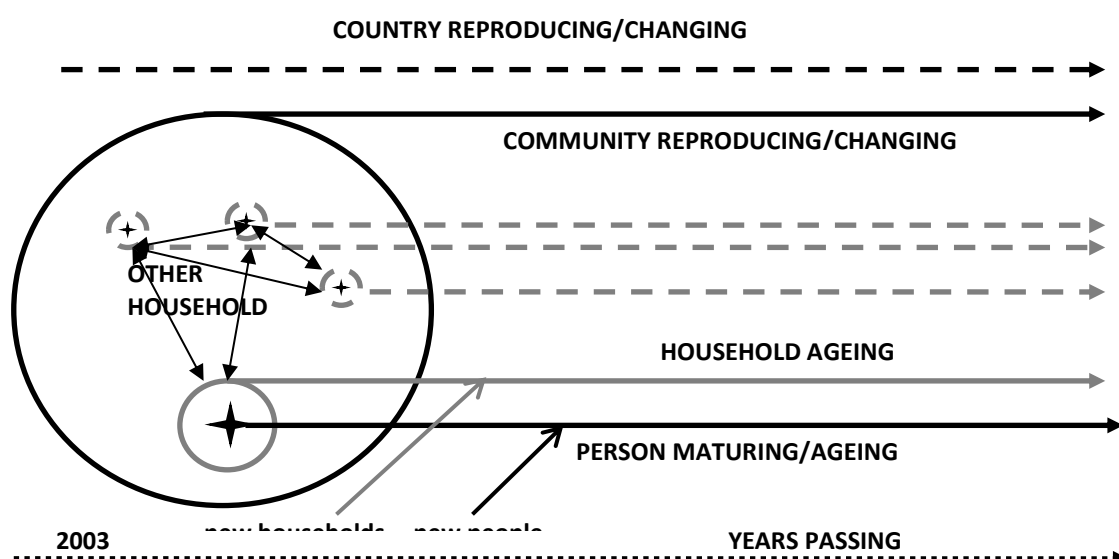
Communities co-evolving

Figure 1 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.

¹⁷ In the case of rural communities these might include the weather, a well-entrenched culture, and/or a hierarchical unequal power structure.

¹⁸ See for instance Bevan 2010a.

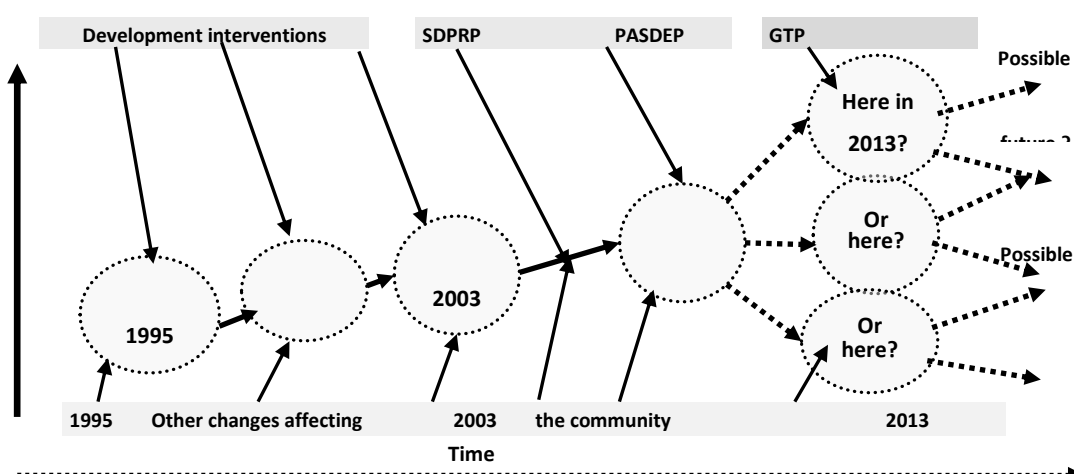
Figure 3: Co-evolution of communities, country, households and people



The core analytic framework which lies at the heart of WIDE3 data-making and interpretatio-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.

The framework in Figure 2 shows how development interventions related to government strategy plans (the SDPRP, the PASDEP and the GTP¹⁹) and wider changes in context have interacted with ongoing community processes since 1995.

Figure 4: Community trajectories



¹⁹ The first government plan, the Sustainable Development and Poverty Reduction Programme 2003-5, was followed by the Plan for Accelerated and Sustained Development to End Poverty 2005-10 and the Growth and Transformation Plan 2010-15.

The material 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 domains of power

Community members are active in five institutional settings or functional sub-systems. Through them community members act to perform the different functions required for the community system to remain in business. The sub-systems structure and guide activities in the fields of livelihoods, human re/pro/duction, social re/pro/duction, community management, and ideas (see Table 4).

Table 4: The five domains of power / fields of action / functional sub-systems

<i>Livelihoods</i>	Smallholder agriculture and agricultural employment
	Non-farm business and non-farm employment
	Migration and remittances
<i>Human re/pro/duction</i>	'Producing' people: pregnancy, birth, child-rearing
	'Producing' people: learning, training, formal education
	'Reproducing' (maintaining) people: domestic work, food consumption
	'Reproducing' people: housing, household assets, water, and sanitation
	'Reducing' people: illness, conflict, ageing
<i>Social re/pro/duction</i>	Social networks
	Social institutions: marriage, circumcision, inheritance, land/labour/oxen exchanges
	Social organisations (including households)
<i>Community management</i>	Community-initiated structures for decision-making and implementation
	<i>Kebele</i> (community government) structures
	<i>Wereda</i> (district) structures
<i>Ideas</i>	Local customary repertoires
	Local modern repertoires
	In-coming ideologies, religions, cultures and other ideas

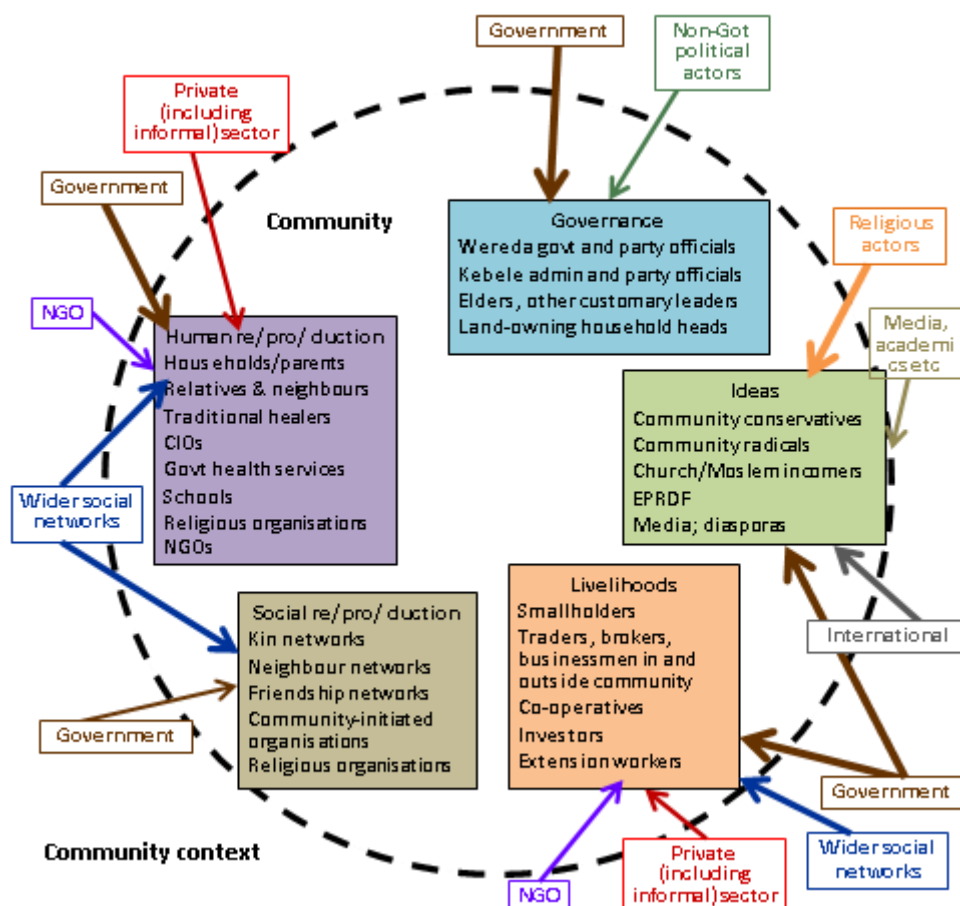
From one perspective these five functional sub-systems are *fields of action* in which different kinds of community member are active in different ways. In these communities most farmers are adult men; the most-important human re/producers (baby-makers, small-child-rearers, and people-maintainers) are 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 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 genderage and resources and opportunities are not equally distributed among family members. Social 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.

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 (Figure 1).

Figure 5: The five functional sub-systems / domains of power / fields of action



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 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 *social re/pro/duction* system is where people invest in their social relationships creating, reproducing, adapting and sometimes destroying organisations, networks and institutions 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 in the *community management* field people work 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.

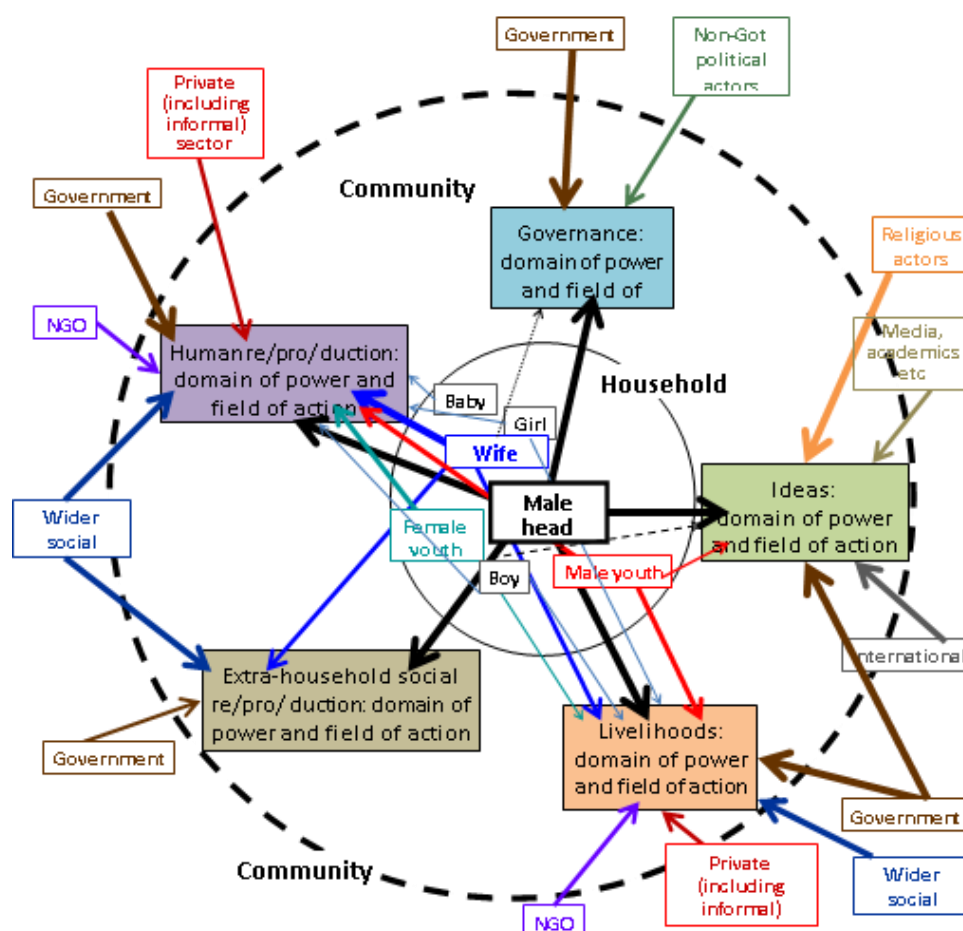
The functional sub-systems overlap and inter-penetrate synchronically as a result of two mechanisms. *First*, a *real action* never takes place in only one of the fields. For example, a man ploughing in a livelihood role is also playing a societal role as for example smallholder, share-cropper, ox-sharer. 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.

Household systems

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 different roles in 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 pass through the household cycle and evolve. Household survey research undertaken in four WIDE sites during the WeD programme in the mid-2000s showed similarities in household structure patterns across the sites, and that, on average, only 62% of households were on the culturally-ideal track. This was defined as a progression from young couple, through young nuclear family, mature nuclear family, in some cultures polygynous families, emptying nest, old couple, male-headed 3-generations, and nuclear family with old parent (Pankhurst and Bevan 2007). The remaining 38% included female-headed households, sibling households, men and women living alone, and some more unorthodox combinations of people.

Households 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 1 shows the different participation of household members in the different functional domains.

Figure 6: Participation in the different fields of action by different kind of household member



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.

Pankhurst, A. and P. Bevan 2007 'Unequal Structures, Unbuffered Shocks, and Undesirable Strategies' Paper for World Bank Social Protection Department [accessed 29/09/16.](#)

Different kinds of people

Each person is a biologically-constituted social actor with a genderage, class/wealth position, ethnicity, religion, maybe other community-relevant social statuses, a personality, accumulated human resources and liabilities, and a personal history. Men and women, youth and children 'co-evolving' with other people, their households and their communities are affected by what happens to each. Individual consequences depend on community trajectory, household trajectory, social networks, 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.

Social interactions in the context of durable structures of inequality

The structures of interest here included class, status and power structures and elite formation. How is the community structured in terms of class, wealth/poverty, and income? What kinds of community elites exist and how integrated are they? Who is most powerful? What forms do genderage inequalities and relations take? In what ways are adult and youth gender relations changing? What is the state of gendered inter-generational relations? What other community-specific status markers structure inequality?

