

Southern Nations Nationalities and People's Region (SNNPR) LIVELIHOOD PROFILES

Regional Overview

Introduction



Implemented
by FEWS
NET in
collaboration
with
DPPA/B

Funded by
USAID



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Contents

	Page
INTRODUCTION	1
THE USES OF THE PROFILES	1
KEY CONCEPTS.....	2
INTRODUCTION TO THE HOUSEHOLD ECONOMY APPROACH.....	3
WHAT IS IN A LIVELIHOOD PROFILE	6
METHODOLOGY	7
REGIONAL OVERVIEW	8
INTRODUCTION	8
GEOGRAPHY AND CLIMATE	9
RURAL LIVELIHOOD ZONES	11
RURAL SOURCES OF FOOD AND CASH: MAIN FINDINGS AND IMPLICATIONS.....	13
RURAL LIVELIHOOD ZONE SUMMARIES	20

Introduction

The Livelihood Profiles that follow document how the rural populations of the Southern Nations, Nationalities and Peoples' Regional State (SNNPR) live. A *livelihood* is the sum of ways in which households make ends meet from year to year, and how they survive (or fail to survive) through difficult times.

There is increasing interest in using livelihoods analysis as the 'lens' through which to view a number of subjects. These subjects range from emergency response to disaster mitigation to longer term development. The interest rests upon two basic observations:

- 1) Information about a given area or community can only be properly interpreted if it is seen against the context of how people live.
- 2) Interventions can only be designed in ways appropriate to local circumstances if the planner knows about local livelihoods and whether or not a proposed intervention will build upon or undermine existing strategies.

Two main products are offered here:

Regional Livelihood Zone Map

The map shows the division of the Region into homogeneous zones defined according to a livelihoods framework.

Livelihood Zone Profiles

The Profiles describe the major characteristics of each Livelihood Zone, including a brief differentiation of the food security status of different wealth groups. There is some emphasis on hazards and the relative capacity of different types of households in different places to withstand them.

In compiling the Profiles, a balance has been struck between accessibility and level of detail. Taken together, they provide a compendium on the livelihoods in the Region; on the other hand, the Regional Overview, including the short summaries for each Livelihood Zone, provides a more rapid introduction to the subject matter. The preparation of these Profiles was a joint activity between the USAID FEWS NET project and the Disaster Prevention and Preparedness Commission (DPPC) of the Ethiopian Government. The main focus of FEWS NET's work is early warning, food security monitoring and emergency assessment. The Livelihood Profiles have been structured primarily with these types of activity in mind. However, it is hoped that they will also prove useful to the wider development community.

The Uses of the Profiles

The livelihood zoning and Profiles presented here offer an analysis rural food security on a geographical basis. The Region is divided into homogeneous zones defined according to a livelihoods framework. A brief description of each zone is provided, including an analysis of the position of different wealth groups within the zone. It is envisaged that this product will be useful on three levels, as follows.

1. An Introductory Guide to Food Security in the Region

The Profiles pack considerable information and analysis into a few pages of presentation. They should therefore form a useful briefing for a newcomer who needs to get a grasp of food security conditions around the Region. As far as this is consistent with ground realities, the geographical divisions into Livelihood Zones is in single pieces – i.e. a given zone is not split into several non-contiguous parts - so that the reader can take in the general pattern and the basic differences between areas and populations.

Development planners can also benefit from using the Livelihood Profiles. One objective of development is to reduce people's vulnerability to hazard and to increase their capacity to cope. An important first step is to understand who is vulnerable, to which hazards, and why. Likewise, efforts to reduce poverty require an understanding of how the poorest households normally survive in different areas of the Region and the reasons for their poverty.

2. Early Warning and Food Security Monitoring

Most early warning and food security monitoring systems draw heavily from two information sources: (i) crop and/or livestock production data; and (ii) market price information. Given the predominance of production data, local food security is often equated with production outcomes. Hence, a chronic or temporary production deficit against local food requirement is immediately translated into chronic or temporary food insecurity.

This is almost never the whole story. A full account of the Household Economy includes both what food people produce, and what cash people earn to purchase food. Thus, data on casual employment or wild foods, or charity from relatives or the sale of handicrafts is equally important to the livelihood story as data on crop and livestock production.

Using a baseline Livelihood Profile, we can then inquire into household capacity to adapt to economic stress, especially failed crop or livestock production; and we can appreciate household activities at different periods in the yearly cycle. All of which feeds directly into our analysis of need, helping to answer key questions such as; which areas and what types of household are likely to cope should a hazard strike and which will need assistance? What types of intervention will be most appropriate, and when and for how long should they be implemented?

Thus for instance one could point to the position of poor households in a given geographical area who are highly dependent on coffee harvesting employment. If the harvest is seriously reduced for any reason, their labor will be less in demand: can they find alternative income elsewhere – and will they be competing with people from other zones in these activities?

Officers working within the Regional early warning system have an immense knowledge of their Region. The livelihoods approach helps to provide a framework for the full use of that knowledge, as well as adding a new level of information to it.

3. Policy Development

Disaster management has been the main impetus to the spread of early warning systems. The rationale in early warning is to improve the efficiency in the scale and timing of emergency food aid. However, increasingly planners are looking at alternatives to food aid in early emergency intervention—and this often requires changes in policy and practice. A case in point is the stabilization of market prices for basic foods. Livelihoods analysis can expose the likely effects of such interventions on different households' capacity to survive a crisis. The analysis can also recommend the optimum timing for intervention.

Livelihood analysis can also be applied to other policy changes. For example, if government taxes on trading of a cash crop were reduced, or new charges were made for government veterinary drugs, what would be the impact on households? More generally, the household viewpoint offers a more secure footing for looking at the increasingly voluminous discussion of poverty alleviation. It allows one to look at the story which lies behind Regional statistics.

Key Concepts

Risk, hazard, vulnerability and **need** have well-established meanings in the context of disaster management. They are, however, frequently misused in the context of food security. The meaning of these terms is perhaps best explained with an example (see below).

Defining Risk, Hazard, Vulnerability and Need _____

- Drought is a major **hazard** affecting crop and livestock production in several parts of Ethiopia.
- Poor households are more **vulnerable** to (i.e. less able to cope with) drought than better-off households; they have fewer reserves of food or cash to fall back on, and fewer options for generating additional income.

- Poor households living in drought-prone areas of the Region are more **at risk** of a food shortage than other households because they are both exposed to and vulnerable to the drought hazard.
- Once a drought strikes, the poor are the most **in need** of food assistance.

To be at risk of food deficits you must both be exposed to a hazard and be vulnerable to that hazard, as in the case of poor households in the drought-prone areas in the above example. Because vulnerability is so closely linked to hazard, it follows that there is no general state of vulnerability; people can only be vulnerable *to something*. For example, farmers cultivating along a river margin may be vulnerable to flood (which is likely to wash away their crops), but may not be vulnerable to drought (since they can irrigate their crops using water from the river). Likewise, pastoralists may not be very vulnerable to drought provided they can move freely in search of water and grazing. They may, on the other hand, be highly vulnerable to conflict if that inhibits their movement to key water points and grazing areas.

Mathematically, the relationship between risk (R), vulnerability (V) and hazard (H) can be summarized as:

R = f(H,V) Where:

Risk = likelihood of a negative outcome (e.g. food deficit)

Hazard = likelihood of exposure to a hazard (e.g. drought)

Vulnerability = likelihood that people will not be able to cope with a defined hazard.

Once a hazard has struck, it no longer makes sense to talk about vulnerable groups. Put simply, people are **vulnerable before the event**, (since this refers to their ability to cope should a hazard strike). They are **in need after the event** (i.e., those actually affected by and unable to cope with a hazard). Going back to the drought example, the poor are vulnerable to drought before the rains fail, but once they have lost their crops or livestock they are in need of assistance. For the assessment and analysis of these matters, one of the most widely used livelihoods-based approaches is the Food or Household Economy Approach, first developed by Save the Children UK in the 1990s¹. This is described further in the next section.

The Household Economy Approach

There is one basic principle underlying the Household Economy Approach. This principle states that:

an analysis of local livelihoods is essential for a proper understanding of the impact— at household level - of hazards such as drought or conflict or market dislocation.

Total crop failure may, for example, leave one group of households destitute because the failed crop is their only source of staple food. Another group, by contrast, may be able to cope because they have alternative food and income sources. These alternative sources—such as livestock to sell or relatives elsewhere who can assist—can make up the production shortfall. Thus, effective hazard impact assessments must be based on livelihood analysis, and livelihood analysis itself involves several steps (see table below).

The Livelihood Zone Map: Patterns of livelihood clearly vary from one area to another. Local factors such as climate, soil, access to markets etc. all influence livelihood patterns. The first step in a Household Economy Analysis is therefore to prepare a **livelihood zone map**. This map delineates geographical areas within which people share basically the same patterns of access to food (i.e. they grow the same crops, keep the same types of livestock, etc.) and have the same access to markets. An example of a livelihood zone map based on information gathered from southern Mozambique is presented on page 5.

The Wealth Breakdown: Where a household lives is one factor determining its options for obtaining food and generating income. Another factor is wealth, since this is the major factor determining the ability of a household to exploit the available options within a given zone. It is obvious, for example, that better-off households owning larger farms will in general produce more crops and be more food secure than their poorer neighbours. Land is just one aspect of wealth, however, and wealth groups are typically defined in terms of their land holdings, livestock holdings, capital,

¹ See 'The Household Economy Approach', Seaman J., Clarke P., Boudreau T., Holt J., Save the Children UK 2000.

education, skills, labor availability and/or social capital. Defining the different wealth groups in each zone is the second step in a Household Economy analysis, the output from which is a **wealth breakdown**.

The Household Economy Baseline: Having grouped households according to where they live and their wealth, the next step is to generate **Household Economy baseline** information for typical households in each group for a defined reference or baseline year. Food access is determined by investigating the sum of ways households obtain food — what food they grow, gather or receive as gifts, how much food they buy, how much cash income is earned in a year, and what other essential needs must be met with income earned.

Household Coping (or Response) Strategies: Once this baseline is established, an analysis can be made of the likely impact of a shock or hazard in a bad year. This is done by assessing how food access will be affected by the shock, what other food sources can be added or expanded to make up initial shortages, and what final deficits emerge.

Outcome Analysis: The objective is to investigate the effects of a hazard on *future* access to food and income, so that decisions can be taken about the most appropriate types of intervention to implement. The rationale behind the approach is that a good understanding of how people have survived in the past provides a sound basis for projecting into the future. Three types of information are combined; (i) information on baseline access, (ii) information on hazard (i.e. factors affecting access to food/income, such as crop production or market prices) and (iii) information on response strategies (i.e. the sources of food and income that people turn to when exposed to a hazard). The approach can be summarized as follows:

Baseline + Hazard + Response = Outcome

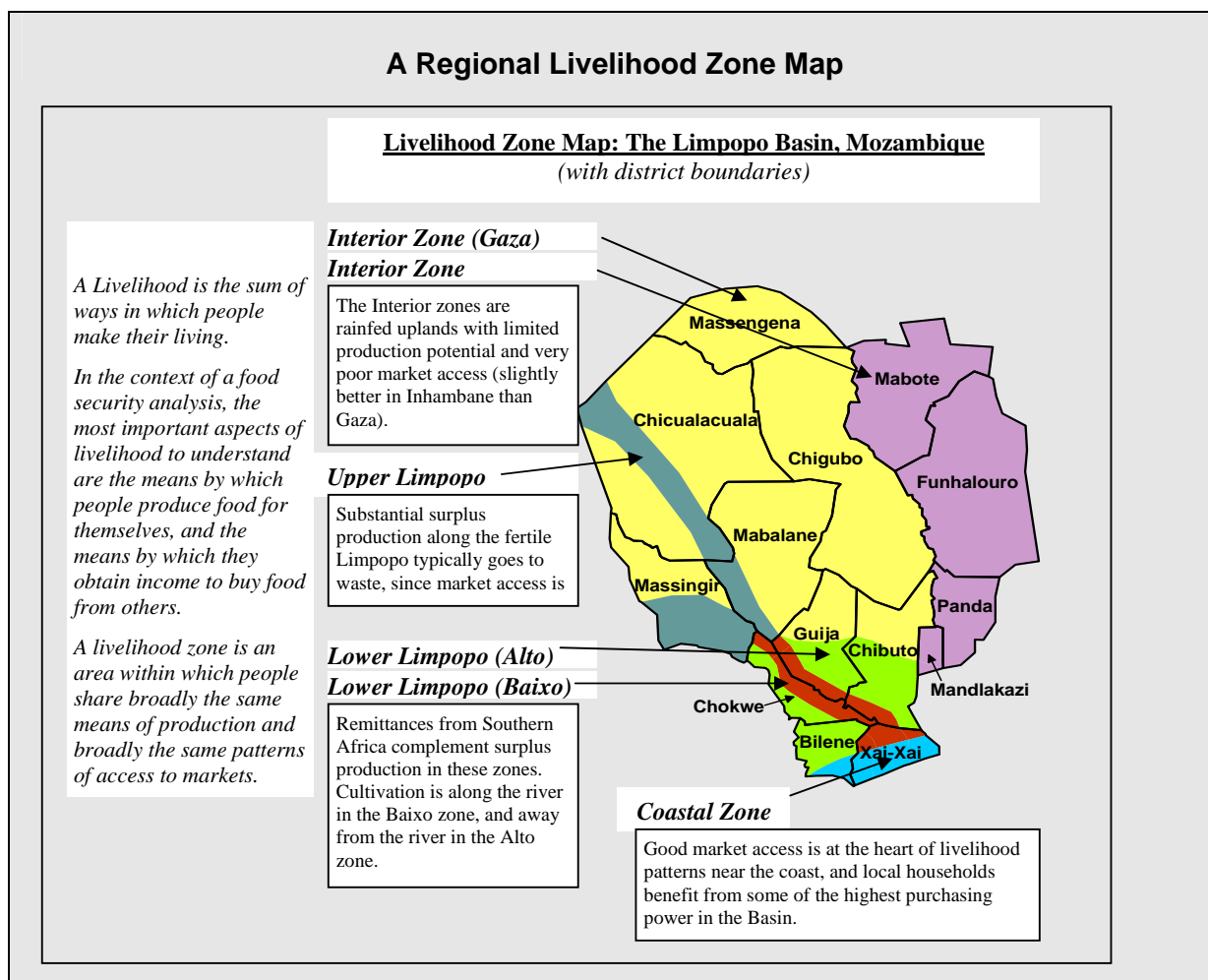
The idea is that once the baselines have been compiled they can be used repeatedly over a number of years - until significant changes in the underlying economy render them invalid. A good food economy baseline will generally be

<u>Outcome Analysis: Baseline + Hazard + Response = Outcome</u>		
<p>The baseline picture provides a starting point or context for understanding the likely impact of a shock or hazard on food access at household level.</p> <p>If, for example, ‘poor’ households are heavily dependent upon crop production, then they may be vulnerable to hazards affecting crops, such as drought or pest attack. Households that rely upon other sources of food and income are, on the other hand, less vulnerable to these hazards.</p>	<p>The first step is to superimpose the hazard on the baseline to assess its effects on food access at household level.</p> <p>This requires that the hazard be expressed in quantitative terms, e.g. a 50% reduction in crop production, a 20% reduction in milk output, etc.</p> <p>In the example below, a 50% reduction in crop production results in a 25% deficit in food access for the ‘poor’, since crops provide half of baseline food needs for this group.</p>	<p>The second step is to consider the response strategies that can be pursued by households exposed to a hazard, and the amount of food and/or income that can be generated from these.</p> <p>In the example, the ‘poor’ keep from 3-5 goats, and in a crisis can exchange 2 of these for 1-2 sacks of grain – enough to cover roughly 10% of annual food needs. This has the effect of reducing the deficit from 25% to roughly 15%.</p>
<p>Baseline</p>	<p>+</p> <p>Hazard e.g. 50% crop failure</p>	<p>+</p> <p>Response e.g. sale of 2 goats</p>
<p>= Outcome</p> <p>The outcome represents the final result, expressed in terms of the food intake deficit likely to result from a particular hazard, once household-level responses have been taken into account.</p> <p>In the example, the conclusion is that a 50% crop failure is likely to result in a food intake deficit of 15% for ‘poor’ households. Similar analyses undertaken for other types of household (e.g. the ‘middle’ and the ‘better-off’) will indicate their vulnerability to this particular hazard.</p>		

valid for between 3 and 10 years. What varies is the prevailing level of food security, but this is a function of variations in hazard, not variations in the baseline. Put another way, the level of maize production may vary from year to year (hazard), but the underlying pattern of agricultural production does not (the baseline).