Control parameters

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 process²⁰. 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 5 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 5: Parameters guiding rural community trajectories

Control parameter areas		Parameters identified as potentially important for the communities studied
Internal parameters	1. Place	Terrain, settlement, climate, ecology Remoteness - connections with wider world
	2. People	Current human resources/liabilities Aspirations Personal relations
	3. Lives	Human re/pro/duction institutions
	4. Livelihoods	Farming system
		Livelihood diversification Economic institutions
	5. Social relations	Community fault-lines Organised collective agency
	6. Cultural ideas	Customary cultural repertoire Modern cultural repertoires
Contextual parameters	7. Politics	Political settlement Government-society relations Opposition party organisation
	8. External aspects of intersecting functional systems	Economic – e.g. international coffee prices
		Lives – e.g. contraceptive provision, food aid systems
		Social – e.g. diasporas
		Cultural imports –e.g. religious, political, modernisation ideologies Political – e.g. EPRDF party

²⁰ In times of rapid change configurations can change rapidly.

Control parameter areas		Parameters identified as potentially important for the communities studied
	9. Encompassing meso systems	State of meso system: economy, society, culture, politics Government plans for the wider area
	10. Encompassing macro systems	State of country system: economy, society, culture, politics State of Horn of Africa systems State of global systems

In different types of community actual manifestations of these abstractly-described control parameters take different forms. Also in different types of system, or at different times in the life of one system, a 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.

How significant rural 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 internal or nearby material system processes: volcanos and earthquakes, unusual weather, people and livestock epidemics, new roads, urbanisation 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 or externally.

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 identify important causes of significant changes.

There are five 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 allowed us to identify forces for change and continuity, including development interventions, in the Stage 3 communities and this analysis could 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
11. Place	Terrain, settlement, climate, ecology	
	Connections with wider world	
12. People	Current human resources, aspirations, personal relationships	
13. Lives	Human re/pro/duction infrastructures & institutions	
14. Livelihoods	Farming system	
	Livelihood diversification	
	Economic institutions	
15. Social relations	Community fault-lines	
	Organised collective agency	
16. Cultural ideas	Customary cultural repertoire	
	Modern cultural repertoires	
17. Politics	Political settlement	
	Government-society relations	
	Opposition party organisation	
18. External aspects of intersecting	Economic – e.g. international coffee prices	
	Lives – e.g. contraceptive provision, food aid systems	
	Social – e.g. diasporas	

Control parameter areas	Potential parameters identified as important for the communities studied	Forces for continuity/change to control parameters in each community 1991-2013
functional systems	Cultural imports –e.g. religious, political, modernisation ideologies	
	Political – e.g. EPRDF party	
19. Encompassing meso systems	State of meso system: economy, society, culture, politics	
20. Encompassing macro systems	State of country system: economy, society, culture, politics	

List of potential interventions in 2013

Table 7: 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)
Interventions to improve young men's lives	15. HIV/AIDS clubs; youth clubs,
	16. Boys school clubs
Interventions to improve young women's lives	17. Male sports opportunities
	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;
Interventions to improve adult women's lives	22. Female sports opportunities
	23. Interventions related to marriage age, choice etc
	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
	66. Disease prevention & control: malaria, TB, HIV/AIDS etc
Curative health services	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>
	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
Community contributions	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
Accountability	84. Elections: organising elections; mobilising community members to register and vote; warning off Opposition parties
	85. Accountability: targets, reporting, <i>qimqema</i>
Community planning	86. Planning for the community: wereda-kebele interactions; wereda-community interactions; kebele-community interactions
Army recruitment	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

Development intervention frameworks

We developed four frameworks to help us think about development interventions:

- How they were designed to change community control parameters, some of which would be easier to change than others;
- A framework for assessing the appropriateness of federal-level intervention designs;
- A framework for establishing the theory of change implicit in an intervention design;
- A framework for understanding why development interventions are never implemented as planned

Development interventions and control parameters

Government development interventions are designed to change community control parameters with the aim of triggering a development process within the community. Table 8 links the major interventions with the relevant control parameters.

Table 8: Community control parameters and selected development interventions

Parameter areas	Control parameters	Main community development interventions
21. Place	Terrain, settlement, climate, ecology	Watershed management, zero-grazing, tree-planting, land use Irrigation infrastructure, soil interventions

Parameter areas	Control parameters	Main community development interventions
	Connections with wider world	Internal, feeder and external roads Electricity Mobile phones TV & radio infrastructure Small rural town interventions
22. People	Human resources/liabilities Aspirations Personal relations	Youth interventions Women interventions Interventions for poor & excluded Child-focused interventions (other than primary education)
23. Lives	Human re/pro-duction infrastructures and institutions	Safe water Health extension Primary education Pre-school, secondary, post-secondary education; Functional adult literacy Child health, curative services
24. Livelihoods	Farming system	Crop extension Access to farming land Livestock extension & vets
	Livelihood diversification	Migration regulation Non-farm extension
	Economic institutions	Credit Taxes & contributions Co-operatives (PCs & SCs)
25. Social relations	Community fault-lines Organised collective agency	Govt engagement with elites, ROs and CIOs Physical security Political security Justice
26. Cultural ideas	Customary cultural repertoire Modern cultural repertoire	Government 'awaring' and party propaganda Government regulation of other ideas Interventions to reduce 'Harmful Traditional Practices'
27. Politics	Political settlement Government-society relations Opposition party organisation	Kebele and party organisation Elections Accountability measures including reporting upwards Planning for the community
28. External aspects of intersecting functional systems	Economic – e.g. international coffee prices	
	Lives – e.g. contraceptive provision, food aid systems	
	Social – e.g. diasporas	
	Cultural imports –e.g. religious, political, modernisation ideologies	
	Political – e.g. EPRDF party	
29. Encompassing meso systems	State of meso system: economy, society, culture, politics Government plans for the wider area	
30. Encompassing macro systems	State of country system: economy, society, culture, politics State of Horn of Africa systems State of global systems	

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 live and work. Their success partly depends on how well they connect with the place, people, and functional sub-systems in the particular community. In the Stage 3 research for each intervention we asked how appropriate the design was for the different types of community. We focused on material (dis)connects, timing (dis)connects and cultural (dis)connects in government and community aims and assumptions related to the field in which the interventions were 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 Cultural disconnects between top-down and local cultural repertoires

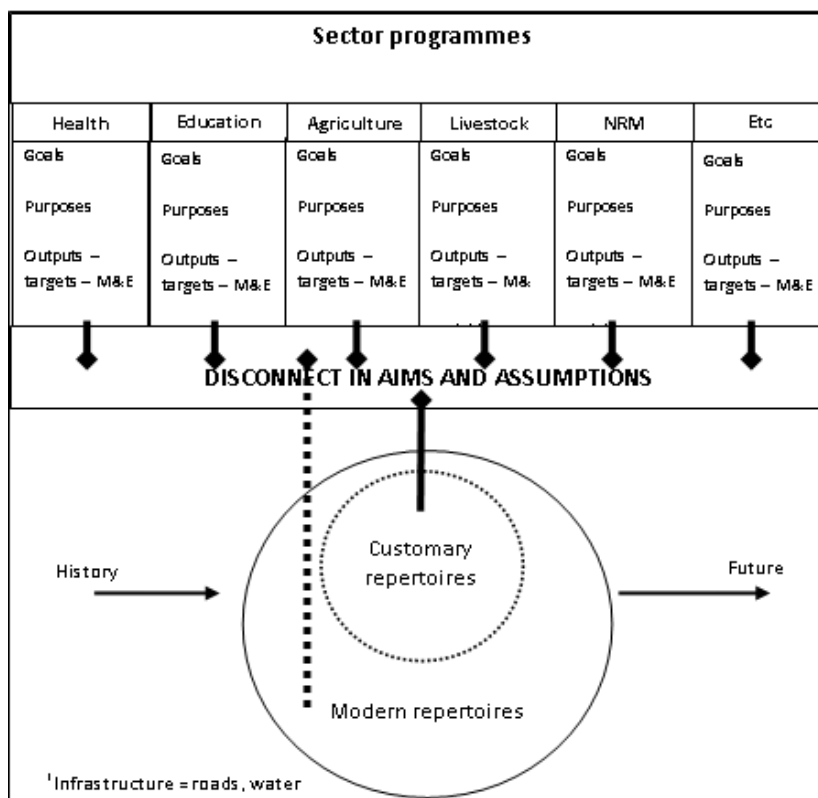


Figure 7 depicts potential cultural (dis)connects between the aims and assumptions implicit in the mental models (ideas) and institutional designs (norms and rules) associated with top-down sector policies and programmes and local beliefs, values, norms and ways of doing things which we are calling cultural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

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 (CMO framework²¹). The same framework can be used to explore what actually happened when the intervention was implemented (see below).

Social construction in the design

We considered the theoretical social construction in the design of the development intervention under three headings:

²¹ Pawson, R. and N. Tilley, 1997, *Realistic Evaluation*, London: Sage.

- *Social actors*: identify the social actors given roles and how they were meant to behave and relate
- *Institutional location*: describe the planned intervention system, rules, and routines
- *Resourcing*: what material and human resources for implementing the intervention are assumed to be available?

Mechanisms of change in the design

What change mechanisms are built into the intervention design? 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 in the design

What were the planned outcomes for people, institutions, and the community place?

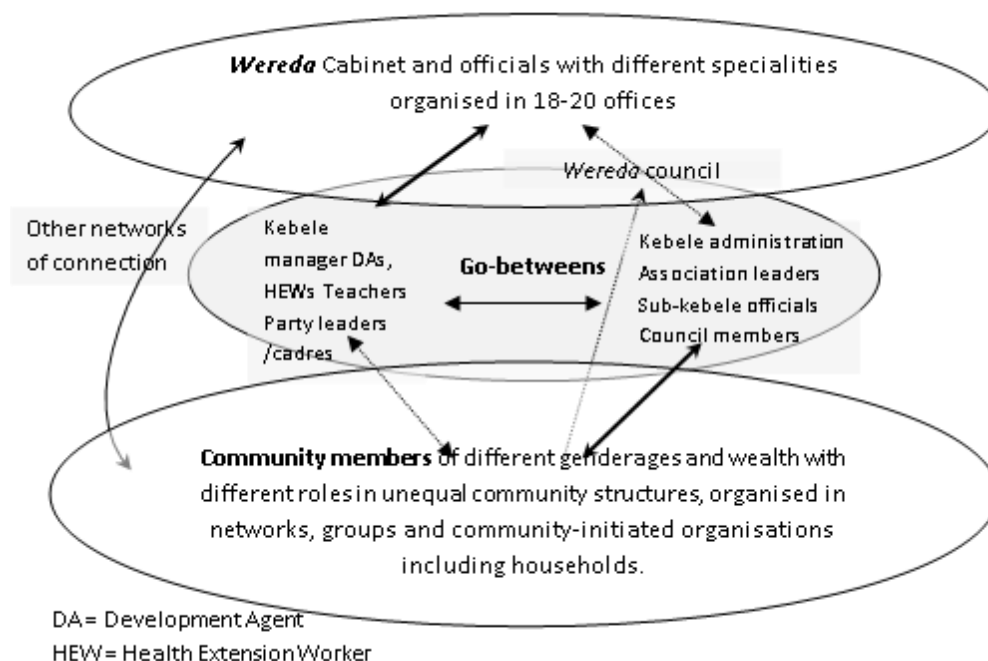
Intervention implementation never goes to plan

For a number of reasons development interventions are never implemented as planned. The reasons 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 at 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.

Figure 8: Social interactions in the development interface



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)electd 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 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 in practice

In practice 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)electd '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.

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) the actual institutional location which includes systems, rules, divisions of labour and routines and (2) the infrastructure and resources for implementing the intervention.

Mechanisms in practice

Development interventions rely on one or a mix of the social mechanisms listed earlier, for changing minds, bodies and behaviour of beneficiaries, implementers and others. People 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 annoy 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 the simple theories of change found in intervention designs.

The successful implementation of an intervention depends on new behaviour on the part of 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 and responded to has consequences for the progress of the intervention.

Outcomes in practice

Interventions have consequences during and after implementation for people, place, institutions and community-government relations; some may coincide with planned outcomes but some are likely to be unintended.

Comparing intervention design and implementation

While there is always a gap between intervention design and implementation this is larger in some cases than others. Table 9 presents a framework for comparing design and implementation which was used during the Stage 3 research.

Table 9: 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	Instructions		

Development intervention processes		Theory of change in design	Implementation realities
for influencing the behaviour of intervention implementers	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		

Modernisation variates

Table 10: 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	

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Pankhurst, A. (ed.) forthcoming 2016 *Change and transformation in twenty rural communities in Ethiopia: selected aspects and implications for policy* Addis Ababa.

Paper 4: Guide to using the WIDE data and community reports

The website

Much of the raw data for WIDE1 (1994/5) and WIDE3 (2010-13) can be downloaded from the Database page on the website; what is not available at the moment will be uploaded as it is edited over the next few months.

WIDE2 was conducted in 2003 and is not yet in a website ready state and we also have currently unedited in-depth data made between 2003 and 2005 in what were known as the DEEP communities. These were four of the WIDE communities and two urban communities.

The WIDE1 data

WIDE1 covered 15 of the 20 communities which were covered later by WIDE2 and WIDE3. For each community the research process involved three drafts of a community study organised under headings based on an early version of the current theoretical framework. Students who had completed or were in the midst of the MA in the Department of Anthropology at the University of Addis Ababa wrote the first draft using secondary sources. Draft 1 was taken to the communities for initial additions then a second draft was written. This combined the revised version of Draft 1 with data made for us using rapid rural appraisal techniques by the managers of the teams of enumerators who were conducting the first rounds of the Ethiopian Rural Household Survey in the communities. The second drafts were written by a team at Oxford University; this draft was taken back to the communities for a final consultation following which the final Village Studies were published.

The village studies are available in WORD format to enable comparative analysis on particular topics. Comparisons can be made across the communities in 1994/5 or used to compare situations within the communities in 1994/5 and 2010/13.

WIDE3 data

The WIDE3 data were made in three stages: Stage 1 was conducted in six mixed communities in early 2010; Stage 2 in eight drought-prone and aid-dependent communities in later 2011; and Stage 3 in six richer and self-sufficient communities in 2013. Not all the data are yet in the database as preparing it for public access is very time-consuming.