The Household Economy analytical framework described here sets out the types of information and analysis that are required to understand the impact of a hazard on food security and local livelihoods. As much of this information as possible has been included in the current Profiles, which together with the Regional livelihood zone map are designed as a stand-alone product (see section on Uses of the Profiles). However, the Profiles do not contain all the information acquired to complete the full quantitative outcome analysis described in the graphic on page 4. The full set of information gathered in the SNNPR Baseline Survey has been stored on separate spreadsheets.¹

Livelihood Zone Maps: A livelihood zone is an area within which people share broadly the same patterns of access to food (i.e. they grow the same crops, keep the same types of livestock, etc.). They also share broadly the same access to markets.



Livelihood zone boundaries do not always follow administrative boundaries. Instead, a river or mountain range may be the boundary for a livelihood zone. In this way, in Ethiopia a single woreda will often contain parts of different livelihood zones, for instance reflecting lowland versus midland ecologies. By the same token, a livelihood zone will often cover parts of several woredas. However, resources are allocated on the basis of administrative units not livelihood zones, and so it is an advantage when livelihood zone boundaries coincide with district boundaries; but this

¹ The full Household Economy baseline provides quantitative information on food, income and expenditure for at least three main wealth groups within a livelihood zone. Taken together these baseline data provide detailed information on the *amounts* of food accessed and the *amounts* of cash income generated from different sources by typical households living at different levels of wealth. The Livelihood Profiles include information on the *proportional contribution* of different sources of food, in terms of their contribution of kilo-calories (the food energy measure) to total consumption, and the different types of household expenditure as a *proportion* of the overall household cash budget; however cash income sources are given in absolute Birr terms.

is frequently not possible because ecology and economy so often cross the administrative boundaries. In the SNNPR the boundaries of livelihood zones have been lined up with Peasant Association boundaries so that the populations in the livelihood zones can be identified and their numbers determined.

What is in a Livelihood Profile

The Profiles are divided up into a number of sections:

Zone description offers a general description of local livelihood patterns (crop production, livestock rearing, off-farm income generation etc.).

Markets contains basic information on the marketing of local production and on any importation of staple food into the zone.

Seasonal Calendar sets out the timing of key activities during the year. This is useful in a variety of ways, e.g. to judge the likely impact of a hazard according to its timing during the year, or to assess whether a particular activity is being undertaken at the normal time in the current year.

This is followed by four sections that provide the core information on the 'Household Economy' of the zone.

The **Wealth Breakdown** section describes three main wealth groups ('poor', 'middle' and 'better-off'), explaining the differences between these groups and how this affects potential access to food and cash income¹.

The **Sources of Food** and **Sources of Cash** sections examine patterns of food and income access at each level of wealth, relating these to the characteristics of each group. The **Expenditure Patterns** section is of interest in showing what proportion of their annual cash budget households at the different wealth levels spend on food, on household items, on production inputs etc..

The sections on **Hazards** provide information on the different types of hazard that affect the zone, differentiated by wealth group where this is appropriate.

Response Strategies describe the various strategies available to different types of household in the zone, together with a judgement of the likely effectiveness of the strategies².

Early warning involves identifying and interpreting key events that indicate that a severe food shortage or famine may be developing. The final section, **Indicators of Imminent Crisis**, draws upon the classification of early warning indicators proposed by Fred Cuny³. This section provides information on the key indicators and their likely timing by zone, based upon an understanding of local livelihoods and local patterns of response to food shortage⁴.

¹ It is important to bear in mind for this analysis that we are thinking of wealth in relative (and local) terms. Statistical data may indicate that 80% or even 90% of the population in a particular area lives below the national poverty line, but this is measuring poverty on a national, absolute scale. In a livelihoods analysis we are interested in understanding some of the differences between different groups within the community and the reasons for these – in which case it is not particularly useful to lump 80% or 90% of the population together into one group.

² The term response strategy is preferred to coping strategy for two reasons. Firstly, the term coping strategy is often used to refer to regular components of everyday livelihood (e.g. firewood sale), which strictly speaking are only coping strategies when intensified in response to a hazard. Secondly, 'coping' can be taken to imply that the strategy in question is cost-free, which is not always the case.

³ 'Famine, Conflict and Response: A Basic Guide', Cuny F. C. and Hill R. B. Kumarian Press, 1999, pp 33-42.

⁴ Fred Cuny identified two types of early warning indicator, those that provide advance warning of a famine (indicators of imminent crisis) and those that confirm the existence of famine (indicators of famine). The latter group includes indicators such as distress sales of productive assets (e.g. plow oxen), consumption of seeds, increased malnutrition and increased mortality. Indicators of famine are not generally context specific (i.e. a single list could be prepared that would apply to all livelihood zones). They are also of little use in predicting or preventing severe food shortage or famine. For these reasons they have not been included in the Livelihood Profiles.

Methodology

The livelihood zone map and Profiles presented here have been compiled through a combination of field work and reference to existing secondary data sources. A draft map of the Livelihood Zones of SNNPR was achieved through a Regional workshop held in October 2004 in which representatives of Special Woredas and Administrative Zones joined regional representatives of the DPPC, Food Security Bureau and the Department of Agriculture. The map was then revised during the course of the subsequent baseline fieldwork. This fieldwork, involving six trained field teams, was undertaken between February and September 2005. Most of the field data was collected directly at village level from community key informants and focus groups; however this was always preceded by meetings and interviews with key woreda officials; and traders were also interviewed.

SNNPR Livelihood Profiles

Regional Overview

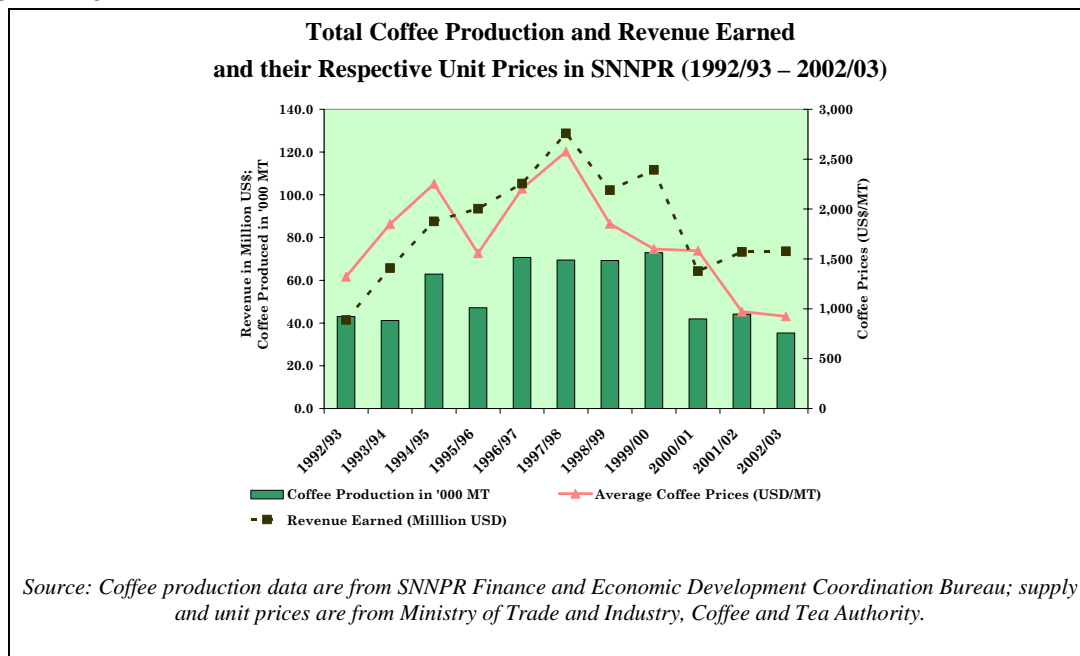
December 2005

Introduction

The 112 woredas of the Southern Nations, Nationalities and Peoples' Regional State (SNNPR) occupy most of south-west Ethiopia. The Region contains up to one-fifth of the country's population, with 12-14 millions depending on growth assumptions for the decade since the last full census. SNNPR is the region of the country with by far the greatest number of ethnic and language groups, including Gurage, Hadiya, Kambata, Wolayta, Sidama, Gamo, Goffa, Ari, Sheko, and the pastoral/agro-pastoral Hamar and Surma of the Omo River area and beyond to the west.

SNNPR boasts all of the inhabited environments seen elsewhere in Ethiopia: arable highlands (*dega*), midlands (*woina dega*) and lowlands (*kolla*), and pastoral rangelands (*bereha*). But the most characteristic environment of the Region is a relatively fertile and humid midland which contains the densest rural populations of Ethiopia. The majority of woredas have more than 100 people per square kilometre, many have over 200 ppkm², several over 300 ppkm² and one, Wenago in Gedeo Administrative Zone, as many as 600 ppkm².

The most characteristic product of SNNPR is enset, a food unique to Ethiopia, and in modern times at least, largely confined to southern Ethiopia as a staple. Enset (*Ensete ventricosum*) is sometimes called 'False Banana' because its leaves are so similar to those of the banana plants to which it is related; but it is the starchy base of the plant – the corm and the leaf-sheaths – which provides the foodstuff. This is eaten in various forms: boiled corm (*amicho*), or a fermented product in the form of a bread (*kocho*), or the best-quality product from mature plants (*bull*) in the form of pancakes, porridge or dumplings. Enset may be planted in clusters around the compound, or in dense fields. As a perennial, maturing at around four years and grown up to seven years, enset acts as a food store which can be used at any time of year; it is a relatively drought-resistant plant, and the leaves provide fodder for livestock as well as twine for rope-making.



However, enset is virtually never the sole food-source of households and is rarely their chief marketed item. Cereals are ubiquitous, and are dominant in relatively high- or low-altitude arable areas, together with smaller amounts of pulses and oilseeds. Annual root crops are important especially in midland areas, and include sweet potatoes, Irish potatoes, taro and cassava – the last of which may also be a perennial. But the varied ecologies of SNNPR also offer greater or

lesser niche areas for important cash-crops, of which the biggest is coffee. The graphic below, taken from a FEWS NET Special Report on SNNPR in 2003, shows both the importance of coffee revenue and its dramatic downturn between the late 1990s and the early 2000s, caused partly by production conditions but mainly by the collapse in international coffee prices. Both production and prices have since substantially recovered.

Other important cash crops are ginger and chilli peppers, and the stimulant drug leaf *chat* (*Catha edulis*) has been an increasingly marketed product in recent years. Honey comes mainly from lowland areas, and there is more localized production of bananas from irrigated plots (especially in the Chamo-Abaya Irrigated Banana Livelihood Zone), whilst the cardamom-like spice *afromomum* is a still more localized product (notably in Basketo Melo Coffee Livelihood Zone), as are wild spices from the forests of the far west of the Region where honey is also collected. Eucalyptus poles are a widely marketed product in middle and high altitude areas, feeding the upsurge since the mid 1990s in building in cities which requires the poles in great numbers particularly for scaffolding. Finally there are livestock, not only amongst pastoral groups in the rangelands of the south-west, but in crowded agricultural areas where cattle are often hand-fed, and butter is an important marketed item, and oxen are fattened for the meat market. Most of these cash-earning items reach the Addis Ababa market, and products from areas in relative proximity to Addis Ababa, in the north-east, east and central areas of the Region, gain significant producer-price advantages through competition between traders and lower transport costs.