The research officers

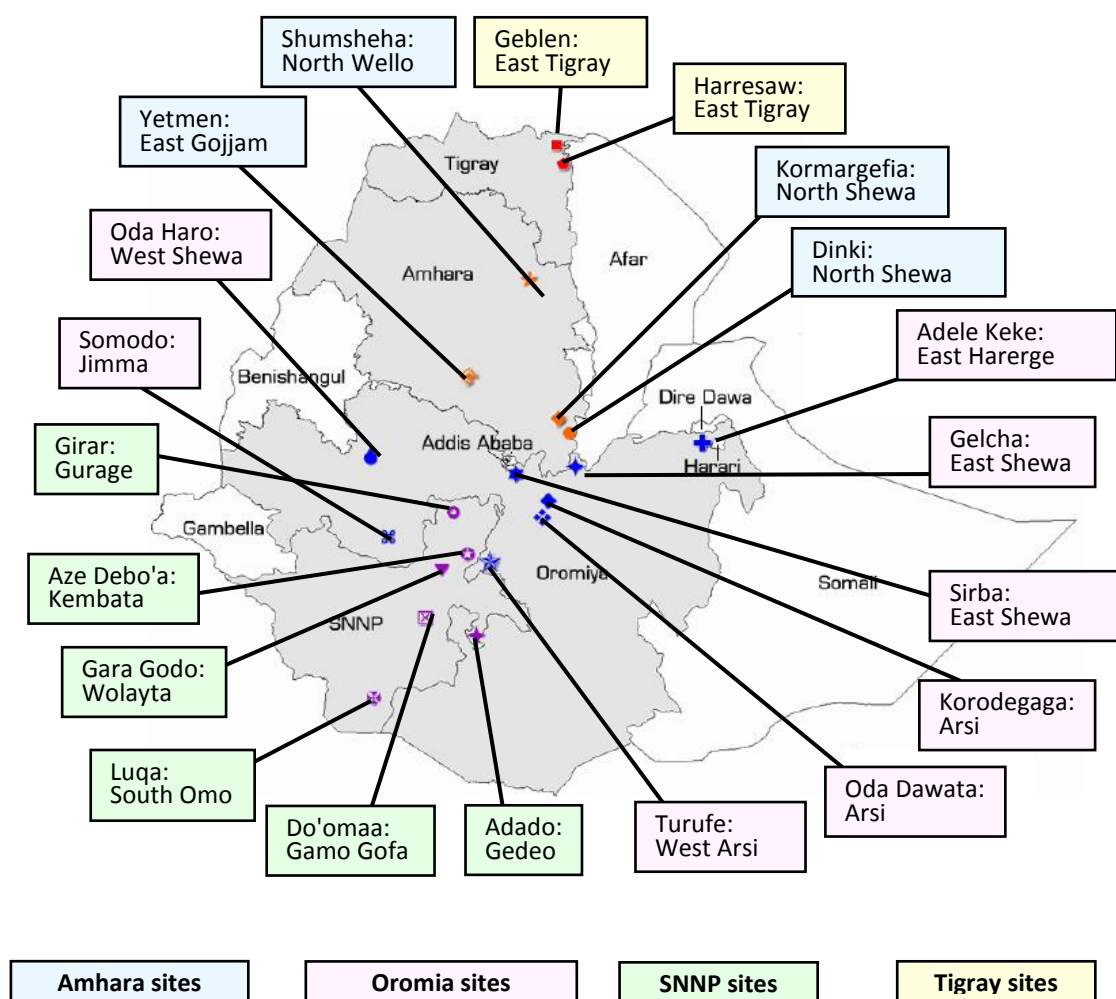
Interviews were conducted in each community by a male and a female researcher working as a team. They all had social science degrees and some had Masters degrees; many of them worked in two or three of the Stages and a few had also done WIDE2 fieldwork. They contributed ideas and comments in training and de-briefing workshops and, under supervision, wrote up their interviews in Report Documents. These were, or are being, lightly edited and anonymised before being put in the database.

The communities

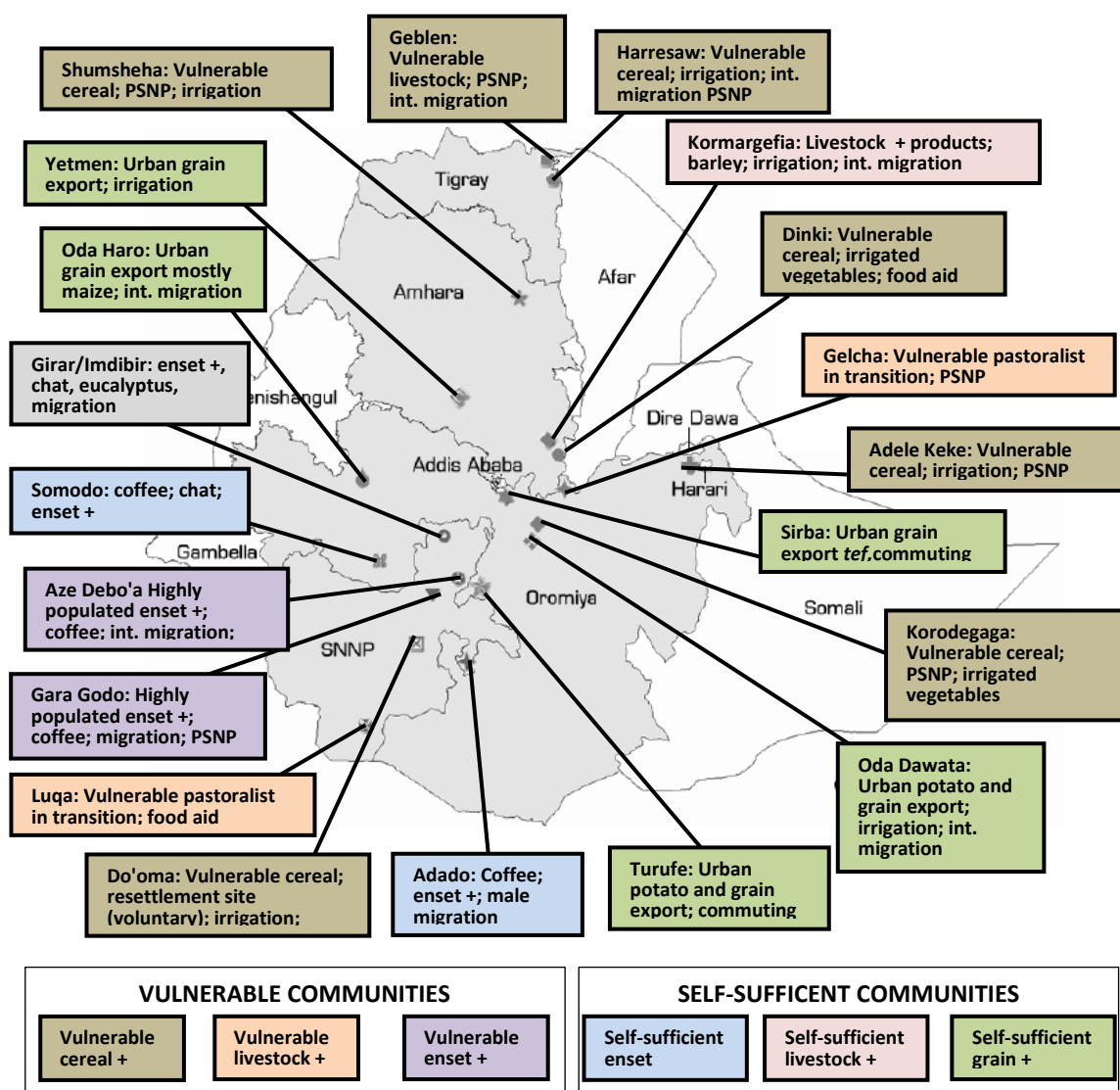
The WIDE communities were chosen by the economists who conducted the panel Ethiopian Rural Household Survey as *examples* of the major livelihood systems found in agricultural Ethiopia in the early 1990s. By the time of WIDE2 in 2003 the economists had added three examples of the growing number of cash-crop producing communities and we added two agro-pastoralist communities.

The wide diversity of the WIDE communities can be considered from various perspectives to identify contrasting types. The following four maps show differences by Region and Zone, by major livelihoods differences, by location in relation to urban areas, and by religious and cultural mixes.

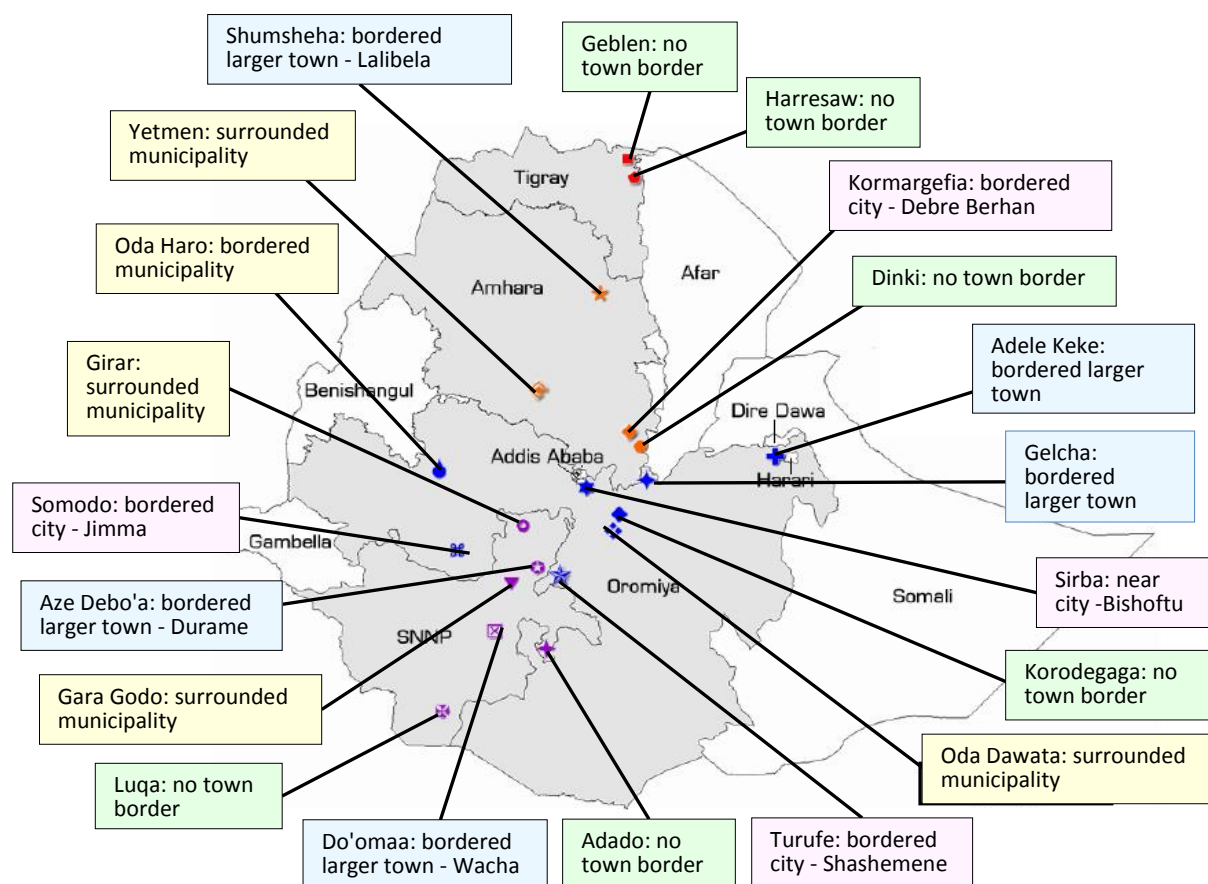
Map 1: the WIDE communities by Region and Zone



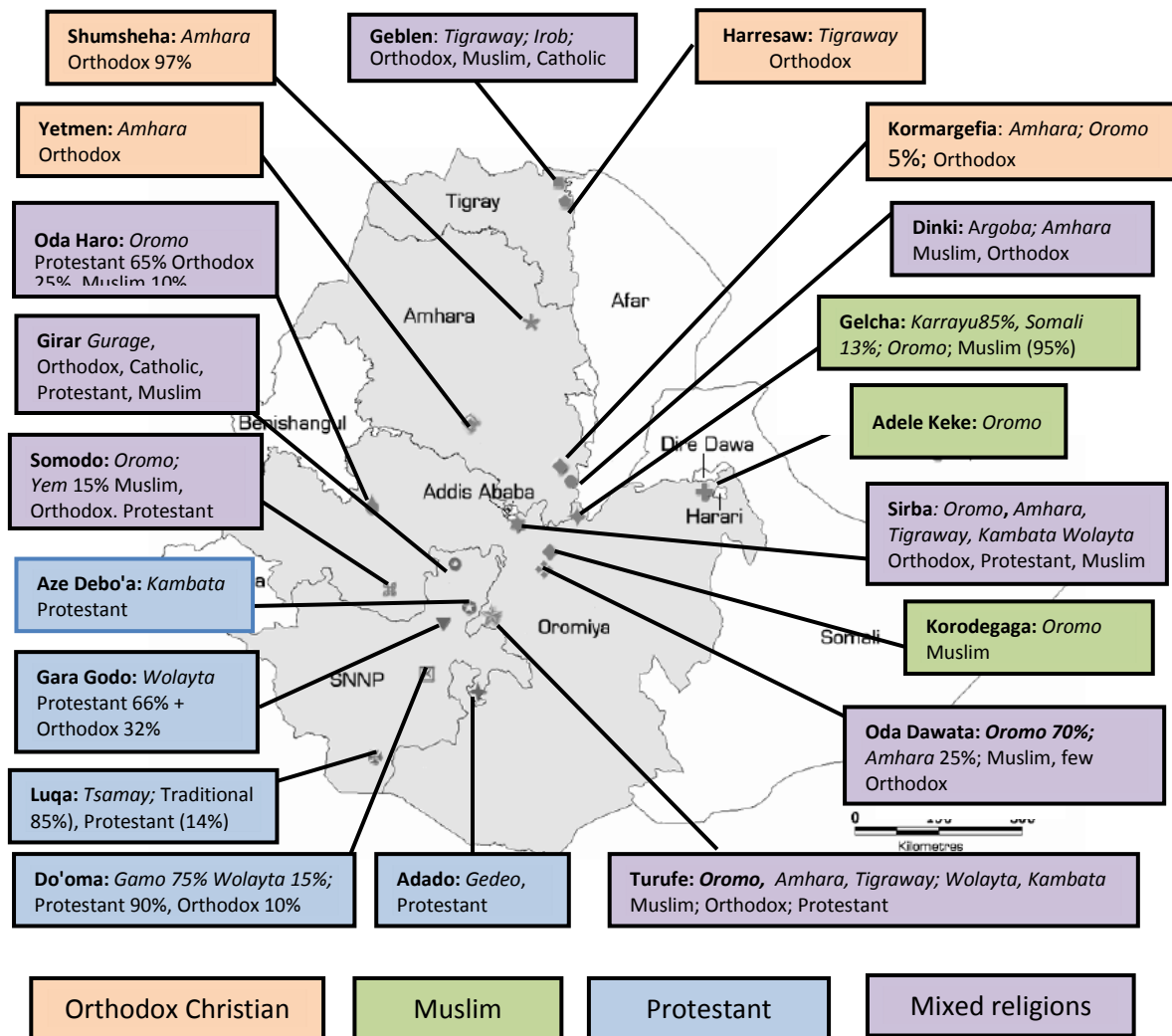
Map 2: WIDE communities by major livelihoods differences



Map 3: The locations of the WIDE3 communities in relation to urban areas



Map 4: WIDE communities major cultural differences



The WIDE3 households

In each of the twenty communities respondents from six households were interviewed in depth following the same protocol. In the four male-headed households the wives, or in a few cases one of the wives, was interviewed separately. Some of the questions were similar to those answered by their husbands and others focused more on the duties usually allocated to women in the household division of labour. In the two female-headed households the head of household answered all the questions. The interviewers were told to find six different kinds of household as shown in Table 11.