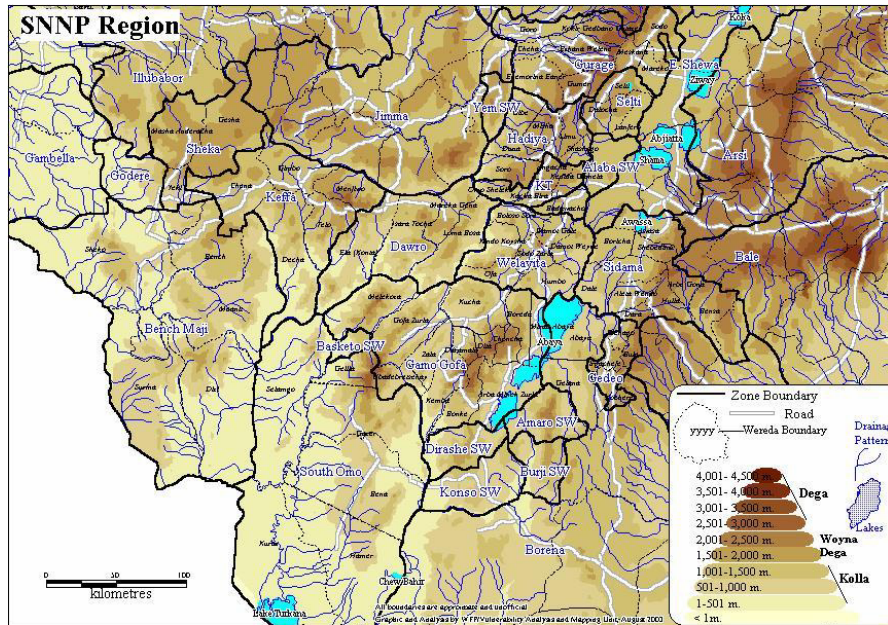
The Regional capital, Awassa, is the only really big urban center in the Region, and during the last dozen years it has grown substantially in size and economic activity. It thus offers an important demand for labor, not least for building construction, which is partly filled by rural people who either reside nearby or migrate seasonally. But Awassa is located near the eastern limit of the Region, and it is northwards beyond the regional boundary, and on or near the main national highway which proceeds to Addis Ababa, that towns of some size are otherwise to be found: Shashamene, Ziway, Nazret. However, compared with these, Addis Ababa itself provides by far the greatest labor market both for seasonal migrant workers and for those who settle and send back remittances to their families. Not surprisingly it is the far northern areas of SNNPR, Gurage, Siltie and Hadiya Administrative Zones, which have the most intense employment relationship with Addis Ababa. The irrigated farming establishments on the Awash River, dominated by the Metahara sugar plantation, also offer seasonal employment to numbers of people from the east/north-east half of the Region. For the north-west areas of the Region, Jimma town in Oromiya provides some employment, but it is rather the surrounding coffee industry – the basis of Jimma’s wealth – which invites seasonal labor migration. On the other hand, the southern, south-western and far western populations are mainly isolated from external labor demand; and more generally it can be said that for the Region as a whole, the national commodity market is far more important than the national labor market.

Despite a more or less dense population making do on relatively small plots of land, SNNPR overall is not as food insecure as other Regions to the north and east. Despite the record of erratic rainfall in some parts, outright drought of the kind which destroys a year’s crop production and/or kills off great numbers of livestock has not struck SNNPR as it has struck some other regions. More fundamentally, the bimodal and generally relatively abundant rainfall has allowed the diversity of food and cash crops as well as intensive livestock production noted above, and this in itself makes for less risk than exists in an economy with a single rainy season and high dependence only on staple cereal crops. But also the spread of different harvests during the year reduces the effect of the annual ‘hungry season’ associated with the finishing of household grain stocks and dependence on food market with seasonally rising prices. In several highly populated areas, for instance, there are two sweet potato crops in the year, the second of which falls exactly when access to grain has declined. If this is diminished, e.g. by an attack of sweet potato butterfly, then enset provides an important buffer. However, the pressure of population on land means that the poorer third to half of the rural population operate on such small plots – often well under half a hectare – that they have very little margin of harvest stocks or livestock assets to withstand shocks, whether to food production or to cash crop prices. Given their dependence on the markets for food, for cash crops and for labor, it is difficult to distinguish between food insecurity and income insecurity. That is why it is important to obtain the rounded view of their livelihoods which is offered in the Profiles.

Geography and Climate

With a total land area of about 112,000 square kilometers, therefore some 10% of the area of Ethiopia, SNNPR extends west from the Rift Valley as it runs through southern Ethiopia. The Rift Valley lakes, in a line from north-east to south-west, roughly mark the eastern borders of the territory: Lakes Ziway, Awassa, Abiyata, Shala, Abaya, Chamo, Chew Bahir and finally on the border with Kenya, the northern tip of Lake Turkana into which flows the Omo River. That river is served by the biggest drainage pattern in the Region, entering from the north along the boundary between Wolayita and Dawro Administrative Zones and defining the northern-western boundary of Gamo Gofa Administrative Zone before the river enters the main valley in South Omo, with some drainage from Bench Maji. There are other more

localized drainage areas, notably those serving the Bilate River which runs into Lake Abaya and the Weito River which runs into Chew Bahir.