Table 11: Types of household interviewed in the three WIDE3 Stages

Stage 1	Stage 2	Stage 3
Rich male-headed household	Male leader's household	Successful farmer – male-headed household
Middle-wealth male-headed household	Successful male-headed household	Successful businessman – male-headed household
Poor male-headed household	Middle-wealth male-headed household	Middle-wealth male-headed household
Very poor male-headed household	Poor male-headed household	Poor male-headed household
Successful female-headed household	Successful female-headed household	Successful female-headed household
Poor female-headed household	Poor female-headed household	Poor female-headed household

These 120 interviews are very long and not yet edited or available on the website.

The people interviewed

In each community trained male and female social scientists conducted separate interviews, many providing different perspectives on the same questions. Interviewees included rich, middle-wealth and poor men, women and youngsters, government employees working in the *wereda* and *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 various kinds of vulnerable and excluded people.

The modules

Some modules were very similar in all three Stages; some Stage 1 topics were incorporated in new modules or left out in Stage 2 to allow space for new topics; this also happened in Stage 3 (see Table 12).

Table 12: The modules in the three WIDE3 stages

Stage 1 Modules	Stage 2 Modules	Stage 3 Modules
1: Wereda officials Round 1 2: Kebele officials 3: Community history and trajectory 4: Interventions: male and female household heads and wives 5: Wereda officials Round 2 6: Households 7: Interventions: dependent adults and youth 8: Community organisations and their leaders 9: Development actors 10: Gender & HIV/AIDS 11: Site specific 12: Research officer topics	1: Wereda officials 2: Community history and trajectory 3: Kebele officials 4: Experiences of recent interventions 5: Community organisations and their leaders 6: Community member vignettes 7: Households 8: Marginalised people 9: Youth 10: PSNP + OFSP/HABP 11: Site specific 12: Research officer topics	1: Wereda officials 2: Community history and trajectory 3: Kebele officials 4: Farming 5: Non-farming 6: Youth 7: Households 8: Notable people 9: Fact sheet 10: Daily diary 11: Election notes 12: Happenings since Fieldwork 1

The module protocols are not yet edited for the database but Table 13 lists them for Stage 2, together with the interviewees, while Table 14 lists the topics covered in Module 1 as an example.

Table 13: Modules and interviewees and specific topics list for Stage 2

Module	
Module 1: Wereda	Wereda officials appropriate to topic
Module 2: Community history and trajectory	Knowledgeable people individually or in small groups
Module 3: Kebele	Kebele officials appropriate to topic
Module 4: Experiences of recent interventions	Men and women separately
Module 5: Community organisation, networks and activists	<ol style="list-style-type: none"> 1. Head of the Seedlings Nursery 2. Chair of the Land Conservation Administration (or equivalent) 3. Chair of the Natural Resource Management Committee (or equivalent) 4. Development Agent NRM 5. Chair of the Development Committee 6. Public Works organiser 7. Tax/contributions collector – who is it? 8. Development Agent Crops 9. Development Agent Livestock 10. Veterinarian 11. Irrigation organisation leader 12. Savings and Credit organisation leader 13. Service Co-operative leader 14. Successful Youth Co-operative leader 15. Failed Youth Co-operative leader 16. Successful Women's Co-operative leader – female interview 17. Failed Women's Co-operative leader – female interview 18. NGO with livelihood intervention - intervention leader 19. Kebele Food Aid Organisation/committee leader 20. Kebele Health Committee leader 21. Health Extension Worker 1 - female interviewer 22. Health Extension Worker 2 - female interviewer 23. Health Promoter/volunteer – female interviewer 24. Health Army member – female interviewer 25. Health Centre head– only if it is in the community 26. Drinking water Committee/Organisation leader 27. Kebele Education Committee leader 28. Kindergarten head 29. Head teacher 30. Male primary school teacher – male interview 31. Female primary school teacher – female interview 32. Parent-Teacher Association leader 33. NGO with health and/or education interventions – leader of intervention 34. Elders' committee leader – male interviewer 35. Religious leader 1 – male interviewer 36. Religious leader 2 – male interviewer 37. Clan/lineage leader – male interviewer 38. Other community-specific customary organisation leader 1 39. Other community-specific customary organisation leader 2 40. The largest Iddir leader 41. Meskel feast organisation leader 42. The largest Equb leader 43. The largest mehaber leader 44. Other community-initiated membership organisation leader 1 45. Other community-initiated membership organisation leader 2 46. NGO-initiated community-based organisation leader 47. The kebele chair 48. The kebele vice-chair 49. Women and Child Affairs representative – female interviewer 50. Kebele manager 51. Chair, local political party 52. Kebele Council Chair 53. Sub-kebele organisation: Gari (or equivalent) leader 54. Sub-kebele organisation: Development Team leader

Module	
	55. Leader of a 1-5 group 56. Leading male wereda councillor 57. Woman wereda councillor – female interviewer 58. Women's League/Association/Federation leader – female interviewer 59. Youth League/Association/federation leader 60. The security committee leader 61. The militia organiser – male interviewer 62. Community policeman – male interviewer 63. Social court leader 64. Peace committee leader 65. Public Relations/Information Officer 66. Propaganda Officer 67. Anti-HTP Committee leader 68. NGO with social equity intervention - leader of intervention
Module 6: Community member vignettes	1. Guard – National Park, community forest, other government-controlled property 2. Electricity organiser/contributor 3. Champion Model Farmer – male interview 4. Most successful woman farmer – female interview 5. Most successful male youth farmer – male interview 6. Successful pastoralist – male interview 7. Investor 1 - male 8. Investor 2 female if possible – if none a second male – female interview 9. Leading cash-crop trader/merchant – male interview 10. Leading woman trader/shopkeeper – female interview 11. Delala/fixer – male interview 12. Leading businessman – male interview 13. Leading businesswoman – female interview 14. Leading young male businessman/trader – male interview 15. Leading young female businessman/trader – female interview 16. Skilled worker – e.g. carpenter – male interview 17. Returned international migrant male – male interview 18. Returned longer-term male migrant from elsewhere in Ethiopia – male interview 19. Returned seasonal migrant male – male interview 20. Returned re-settler - male 21. Returned international migrant female – female interview 22. Returned divorced woman – female interview 23. Ex-soldier – male interview 24. Head of private clinic/pharmacy in the community 25. Traditional health practitioner 26. Traditional birth attendant – female interview 27. Non-EPRDF political organiser (maybe Shumsheha only) 28. Young male opinion leader – male interview 29. Young female opinion leader female interview
Module 7: Households	Male-headed: rich/successful farmer or pastoralist Male-headed: headed by politically active man Male-headed: of medium wealth Male-headed: poor Female-headed: relatively successful Female-headed: poor
Module 8: Marginalised people	1. Resident from the remotest part of the kebele 2. Resident from the least desirable place to live in the community – 'slum' area – if there is one 3. Landless man involved in share-cropping – male researcher 4. Destitute man – no home of own – male researcher 5. Destitute woman – no home of own – female researcher 6. Too old to work with no relatives – man – male researcher 7. Too old to work with no relatives – woman – female researcher 8. Physically disabled man 9. Physically disabled woman – female researcher 10. Relative of a mentally ill person 11. Poor man excluded from PSNP 12. Poor woman excluded from PSNP – female researcher 13. Agricultural labourer 14. Child herder

Module	
	15. Domestic servant – female researcher 16. Poor widow– female researcher 17. Poor widower not remarried 18. Poor divorcée (female) with children– female researcher 19. Poor divorcé (male) 20. Person Living with HIV-AIDS - male – male researcher 21. Person Living with HIV-AIDS - female– female researcher 22. Deaf person 23. Blind person 24. Relative of woman evicted from the community– female researcher 25. Relative of man evicted from the community 26. Non-taxpayer 27. Recent in-migrant 28. Craftworker – male 29. Craftworker – female– female researcher 30. Marginal religion – male 31. Marginal religion – female– female researcher 32. Marginal ethnicity – male 33. Marginal ethnicity – female– female researcher
Module 9: Youth	In early 30s rich – male and female In early 30s middle – male and female In early 30s poor – male and female In mid-20s rich – male and female In mid-20s middle – male and female In mid-20s poor – male and female Young men aged 19 rich Young men aged 19 middle Young men aged 19 poor Young women aged 16 or 17 rich Young women aged 16 or 17 middle Young women aged 16 or 17 poor
Module10 PSNP and OFSP/HABP	1. PSNP targeting decision-maker 2. PSNP appeals decision-maker 3. PSNP public works – without ofsp/habp 4. PSNP public works – with related ofsp/habp – successful 5. PSNP public works – with related ofsp/habp – unsuccessful 6. PSNP direct support – elderly 7. PSNP direct support – other (non-elderly) 8. PSNP graduate – voluntary 9. PSNP graduate – achieved food security and sustainable livelihood 10. PSNP graduate – suffering food insecurity and not achieved sustainable livelihood 11. somebody who has been excluded from PSNP and is not happy 12. never a PSNP beneficiary – without ofsp/habp
Module 11	Site-dependent
Module 12	Research Officer selected

Table 14: Stage 2 Module 1 list of topics covered

Module	Interviewees	Topics
Module 1: Wereda	Wereda officials	1. Wereda comparison 2. Wereda structure 3. Kebele organisation in the wereda 4. Kebele boundaries 5. Kebele comparison 6. Development progress of the kebele 7. Plans for new interventions affecting the kebele 8. Public services outside the kebele which kebele members use 9. Land-related interventions 10. Moving people 11. Water for farming 12. Farming interventions 13. Non-farm interventions 14. Micro-credit and savings 15. F/CFW 16. Co-operatives

Module	Interviewees	Topics
		17. Interventions against HTPs affecting livelihoods 18. Food aid 19. Nutrition 20. Safe water 21. Hygiene and environmental sanitation 22. Disease prevention and control 23. Interventions against HTPs affecting health 24. Curative health services 25. Reproductive health services 26. Mother and child services 27. Education 28. Marriage-related questions 29. Using CIOs to help implement interventions 30. Women's Association 31. Youth Association 32. Planning and consultation 33. Rights and duties of community members 34. Community contributions 35. Accountability 36. Security and policing 37. Justice 38. Learning about Government policies and programmes 39. Insurance 40. Promoting equity for women 41. Youth policies and programmes 42. Getting Government services to poor people 43. Interventions to help vulnerable people

The report documents

In the report documents in the database the responses to the Modules have been turned into narratives sticking as closely as possible to what the respondents said.

The photographs

Most of the [photographs](#) were taken by the Research Officers who were given cheap cameras and a list of images to photograph. Some of the cameras did not work very well so there are more photographs from some places than others. Many of the remaining photographs were taken by the senior researchers during field visits.

The community reports

The first task in interpreting and analysing the data was to write a long report for each community using the headings developed using the multiple perspectives framework:

- The community place and people in their wider context
- Households
- Structures of inequality
- Livelihoods
- Human re/pro/duction –producing and maintaining people
- Social re/pro/duction
- Community management
- Community ideas

These are available in pdf format [here](#); if you would like to have them in WORD format to facilitate comparative analysis please contact us contact@ethiopiawide.net.

Paper 5: Guide to planning and implementing a similar study

Introduction

The key focuses of the longitudinal WIDE study have been the modernisation trajectories of the communities and the roles played by government-managed development interventions in those trajectories²². But we have also used the WIDE 3 data in a number of synchronic comparative analyses of selected features of the communities²³.

It would be possible to do a longitudinal community study without getting into the complexities of complexity social science, although I have found its metaphors very helpful in trying to understand continuity and change in the WIDE rural communities. Also the notion that communities as complex systems can be 'deconstructed' in different ways informed the 'multiple perspectives' conceptual framework which connects the data-making process with the structure of the community narratives.

However, it would not be possible to undertake such a study effectively without some familiarity with the literature on case-based comparative analysis (for example, Byrne and Ragin (ed), 2009). The most important features of case-based research are (1) the evidence base comes in the form of narratives which are available to all; (2) the method of exploring the narratives for similarities and differences among cases in the sample encourages identification of different *types* or *kinds* of case which is useful for targeted policy-making; (3) quantitative case-based analysis techniques for causal analysis, such as QCA²⁴, do not de-compose the cases as variable analysis does, which means it is possible to make direct links between the narrative interpretations and the causal conclusions, and 'causal properties' are not given to abstract variables such as 'education' measured in terms of years of schooling.

In WIDE we do not have any quantitative skills and have not found anyone to engage with who is interested in using case-based quantitative methods in development contexts. However, we believe that nesting a qualitative study such as ours in a large panel community survey with a questionnaire designed using the multiple perspectives theoretical framework would be very fruitful and would recommend anyone starting out on a longitudinal qualitative study to try to do so. The first survey results could be used to establish the main different types of rural community and an exemplar community could be selected from within each type for an ensuing qualitative study. The findings from this could be used to improve the design of the second round of the panel survey which would then inform the second round of the qualitative study which would then inform the third round of the survey; and so on.

The other papers in this collection and methodology publications on our website describe the WIDE methodology quite exhaustively and provide a resource for those interested in pursuing a similar study. This paper briefly raises some key practical issues which are not covered elsewhere with examples of what we did. These are: (1) designing the baseline study; (2) choosing the communities; (3) using the multiple perspectives framework to link data-making with the writing of the community narratives; (4) designing the modules and constructing a research calendar; (5) the fieldwork process and the making of the database; and (6) interpretation and analysis of the data.

Designing the baseline study

A study such as ours should be conducted by people trained in social anthropology, sociology and policy analysis, with some experience of qualitative rural research in the country of interest. The first step should be a thorough review of relevant literature to provide an understanding of the recent

²² See the Final Reports for the three WIDE3 Stages.

²³ Some of these can be found in our forthcoming book (Pankhurst ed) which will be available on the website while Paper 6 describes some policy-related WIDE projects which could be undertaken in the near future involving further analysis of the WIDE3 data and/or new fieldwork.

²⁴ Qualitative Comparative Analysis; for a brief description see [Ragin, 2008](#)

trajectory of the country and to inform the choice of the communities. We would recommend conducting the baseline round of a longitudinal study in at least two phases. Phase 1 in each community should be exploratory with the aim of (1) establishing the main local features of the place and the four domains of power to inform the content of the detailed questions to ask in Phase 2, and (2) identifying the different social groups, organisations and individual social actors who should be the focus of the interviews.

Choosing the communities

If you are building on a (preferably random sample design) quantitative community study it would be advantageous to use this to select communities exemplifying the types which emerge as interesting in relation to your main question – maybe some because they are the most common, some which are important from a policy perspective, some which are at greatest risk.

We did not choose eighteen of our twenty communities as WIDE1 was an add-on to the Ethiopian Rural Household Survey and these communities were selected by economists as *exemplars* of Ethiopia's rural agricultural economies in the 1990s; fifteen in 1994 and 3 in 1997. We added two agro-pastoralist communities in 2003, identifying communities which had been studied by social anthropologists for doctoral dissertations in the 1990s giving us some kind of baseline. This was not possible in the communities chosen by the economists, but we did ask questions about the history of the community in the fifteen WIDE1 sites and in the baseline reports written for the new communities in 2003.

Using the multiple perspectives

The headings of the WIDE3 multiple perspectives framework were:

1. Community place and people
2. Community in its wider context
3. The community's households
4. Durable structures of inequality
5. Field of action/domain of power: livelihoods
6. Field of action/domain of power: human re/pro/duction – the making, maintaining and deaths of people
7. Field of action/domain of power: social re/pro/duction – organisations, networks and institutions
8. Fields of action/domains of power: ideas in the community
9. Fields of action/domain of power: community management

These nine headings were used to structure the narratives in the community reports. Within each heading a number of sub-headings and sub-sub-headings were developed as shown in Box 1. The sub-headings were also used in the design of the modules as discussed below.

Box 1: Table of Contents from the Stage 3 Oda Dawata Community Report

Community features.....	7
Place	8
Altitude and terrain	8
Soil	8
Ecosystem	8
Weather and climate	9
Weather since 2008.....	9
Seasonality and work.....	10
Community land use.....	12
Land use.....	12
Settlement pattern	12
Urban areas	12

Community water use.....	12
Rivers and springs	12
Underground and harvested water	12
Irrigation infrastructure	13
Infrastructure	13
Public buildings.....	13
Internal roads, paths and bridges and transport	13
Other infrastructure	14
<i>Mobile phones</i>	14
<i>Electricity</i>	14
Community economy.....	14
Local macro-economy.....	14
Main livelihood activities and notable changes.....	14
<i>Established adult males</i>	14
<i>Established adult females</i>	15
<i>Young men</i>	15
<i>Young women</i>	15
Notable recent changes	15
Independence of farming economy and future potentials.....	16
Inflation.....	16
Social structure.....	16
Demographics	16
Wealth and poverty	17
Social identities.....	18
The community in its wider context	18
Political economy context.....	18
The kebele in the wereda	18
The wereda in the wider world.....	19
External roads, bridges & access	19
External linkages.....	19
Rural linkages.....	19
<i>Other kebeles</i>	19
<i>Rural/agricultural migration</i>	21
Urban linkages	21
<i>Local towns</i>	21
<i>Urban migration linkages</i>	22
International linkages	22
Cultural imports	23
Community changes since 2008	23
Crises	23
Environmental changes.....	23
Economic changes.....	24
Social changes.....	24
Cultural changes	25
Political changes	25
The community's households	25
Household structures.....	25
Household case studies.....	26
Successful farmer's household	26
Successful businessman's household	28
Household of farmer of middle wealth	30
Household of poor farmer	32
Household of successful woman head	35
Household of poor woman head	37
Structures of inequality	39
Class, wealth and poverty	39
Overall community wealth	39
Spatial poverty	39
Household wealth inequalities	40
Inequality within households.....	41
Problems poor people face.....	41

Social identity, status differences and vulnerability.....	42
Ethnicity	42
Clan / lineage / family	42
<i>Generally</i>	42
<i>Craftworkers</i>	42
<i>Slaves</i>	42
Religions.....	42
Native/immigrant	43
Status associated with wealth/poverty	43
Non-conformity and status.....	43
<i>Women without husbands</i>	43
<i>Men without work</i>	43
<i>Children without parents</i>	43
Vulnerable people	44
Genderage experiences, differences and relationships	44
Growing up in the community – boys and girls	44
<i>Birth and infancy</i>	44
<i>Children – work, play and education</i>	45
<i>Adolescence and youth</i>	45
Youth.....	46
<i>Male youth trajectories</i>	46
<i>Female youth</i>	50
Gender inequities	55
<i>Violence against women</i>	55
<i>Marriage</i>	56
<i>Women’s economic status</i>	57
<i>Women’s political status</i>	58
<i>Perceptions of females</i>	59
Upward and downward mobility	59
<i>Males</i>	59
<i>Females</i>	59
Age inequities	60
<i>Youth and adults – male and female</i>	60
<i>Adults and elderly - male and female</i>	60
Government/NGO interventions to promote social equity	60
Assistance to poor people	60
Interventions to help vulnerable people	60
<i>Orphans</i>	60
<i>Disabled people</i>	60
<i>Vulnerable women</i>	61
Promoting equity for women	61
<i>Violence against women interventions</i>	61
<i>Marriage interventions</i>	62
<i>Interventions to improve women’s economic status</i>	63
<i>Interventions to improve women’s political status</i>	64
Youth policies and programmes	64
<i>Youth livelihoods- male and female</i>	64
<i>Community and political participation</i>	65
<i>Youth and HIV/AIDS</i>	65
<i>Youth recreation</i>	66
Fields of action /domains of power.....	66
Livelihoods domain.....	66
Local macro-economy.....	66
Smallholder agriculture	67
<i>Land for smallholder farming</i>	67
<i>Agricultural labour</i>	68
<i>Interlinkages</i>	69
<i>Crops grown</i>	69
<i>Irrigation</i>	74
<i>Other farming technologies</i>	74
<i>Livestock</i>	75
<i>Income from farming</i>	80
Government smallholder farming interventions	80
<i>The role of the wereda agricultural office</i>	80
<i>Local agricultural research institutes</i>	80
<i>Agricultural extension</i>	81
<i>The Farmers’ Training Centre (FTC)</i>	82

<i>Mobilisation of local farmers</i>	82
<i>Recent crop interventions</i>	83
<i>Recent livestock interventions</i>	83
<i>Credit for farming</i>	83
<i>Producer co-operatives</i>	84
<i>Government Service Co-operatives</i>	84
Investors	85
Diversification	85
Trade	85
<i>Trading in the community</i>	85
<i>Trading of most important cash crop - Potatoes</i>	86
<i>Trading of second cash crop - Beans</i>	86
<i>Crop traders' activities</i>	86
<i>Livestock trade</i>	88
<i>Livestock product trade</i>	89
SMEs	89
<i>SMEs in the community</i>	89
<i>Skilled production</i>	89
<i>Livestock and products SMEs</i>	90
<i>Local drinks and food</i>	90
<i>Productive co-operatives</i>	90
<i>Natural resource sale</i>	90
<i>Petty production</i>	91
<i>Service enterprises</i>	91
<i>Food processing services</i>	91
<i>Hospitality services</i>	91
<i>Health services</i>	91
<i>Shops</i>	91
<i>Leisure services</i>	92
<i>Petty services</i>	92
<i>Transport</i>	92
Government support for non-farm activities	92
Non-farm employment	92
Inward investment	93
Migration	93
<i>Out-migration for work and remittances</i>	93
<i>In-migration for work</i>	98
Savings, credit and debt	98
<i>Community-organised savings and credit</i>	98
<i>Government, donor and NGO credit and savings</i>	99
<i>Banks</i>	99
<i>Debt in the community</i>	99
<i>Insurance</i>	99
Harmful Traditional Practices affecting livelihoods	99
Theft	99
Human re/pro/duction domain	100
Houses and household assets	100
Domestic technologies	100
Fuel and light	100
Drinking water	100
Sanitation	101
Domestic work	101
Food and nutrition	102
Health extension	102
<i>The Health Post</i>	102
<i>Health extension</i>	102
Preventive health services	103
<i>Hygiene and environmental sanitation</i>	103
<i>Disease prevention and control</i>	104
<i>HTPs affecting health</i>	105
Reproductive health & services	105
<i>Infertility</i>	105
<i>Contraception</i>	105
<i>Abortion</i>	105
<i>Fistula</i>	106
Pregnancy and childbirth & services	106
<i>Pregnancy</i>	106
<i>Delivery</i>	106
<i>Mother and infant care</i>	106

Illnesses and curative health services	107
Government	107
NGOs	107
Private clinics and pharmacies	107
Child-rearing	107
Education	108
Education overview	108
Pre-school	109
Alternative basic education	109
Primary education	109
Secondary education	110
Post-secondary education and adult education	110
Attitudes to education	111
Social re/production domain	111
Social institutions and organisations	111
Local informal security regime	111
Community celebrations	111
Holidays	111
Customary organisations	111
Marriage, divorce, widowhood	112
Death ceremonies and inheritance	113
Religion	113
New community-initiated organisations	114
Key social actors and their networks	114
Kebele cabinet	114
Elders	114
Religious leaders	115
Clan leaders	115
Iddir leaders	115
Successful farmers	116
Successful traders/businessmen	118
Women's leaders	119
Political activists	119
Social interactions within the community	120
Community-government relations	120
Local elite-people relations	121
Ethnic/clan relations	121
Relations among different religious groups	121
Class relations	122
Interactions affecting gender relations	122
Interactions affecting inter-generational relations	122
External relations	122
Relations with other communities	122
Community-wereda relations	123
Community – NGO relations	123
Social cohesion in the community and beyond	123
Ideas domain	124
Community cultural repertoires	124
Major areas of contention	124
Conservative repertoire	124
Modern repertoire	124
Modern ideas	125
Cultural entrepreneurs	125
Government ideology	125
Ethnic ideologies	126
Religious ideologies	126
Other ideologies	126
Urban connections and ideas	126
Diaspora connections and ideas	126
Modern media and ideas	127
Community management domain	127
Public Works	127
Environment	127
Infrastructure	128
Organising Public Works	128
Doing Public Works	129
Taxes and contributions	129
Land tax	129
Market tax	129

Income tax	130
Licences.....	130
Contributions in cash and kind.....	130
The wereda	130
Wereda policies and budget	130
Wereda progress	130
Working with NGOs	131
Investors in the wereda	131
Regional and zonal plans for the wereda	131
Wereda relations with neighbours	131
The kebele	131
Wereda report on the kebele.....	131
Wereda plan for the kebele	131
Kebele and party structures and activities.....	132
Kebele committees	134
Kebele chair	134
Kebele cabinet	134
Government employees.....	135
Government volunteers	135
Kebele council	136
Kebele manager.....	136
Women's Organisations	137
Youth Organisations	137
Security and policing.....	138
Justice	139
Community leaders.....	140
Ethnic group leaders.....	140
Clan leaders	140
Elders	140
Religious leaders.....	141
Iddir leaders	143
Other community leaders.....	143

These sub-headings were also used in the design of the twelve modules used in each Stage. The contents of the Modules used in Stage 2 are listed in Table 15.

Table 15: The modules in the three WIDE3 stages

Stage 1 Modules	Stage 2 Modules	Stage 3 Modules
1: Wereda officials Round 1	1: Wereda officials	1: Wereda officials
2: Kebele officials	2: Community history and trajectory	2: Community history and trajectory
3: Community history and trajectory	3: Kebele officials	3: Kebele officials
4: Interventions: male and female household heads and wives	4: Experiences of recent interventions	4: Farming
5: Wereda officials Round 2	5: Community organisations and their leaders	5: Non-farming
6: Households	6: Community member vignettes	6: Youth
7: Interventions: dependent adults and youth	7: Households	7: Households
8: Community organisations and their leaders	8: Marginalised people	8: Notable people
9: Development actors	9: Youth	9: Fact sheet
10: Gender & HIV/AIDS	10: PSNP + OFSP/HABP	10: Daily diary
11: Site specific	11: Site specific	11: Election notes
12: Research officer topics	12: Research officer topics	12: Happenings since Fieldwork 1

The challenge was to design Modules that covered these sub-headings AND could easily be used with not too many respondents. So, for example, Module 1, which was used with *wereda* (district) officials, covered topics from all the fields of action as Table 13 in Paper 4 shows. While Module 8 in Stage 2 designed for marginalised people covered 33 men and women who were all asked similar questions about their problems, networks, access to the different government services and tax, cash and labour contributions. The process of matching topics with respondents is fiddly and very time-consuming.