The Region’s cool highland terrains are not extensive, but they are densely populated. Notable highland areas are in Gurage and Hadiya Administrative Zones in the north-east, in Sidama and Gedeo Administrative Zones where they form a south-western leg of the Arsi-Bale massif, and in the Gamo and Gofa highlands of the center/south-west. The dominant, temperate midlands are relatively ‘wet’ or ‘dry’ mainly depending on their altitude within the range of roughly 2500 to 1500 meters above sea level, and this has an effect on the relative success of enset or coffee production, to name two key products. The main lowland areas stretch to the south-west and west, mainly in South Omo and Bench Maji Administrative Zones, and with their relatively high temperatures and low rainfall they are particularly the scene of agro-pastoralism. Elsewhere there are smaller areas of more arable lowland, for instance surrounding Lakes Abaya and Chamo in the Humbo, Arba Minch Zuria and Amaro Special woredas and further south in Dirashe and Konso Special Woredas. But the relatively narrow Bilate river valley is more or less an agro-pastoral lowland.

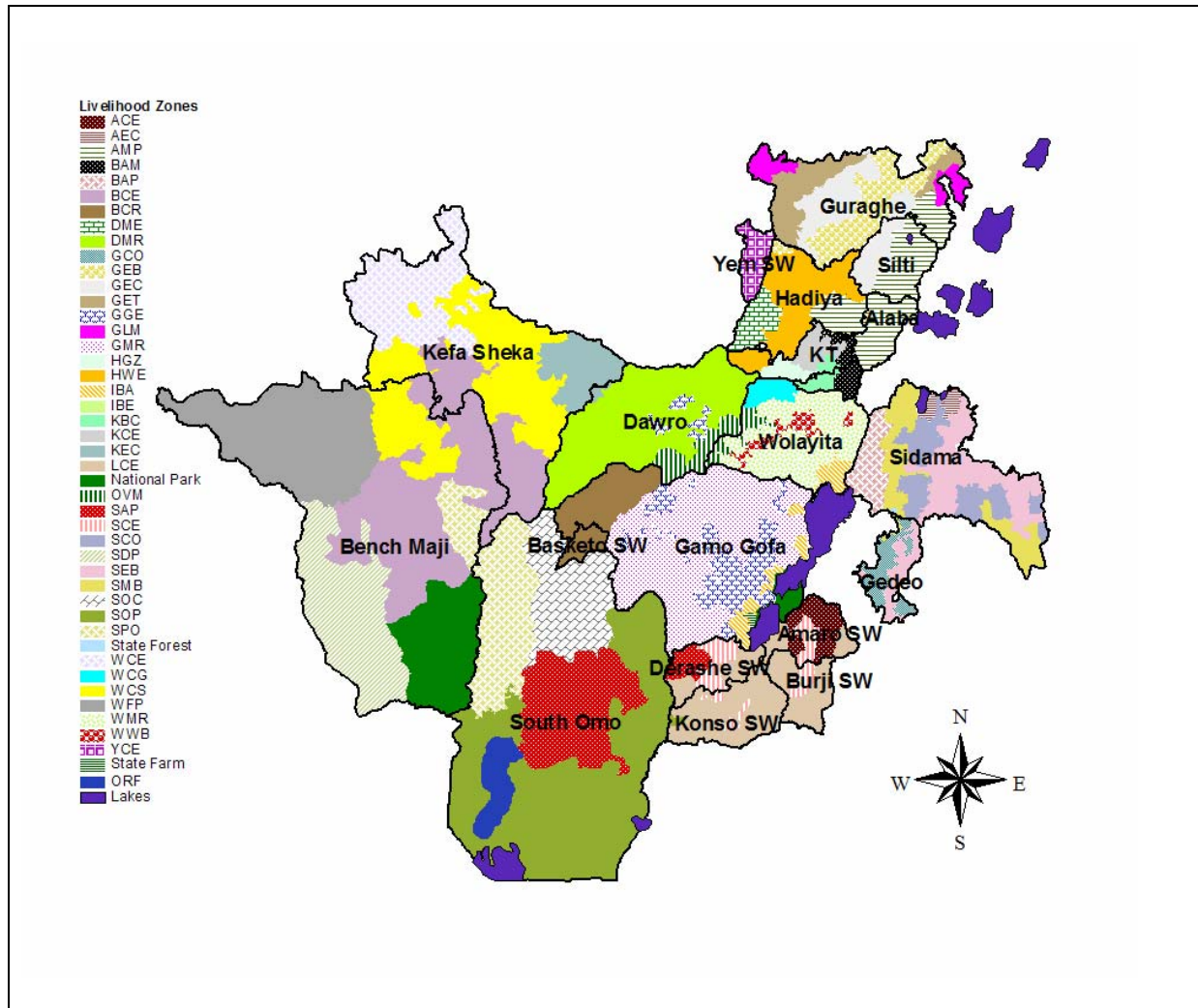
SNNPR is a region of relatively high rainfall by Ethiopia standards. Few woreda reporting stations show under 1000mm of annual precipitation in the 30-year mean 1971-2000. Those that do are lowland areas such as the Hamer rangeland (601mm) and the lowlands around Lake Abaya mentioned above (around 900mm), whilst Konso (609mm) has the lowest rainfall for an arable area – and this is where a traditional technique of land terracing helps to conserve soil moisture. By contrast the highest rainfall is found in the north-western areas of Masha Anderacha (2180mm) Gesha (2004mm), Yeki (1776) and Bench (1735mm) which are mainly in the Sheka and Kaffa Cereals and Enset and the Western Coffee and Spices Livelihood Zones. Elsewhere the Limu area scores high (1811mm, in the Hadiya-Kembata Cereal and Enset Livelihood Zone), as does the Gamo highland at Chencha (1704mm, in the Gamo Gofa Enset and Barley Livelihood Zone). The range for most of the midland of the center, north-east and east of the Region, where the majority of the Region’s population live, is between 1100mm and 1500mm.