The fieldwork process and the making of the database

Constructing the fieldwork calendar

In our case the number of fieldwork days had been guesstimated in the funding bid using rough calculations about how many interviews a research officer could conduct in a day. In all Stages we had two fieldwork visits with a gap in between for de-briefing, writing up in the Report Documents and identifying missing bits that needed re-visiting in the second round. In Stages 1 and 2 we had two field visits of roughly the same length. In Stage 1 the gap between the visits was too short and did not allow enough time for the data recording while in Stage 2 we over-compensated and the longer gap allowed some Research Officers to get involved in other work which was problematic. The Stage 3 solution worked better: most of the fieldwork was done in a long visit in the spring and most of the writing up completed before a short re-visit in October/November allowed for gap-filling and following up on interesting topics.

Choosing, training and working with the field officers

For gendered perspectives on the topics of interest it is vital to employ male and female researchers working as a team. All women and girls should be interviewed by the female researcher, but given the gendered nature of rural communities more of the interviews will be with men, and some of these can be conducted by the female researcher. The important qualities of a good fieldworker are that they:

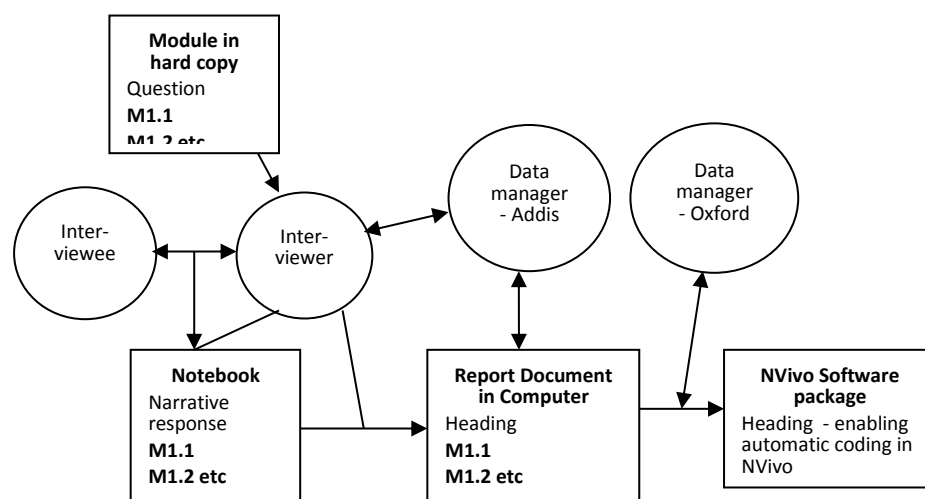
- Enjoy working in rural areas and respect rural people
- (Ideally) speak the local language
- Are social science trained preferably with a qualitative focus
- Are keen to contribute ideas and criticisms in training and de-briefing workshops
- Are reliable and able to work to deadlines
- Are team players

Training should involve going in detail through all the draft Modules with the group and following their suggestions for improvement. They need computers for writing up while in the field and maybe solar panels if they have no access to grid electricity. In Ethiopia the existence of a growing mobile phone network by 2010 made supervision much easier. On return from fieldwork stints we held group de-briefing workshops.

Making and recording the data

The process is depicted in Figure 9.

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



1. The Modules were designed so that each questions had an M number - e.g. M1.1.
2. The interviewer wrote the number in their notebook before recording the narrative response to the question.
3. The interviewer typed the narrative response into the Report Document space for the questions which was numbered to match the Module.
4. The Report Documents were entered into a qualitative software package (we used NVivo) by the research interpreto-analysts; using headings in the RDs supported a first step of easy coding

Interpreting and analysing the data

As described earlier the community reports should all be written using the multiple perspectives framework, simplifying the comparative analysis process. It would then be a good idea to use the reports to construct and archive analysis matrices on topics of interest in a systematic way before writing the final reports. Due to lack of time related to lack of budget we did not do this systematically in WIDE3 which has resulted in inefficient duplication by people working on the data later.

Conclusion

Each of the three stages of WIDE3 took more than a year to complete from beginning to end. There were four main phases. The first involved the writing of a paper on all the Government interventions we should expect to see in the communities and a paper on the methodology and the design of the research instruments. In the second phase the fieldwork was done and the database made and there was some early dissemination of findings to a 'worknet' of people interested in the project. The writing of the community and final reports in phase 3 was followed by dissemination workshops for government, donors and academics in Ethiopia. Completing this schedule required careful planning and management, especially of the fieldwork and database-making phase.

References

- Byrne, D. and C. Ragin (eds), 2009 *The Sage Handbook of Case-Based Methods*, London: Sage.
- Ragin, C., 2008 'What is Comparative Qualitative Analysis (QCA)?'
http://eprints.ncrm.ac.uk/250/1/What_is_QCA.pdf

Paper 6: Analysis protocol for potential policy papers using WIDE data

Introduction

There are a number of policy-relevant topics which could be usefully pursued using the existing WIDE data, some of them in conjunction with a new fieldwork module.

The choice of topic(s) and the need for, and depth of, new fieldwork are a matter of judgment. Key factors are:

- The importance of the topic – for community members as well as government and development partners;
- How much has likely to have changed in relation to the topic since the WIDE3 fieldwork (2010-13);
- How much data there are in existing WIDE research;
- How important it is to get quick answers;
- Who is interested in leading the research and being involved in it;
- The level of funding that is likely.

Potential Series III Discussion Briefs

Potential topics

In earlier discussions the WIDE team identified a number of potential topics for a potential set of Series III discussion briefs using the existing data – and there may be more. They included:

- Taxation and contributions
- Access to justice
- Land issues
- Credit
- Water
- Agricultural developments
- Non-farm own account activities – industrialisation and servitisation
- Non-farm employment

A protocol to aid the ordering of data for the evidence base

It has not been clear how everyone is approaching the task of data interpretation and analysis and a lot of the work done is not retained for others to use. I am in favour of using a protocol through which all workings are recordable and recoverable by others. Appendix 1 contains an example of use of a protocol which emerged during the writing of the Series II policy discussion brief and related book chapter on maternal health and well-being.

Step 1: Design a conceptual framework related to the main broad question

Think imaginatively, creatively and thoroughly. The conceptual framework should identify important broad abstract areas for deconstruction into subsets of empirical variates. In the Appendix example five areas for follow-up were identified/

Step 2: Make a conceptual matrix for each of the areas identified in the framework

Identify the important constituents of each of the areas.

Step 3: Data analysis 1 - use the conceptual matrix to design the data description matrices for the selected areas.

Topics in the columns and communities in the rows.

Steps 1-3 provide the basis for analysing available WIDE3 data and also for designing Data Protocols for a comprehensive focused study in the future.

Step 4: Data analysis 2 – populate the data description matrices using all the available data

Search the interview data and the community reports – summarise what you find as briefly as possible

Step 5: Data analysis 3 - immerse yourself in the data and familiarise yourself with each community narrative

Look across the matrix rows and write short thick descriptions for each of the areas identified for each of the communities

Step 6: Data analysis 4 – identify key points in the data description matrices and look for patterns of similarity and difference among the communities

Look down the matrix columns for commonalities across all **the communities**, for types in relation to each topic column.

Do the same for all **the people** for whom the topic is important –e.g. richer and poorer.

Step 7: Data analysis 5 – in a further search for patterns select key issues to create and explore 20-community truth tables

- For each key issue categorise each community as e.g. high, medium, low
- Construct truth tables – communities in a column and key issues as rows
- Keep re-organising the data rows so that communities with similar patterns are adjacent
- Add possible explanatory variates such as remoteness, customary cultural repertoires, wealth, regional government... to see if they might relate to different types of community

Potential new fieldwork projects

The potential Series III Discussion Brief topics could all be candidates for new fieldwork. The first step should be the use of an interpretation and analysis protocol to establish what seemed to be the case at the time of WIDE3 fieldwork, which would also help to identify gaps. The column rows of the data description matrices described below would be a guide for designing the Module protocols for the new fieldwork.

This analysis would help you to identify which communities to return to for more fieldwork, and whether shorter visits to all would be more useful than more in-depth visits to fewer. Typing the communities would help you to choose one from each type.

The WIDE team discussed another possible topic for new fieldwork, which was the 2015/16 drought. Given the urgency of this problem I would recommend writing a policy discussion paper (not brief) first and use it to design a simple, cheap and rapid fieldwork phase – for example sending seasoned fieldworkers to selected communities ideally with prior WIDE experience of the communities to undertake a lightly protocol-guided rapid anthropological exercise over (say) 10 days.

Appendix 2 starts the process of using an I & A protocol to organise the existing WIDE data.

Appendix 1: Example - maternal and infant health and well-being

This protocol emerged during the writing of the discussion brief and book chapter and was not used thoroughly from the beginning. An important problem in writing the brief was that not much data had been made specifically made with this topic in mind. The

Step 1: Design the abstract conceptual framework

Think imaginatively and creatively about all aspects of the topic

Questions: how did women and infants experience the process of pregnancy, delivery and early infancy? What did other people do to help them? What relevant government interventions were in place?

Common features

1. Pregnancy, birth, and infancy – a time-bound process – idea of the **pregnancy-delivery-infancy cycle**
 - 9 months pregnancy
 - Delivery
 - 6 months infancy = 15 months = 450 days.During this period the health and well-being of mother and infant are highly interdependent – idea of the **mother-baby couple**.
2. Events and experiences **before pregnancy** can affect the quality of the pregnancy-infancy cycle
3. Events and experiences during the pregnancy-infancy cycle can have **consequences** for the longer-run health and well-being of
 - Mother
 - Child

Variable features

4. Community context – remoteness, wealth, drought, seasonality effects, drinking water, cultural repertoires, government health services
5. Intra-community differences among women – remoteness, wealth, women's work

Step 2: Make a [conceptual matrix](#) for each of the five areas identified in the conceptual framework

Identify the important constituents of each of the areas identified in the conceptual framework

1. **Pre-pregnancy** – what events and experiences might be important?
 - infertility
 - contraception
 - circumcision
 - age of marriage
 - rape
 - forced abduction
2. **Pregnancy**- what events and experiences might be important? –
Mother
 - pregnancy outside marriage
 - abortion
 - miscarriage
 - physical and mental aspects of being pregnant
 - diet
 - work and rest
 - illnesses e.g. malaria, German measles
 - stress
 - ante-natal care*Infant*
 - miscarriage, abortion, death in womb
 - developmental problems
 - malnutrition
 - maternal stress
 - ante-natal care
3. **Delivery** - what events and experiences might be important?
Relevant to mother and infant
 - prematurity
 - birth complications

- birth damage
 - death – relevant to both mother and infant
 - cleanliness of environment – place of delivery
 - skill of helpers
4. **First 6 months of infancy** - what events and experiences might be important?

Mother

- Diet and breast-feeding
- PNC
- work and rest

Infant

- Breast-feeding/diet
- PNC
- maternal caring
- hygiene, clothes etc.
- illness and healthcare

5. Possible **longer-run consequences**

Mother

- fistula
- prolapse
- infertility.

Infant

- physical problems
- brain damage

Step 3: Data analysis 1 - use the conceptual matrix to design the [data description matrices](#)

- Topics-columns
- Communities - rows

Step 4: Data analysis 2: populate the data description matrices using the available data

- Record notes on everything you can find on the topic for each community in the community reports/interview data

N.B. Since we are using secondary data that was not designed to cover this issue thoroughly there are considerable gaps in the data.

The conceptual framework and related data analysis matrices described here provide the basis for designing Data Protocols for a comprehensive focused study in the future.

Step 5: Data analysis 3 - data immersion and familiarisation with each [community narrative](#)

- Use the data description matrices to develop a narrative or 'thick description' about women and infants experiences in each of the communities in each of the five stages – pre-pregnancy, pregnancy, delivery, early infancy, longer-term consequences
- Develop a single narrative combining the five narratives

Step 6: Data analysis 4 –use the data description matrices to create [data pattern matrices](#)

- Down the topic columns
 - **commonalities across all communities** – create **commonality matrices** to underpin general conclusions
 - **differences and similarities among the communities** - generate 'types' related to the topic – make a separate matrix for each type - look for other similarities among the communities in each type which might help explain those similarities
 - **commonalities across all women who become mothers**

- **differences and similarities among women who become mothers** – generate types related to the topic

Step 6: Data analysis 5- select key issues to create and explore 20-community [truth tables](#)

- For each key issue categorise each community as e.g. high, medium, low
- Construct truth tables – communities in a column and key issues as rows
- Keep re-organising the data rows so that communities with similar patterns are adjacent
- Add possible explanatory variates such as remoteness, customary cultural repertoires, wealth, regional government... to see if they might relate to different types of community

Step 7: Identify policy issues for discussion with government and development partners

- Use the commonality data pattern matrices to identify conclusions related to the five areas which apply to all communities
- For each area compare these with relevant (1) government macro policies and (2) their implementation at kebele level
- Identify missing policies, and gaps between policies and implementation
- Use the differences data pattern matrices to identify differences among communities requiring adapted (1) policies or (2) implementation of general policies – suggest what these communities are examples of

Conceptual matrix

[illegible]

Abstract general conceptual framework			Differences in community context with potential impacts							Intra-community differences among women		
Maternal and infant health and well-being: main concepts		Issues & risks	Remote-ness	Wealth	Weather	Season-ality	Drinking water	Cultural repertoires & gender relations	Implementation of government policies	Remoteness	Wealth	Marital status
Delivery	Mother	<ul style="list-style-type: none"> • Unclean environment • Unskilled helpers • Birth complications • Birth damage • Death 										
Delivery	Infant	<ul style="list-style-type: none"> • Unclean environment • Unskilled helpers • Birth complications • Birth damage • Death 										
Early infancy	Mother	<ul style="list-style-type: none"> • Diet & breast-feeding • PNC • Work & rest 										
Early infancy	Infant	<ul style="list-style-type: none"> • Breast-milk/diet • PNC • Maternal caring • Hygiene & clothes • Illnesses & health care 										
Longer-term consequences	Mother	<ul style="list-style-type: none"> • Fistula • Prolapse 										
Longer-term consequences	Child	<ul style="list-style-type: none"> • Poor physical devt • Brain damage 										

Data description matrices

Pre-pregnancy data matrix

Community	Infertility	Contraception	Circumcision	Age of marriage	Rape	Abduction
Geblen						
Harresaw						
etc						

Pregnancy – data matrix

Community	Unmarried pregnancy	Abortion	Miscarriage	Physical problems	Diet	Work & rest	Illnesses	Stress	Mental problems	ANC
Geblen mother										
Geblen infant										
Harresaw mother										
Harresaw infant										
etc										

Delivery – data matrix

Community	Environment	Helpers	Complications	Damage	Death
Geblen mother					
Geblen infant					
Harresaw mother					
Harresaw infant					
etc					

Early infancy matrix

Community	Diet & breast-feeding	PNC	Work & rest; maternal care	Hygiene & baby clothes	Illnesses & healthcare
Geblen mother					
Geblen infant					
Harresaw mother					
Harresaw infant					
etc					

Longer-term health consequences

Community	Fistula	Prolapse	Infertility	Poor physical development	Brain damage
Geblen mother					

Community	Fistula	Prolapse	Infertility	Poor physical development	Brain damage
Geblen infant					
Harresaw mother					
Harresaw infant					
etc					

Community narrative outline

Geblen

Community context

- Remote
- Poor
- Drought-prone
- Seasonality
- Drinking water
- Cultural repertoires & gender relations
- Region
- Implementation of government policies

Community context narrative

Pre-pregnancy

- Infertility
- Contraception
- Circumcision
- Age of marriage
- Rape
- Forced abduction

Community pre-pregnancy narrative

Pregnancy

- Pregnancy outside marriage
- Abortion and miscarriage
- Being pregnant
- Diet
- Work and rest
- Illnesses
- Stress
- ANC

Community pregnancy narrative

Delivery

- Prematurity
- Birth complications
- Birth damage
- Death of mother
- Death of infant
- Cleanliness of environment

- Skill of helpers

Community delivery narrative

Early infancy

- Maternal diets, breast-feeding and infant supplementary food
- PNC
- Maternal work, rest and care for infant
- Infant hygiene, clothing etc
- Infant illnesses and healthcare

Early infancy narrative

Longer-term consequences

- Fistula
- Prolapse
- Infertility
- Poor infant physical development
- Brain damage

Longer-term consequences narrative

Harresaw

Etc.

Data pattern matrices

Example Contraception

Community	Low use	Medium use	High use
Community 1	<i>Summarised key points from the data description matrix</i>		
Community 2		<i>Summarised key points from the data description matrix</i>	
etc			<i>Summarised key points from the data description matrix</i>

Truth tables

Example pre-pregnancy issues

Community	Infertility	Contraception	Circumcision	Age of marriage	Rape	Abduction
Geblen	NA	Low	None	Higher	High	None
Harresaw						
etc						

Once complete re-organise in a search for patterns

Do the same for other four stages

Look across the stages in case of cross-stage patterns

Appendix 2: Example - experiences of drought 2015-16

Designing a Module for new fieldwork - informed by data made in 1995, 2003 and 2010-13

Learning from WIDE1-3 data

Question: What did we learn about drought experiences from WIDE2 and WIDE3?

Some quick answers off the top of my head:

- Livestock deaths and sales - debt
- Migration
- Extension programme not effective in 2003 due to droughts
- Drought leads to insufficient income from agricultural production – decline in productivity
- Food aid saved lives; some misuse – directed to kebele official relatives, merchants bought it from recipients at a cheap price and sold it at an expensive price to urban residents
- Pastoralists had to move long distances to get pasture and water for cattle
- Cattle died due to lack of fodder and water
- During drought women in Koro collected and sold firewood
- Women, men and children affected differently by food shortages
- Breast milk can dry up
- Children dropping out of school to go to work as day labourers in nearby town; or because parents unable to cover costs
- Recurrent drought makes people poorer and poorer
- Mutual support among clan members in times of crisis including drought
- Equb not functional
- Crops not drought resistant
- Irrigation lacking
- NGO aid
- Afforestation programme failed
- People given oxen due to drought had to sell them to buy food
- Do'oma – government resettled drought-affected people
- Tax beyond capacity due to drought
- Food shortage made young men too weak for abduction

2003 data paper cross-site comparisons

- Did market-integrated sites suffer less?
- Did sites with *enset* production suffer less?
- Did pastoralist sites suffer more?
- Are coping strategies different in food deficit sites from food surplus sites?
- Many respondents reluctant to simply attribute deaths to 'famine'

Designing a new research project

Step 1: Design the abstract conceptual framework

Think creatively about all aspects of the topic

Question: what is it about the 2015-16 drought that it would be useful for government and development partners to know

Common questions – again off the top of my head

1. What happened –belgs, mehers 2015 2016
2. How it affected production of staples, other rainfed crops, irrigated crops, fodder, water for animals, drinking water

3. Consequences for food consumption and nutrition (especially pregnant women & lactating mothers, infants and children, adolescents)
4. Consequences for agricultural investment, debt, non-farm activity
5. Household coping strategies – rich, middle, poor farmers; rich, middle, poor landless
6. Consequences for community cohesion
7. Government aid – PSNP, EFA, other

Variable features

8. Kind of drought
9. Community context
10. Intra-community differences

Step 2: Make a conceptual matrix for each issue identified in the conceptual framework

There could be ten issues..

Continue with Steps 3 – 7 as described in Appendix 1.

Give the fieldworkers all the data for the community they are going to study.

Use the data description matrix column headings to design the light protocol to guide their anthropological research with them as a team.

Paper 7: Ways of approaching a WIDE4 round of research

This paper mainly consists of a series of questions which we will need to consider in the design of a WIDE4. WIDE3 was an extremely labour-intensive learning arena during which everyone involved put in much more time than they expected, or was funded. The results in terms of outputs have been very satisfactory but, as discussed below, the process is not repeatable. The first question is why do we want to do another round – and the first answer is that we want to know what has happened to these communities and the people in them .

What do we want to know?

How have continuing modernisation processes have affected the communities and the different kinds of people living in them?

What contributions to the community modernisations have been made by government development interventions?

What contributions to the community modernisations have been made by other forces and people?

Of particular interest are the interactions among economic, social, political and cultural developments initiated ‘from below’ and ‘top-down’ interventions by government in the community and wider context.

One of our donors raised two issues when the idea of seeking funding for a WIDE4 round came up. The first was that we should pay some attention to urban areas, and the second that we should include some new communities from the so-called ‘emerging regions’.

How do we pay attention to urban areas?

There is a recent policy discussion brief and book chapter on how urbanisation has been affecting the WIDE communities in the years up to 2010-13 (Bevan, forthcoming 2016). They show that some of the communities had expanding kebele centres which were becoming urbanised, some had urbanising ribbon development along main roads running through them, and that many were adjacent to towns – municipalities, larger towns and cities. Some were close enough to a town that people could commute for work and all had migration links with one or more towns. It would be possible to design a tailored urban module for each community through which we could learn a lot about urbanisation. I am reluctant to add any urban communities to the WIDE set as our experience in 2003-5, when we tried to study urban ‘communities’ in Shashemene and Kolfe, was that our qualitative methodological approach did not work well in places which were not well socially integrated.

Do we add any new communities?

Appendix 1 contains some suggestions of new communities in the emerging regions which we could add to the study, and of two new communities in Tigray, since the two in the current sample do not exemplify many of the rural communities in Tigray. However, new community research would be much more intensive than a re-visit to the twenty existing communities about which we know a lot, since we would have to create a baseline from scratch. Another point is that managing a project with twenty communities was very onerous and that adding four or six more would increase the burden and the budget. Also it is important that senior researchers are familiar with all the communities and this is hard enough with twenty. My personal preference would be to stick to the twenty that we have.

How do we manage a WIDE4?

WIDE3 was managed through a division of labour in which Catherine Dom took the lead on policy matters and connections, Alula Pankhurst managed the fieldwork process, and I (Philippa Bevan)

designed the methodology and led the writing of the final reports²⁵. We were all involved in liaising with the Research Officers and data interpretation and analysis and writing up. We tried various appointments of people to help with supervising the fieldwork and editing the date report documents none of which were very successful. In Stage 2 we brought in Rebecca Carter to take responsibility for two Community reports, and in Stage 3 Tom Lavers and Anthea Gordon did the same. In a WIDE4 we would need more experienced researchers to take charge of community report writing given that we would be doing twenty (or twenty-six) simultaneously. For the existing communities this would focus on the changes since the writing of the WIDE3 report; if there were new communities the community reports would be a bigger exercise.

The management of the fieldwork process would also be different from the experiences of WIDE3 where the highest number of communities which we did at one time was eight in Stage 2. It was possible to work quite intimately with sixteen Research Officers but this would be difficult with 40 or 52. One possibility, which is briefly described in Appendix 2 would be to construct teams that would visit three or four communities near to each other.

References

Bevan, P. 'Rurbanisation, urban expansion, and thickening rural-urban links 2010-13' in A. Pankhurst (ed) *Change and transformation in twenty rural communities in Ethiopia: selected aspects and implications for policy* Addis Ababa.

Appendix 1: Potential research sites for WIDE4

Options

1. Stick to the 20 existing WIDE communities
 - or
 2. Add a community from each of the Emerging Regions plus two more (in Tigray)
- Find communities where there has already been some anthropological research

Suggestions for additions

Tigray Central – near Abiy Adi – research done

Tigray West– Ada Bai – research done

Afar - Amibara district in Middle Awash – research done

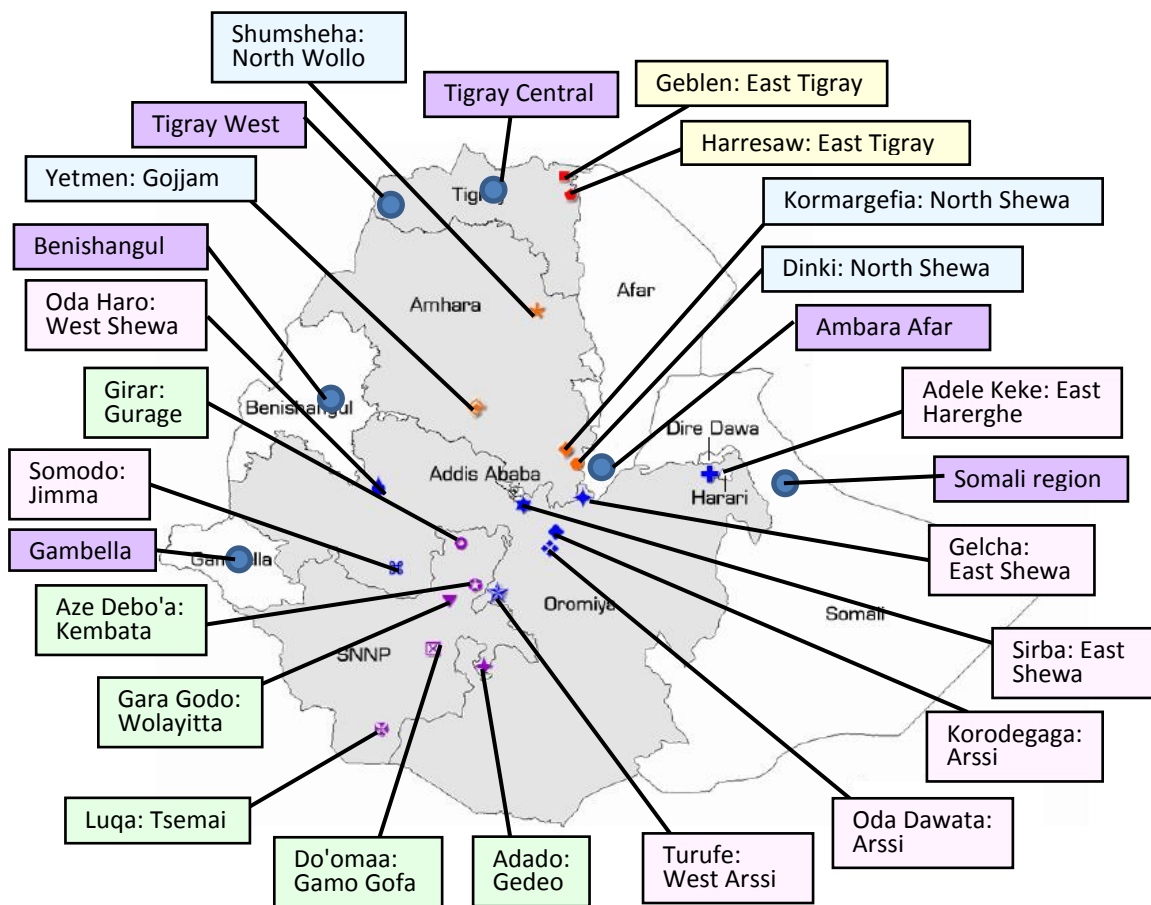
Benishangul – Metekel – research done

Gambella ?

Somali Region ?

²⁵ I would like to hand these responsibilities over to others in WIDE4, potentially acting as an adviser but not the main doer.

Map 1: WIDE3 sites plus six potential new WIDE4 sites



Tigray Central

Near Abiy Adi – where Catherine and Alula did research with Irish Aid 2010-11?

Tigray West

Ada Bai? – where Laura Hammond did research November 1993-July 1995

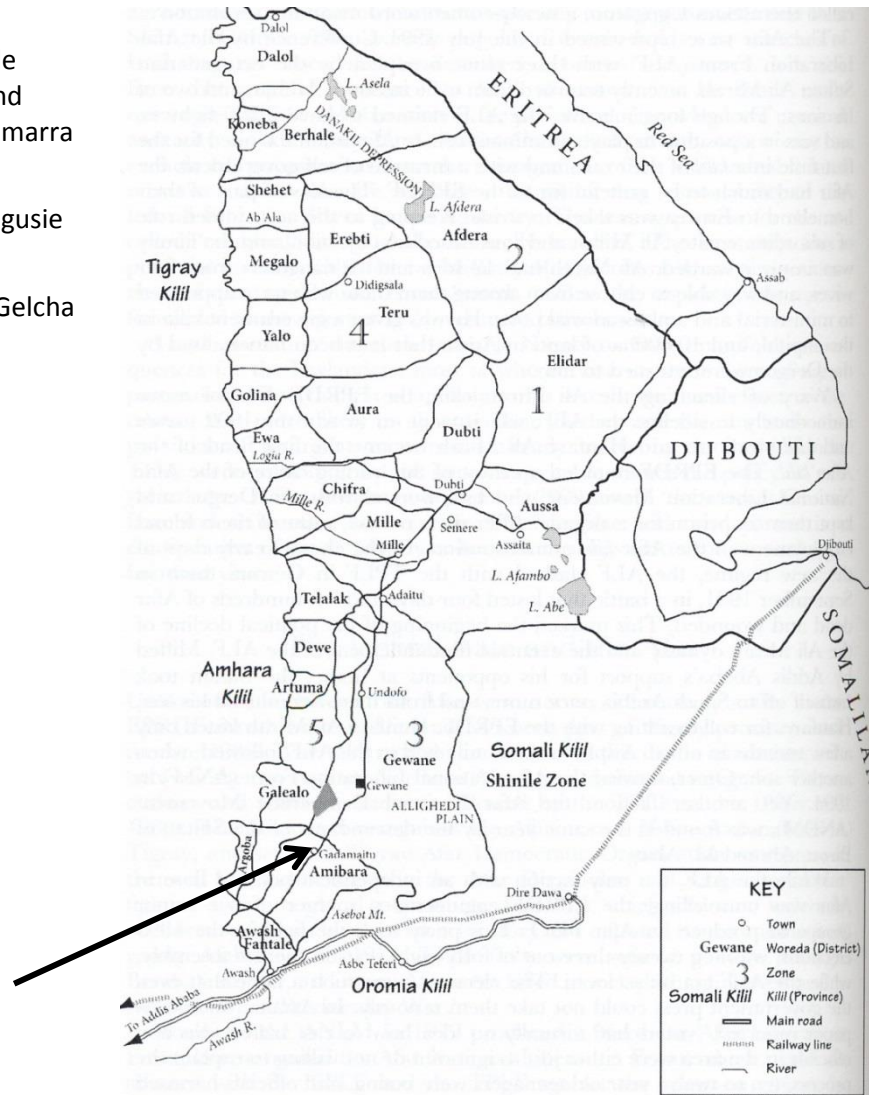


Afar

Amibara district of the Middle Awash, among the Debine and Weima sections of the Adohimarra Afar

Study by Getachew Kassa Negusie covers 18 months 1994-5

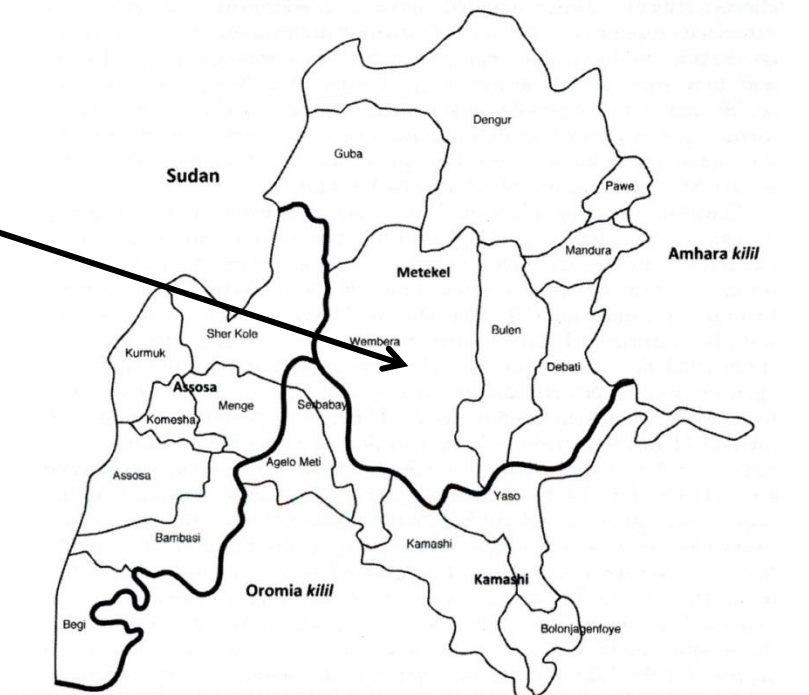
Advantage – near Dinki and Gelcha



Map 3 Afar kilil: zones & woreda

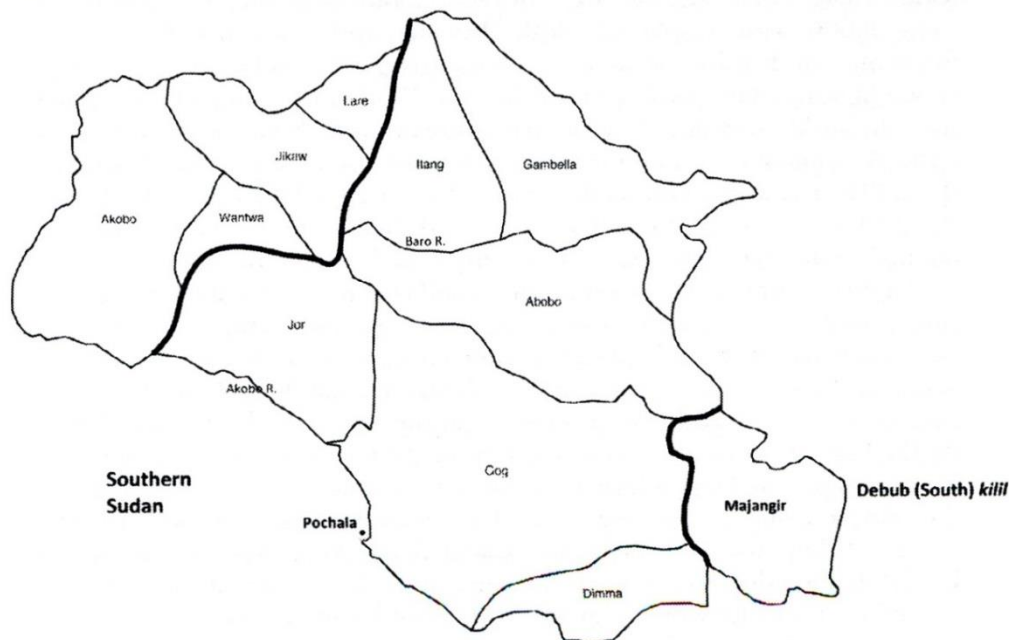
Beneshangul

Work of Berihun in Metekel zone?



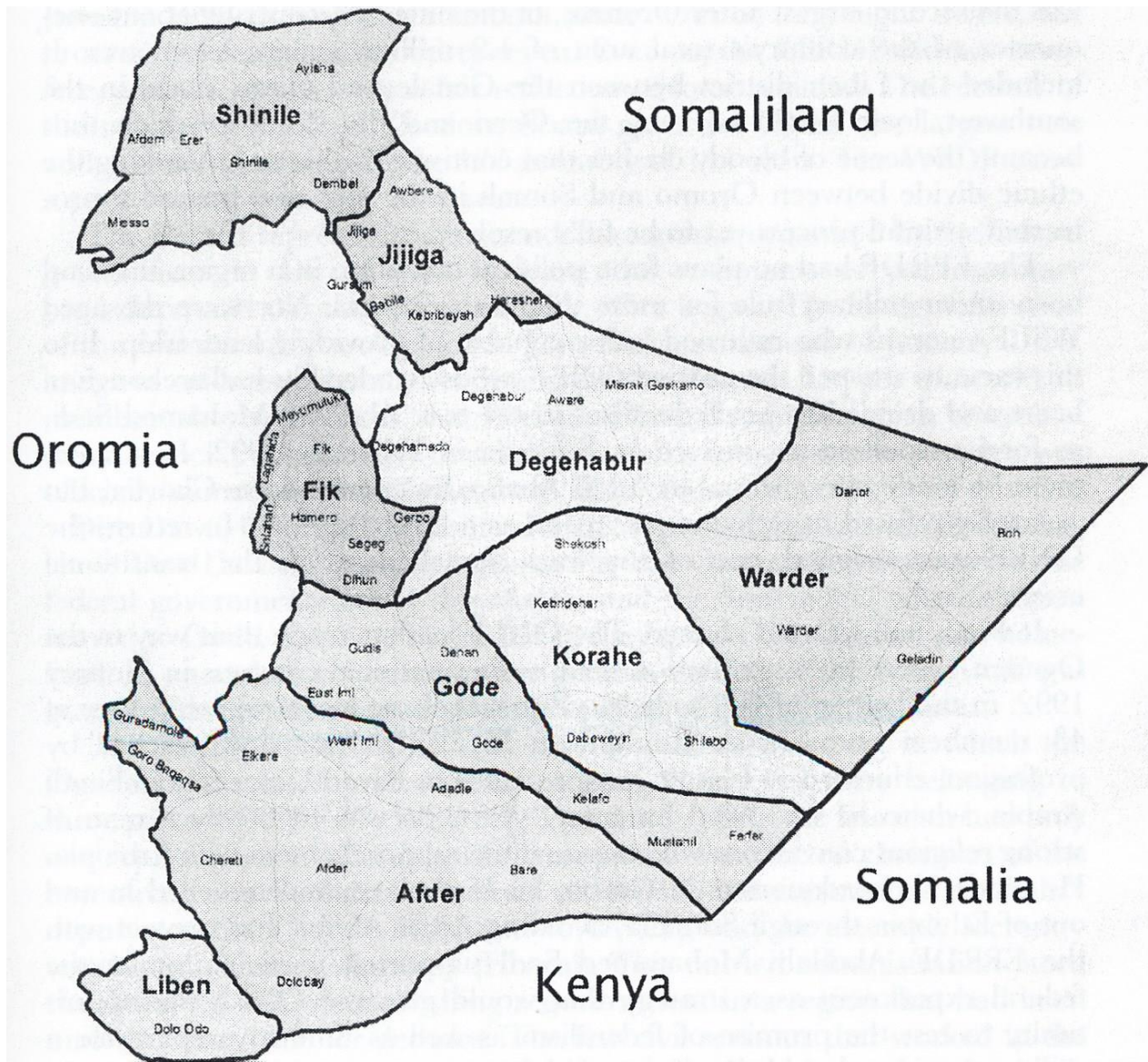
Map 4 Beni Shangul Gumuz kilil: zones & woreda

Gambella



Need to find
a community

Map 5 Gambella kilil: zones & woreda



Map 6 Somali *kilil*: zones & *woreda*

Need to find a community

Appendix 2: One scenario of team organisation for WIDE4

Teams

- Each team to cover 3 or 4 sites
- Resulting in 7 teams – see below
- Each team to have at least 1 Senior Researcher – to supervise fieldwork, write up first draft community report, and complete analysis matrices
- The 3 teams with two new sites to have 2 senior researchers? Ideally 1 male and 1 female
- Each team to be managed by a senior researcher

Region	Regional communities	Fieldwork communities	WIDE4 teams	SRO	RO
Tigray	Harresaw	Harresaw	Tigray team Senior RO (M/F) 4 ROs 2M,2F	2	4
	Geblen	Geblen			
	<i>Tigray Central</i>	<i>Tigray Central</i>			
	<i>Tigray West – Ada Bai?</i>	<i>Tigray West</i>			
Amhara	Shumsheha	Shumsheha	Amhara team Senior RO 3 ROs	1 or 2	3
	Yetmen	Yetmen			
	Kormargefia	Kormargefia			
	Dinki	Dinki			
Oromiya 'East'	Adele Keke	Gelcha	Eastern team Senior RO(M/F) 4 ROs+interpreters	2	4+
	Gelcha	Adele Keke			
	Oda Dawata	<i>Somali</i>			
	Korodegaga	<i>Afar</i>			
Oromiya 'West'	Sirba	Sirba	Central Oromiya team Senior RO 3 ROs	1 or 2	3
	Turufe	Korodegaga			
	Oda Haro	Oda Dawata			
	Jimma	Turufe			
SNNP	Girar	Oda Haro	Western team Senior RO (</F) 4 ROs+interpreters	2	4+
	Aze Debo'a	Jimma			
	Gara Godo	<i>Beneshangul</i>			
	Do'oma	<i>Gambella</i>			
SNNP	Adado	Girar	Eastern SNNP team Senior RO 2 ROs	1 or 2	2
	Luqa	Aze Debo'a			
Beneshangul	<i>Beneshangul</i>	Adado			
Gambella	<i>Gambella</i>	Gara Godo	Central SNNP team Senior RO 2 ROs	1 or 2	2
Afar	<i>Afar – nr Escarpment? Nr Gelcha and Dinki?*</i>	Do'oma			
Somali	<i>Somali</i>	Luqa			
			Total	10 or 14	22

* Kassa Negussie's area studied 1994-5

Staff

Potential senior researchers – need 10 or 14?

1. Kiros
2. Asmeret
3. Damtew
4. Tefera
5. Bizuayehu
6. Jerry
7. Aster
8. Workneh
9. Alima
10. Samuel
11. Dagne
12. Shiferaw
13. Yohannes?
14. Tolosa?
15. Demissie?

Any Young Lives fieldworkers?

Potential researchers

Mulu?

Advertise online

Fieldwork plan

- Two months per site – preparation – fieldwork (21 days – 3-6 researchers = 63-126 days) - report writing – matrix completion – each site should be done before the next is started
- For those with 4 sites this adds up to eight months
- Those with 3 sites – and only 3 researchers - could have more fieldwork days
- The use of new technologies for recording and exporting data should be explored

Work plan

Durations	Phases	Activities/plans
2 months	Inception phase	Final update of Macro Level Policies, Programmes and Models Entering Rural Communities
		Final revision of Paper WIDE4 Methodological Framework and Fieldwork Plan
		Design of draft research instruments, reporting documents and analysis matrices
		Consultative workshops and meetings with stakeholders re topics
		Final design of research instruments, reporting documents and analysis matrices
		Recruitment of fieldworkers
9 months	Fieldwork	Fieldwork training Supervisory visits to the communities New fieldwork and preparation of database De-briefing workshops
0.5 months	Early dissemination & feedback in workshops	Early dissemination – Rapid Briefing Note and topic workshops for feedback in Addis Ababa
4 months	Data interpretation & analysis	Data interpretation and writing of community reports
		Comparative data analysis
4 months	Writing	Writing of Final and Summary Reports
		Writing of Policy Discussion Briefs
		Writing of methodology guide
0.5 months	Policy dissemination	High Level Forum and donor meetings presenting Discussion Briefs
20 months		