The bimodal rainfall pattern is universal, and nowhere is any month of the year on average completely without rainfall; but the spread over the months differs between areas (the patterns for each Livelihood Zone are shown under the Seasonal Activities Calendars in the Profiles). On the rangeland of Kuraz only two months on average show above 100mm (April and October) whilst Bench and Limu show virtually continuous high precipitation between February or March and October, with most months above 200mm and no month below 100mm. However, there are ‘good’ rainfall years and ‘bad’ rainfall years which are defined not only by variations in overall precipitation but by irregularities such as a late start to the spring rains which seriously delays maize and sorghum seeding, or dry spells at critical periods of growth which much reduce the grain or tuber formation in plants that otherwise look quite healthy. As a rule of thumb, irregularities in rainfall increase as altitude decreases; but in the lowlands it is not always clear what is real rainfall ‘irregularity’ and what is within a locally quite normal range of inter-annual variation. People have their own judgement when they are trying to make a living from cereal crops in areas traditionally considered suitable only for livestock grazing. In other words, it is not always clear what is a temporary climatic aberration and what is a result of chronic population pressure pushing people down the hill, so to speak.

The Rural Livelihood Zones

The SNNPR Region is internally varied and complex, and has merited division into no less than 38 Livelihood Zones, two of which are further divided into two sub-zones. By way of a regional summary it is possible to put these zones informally into six geographical areas in order to discuss them collectively in general terms, as is done in the next section: north-east; central; east; south; south-west; west. These divisions have some cohesion in terms of ethnic groups and overall economy, but such an analysis should not be pushed too far, and it is more a matter of temporary convenience.

Thus grouped, the zones are as follows (preceded by identity codes used in the graphics in the next section):

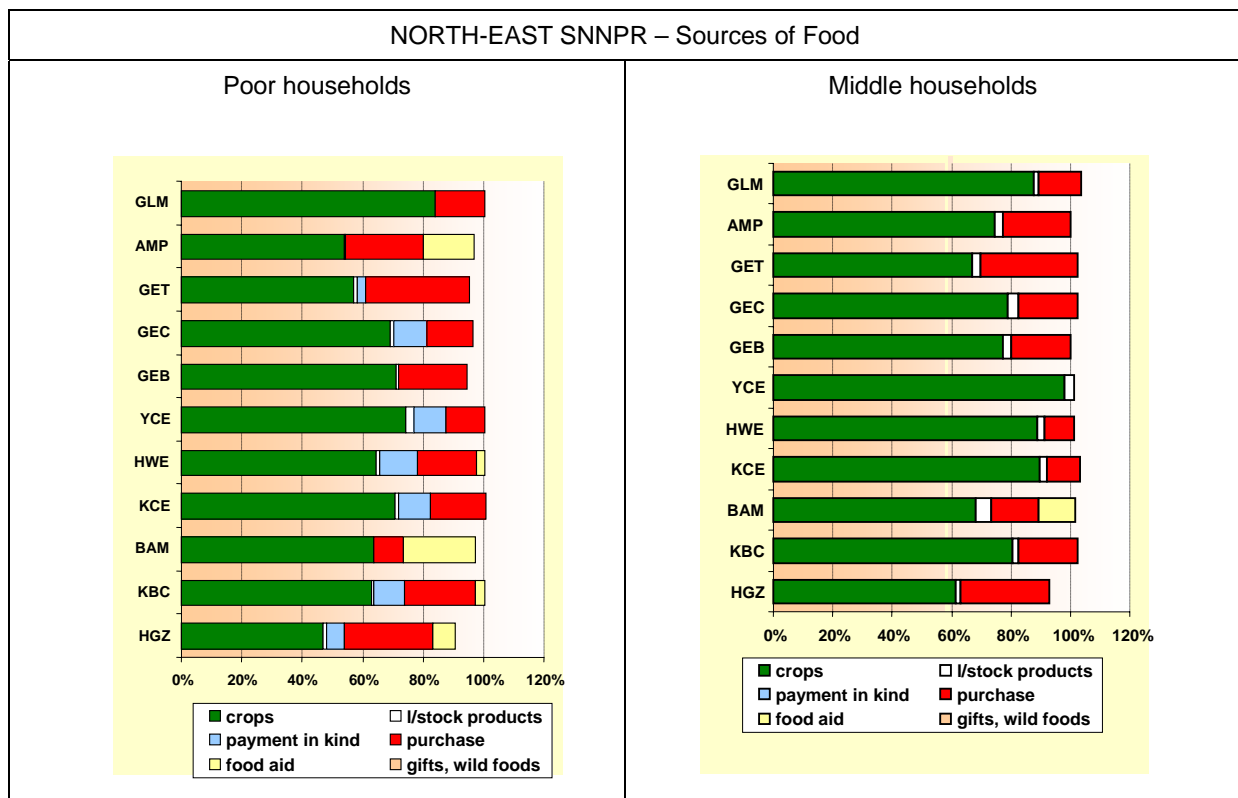


Code	Name of Livelihood Zone	Geographical Area and Agro-ecology
GLM	Gurage Lowland Maize and Teff LZ	North-east lowland
AMP	Alaba-Mareko Lowland Pepper LZ	North-east lowland
GET	Gurage-Siltie Enset and Teff LZ	North-east midland/lowland
GEC	Gurage-Siltie Midland Enset and Chat LZ	North-east midland
GEB	Gurage-Siltie Highland Enset and Barley LZ	North-east highland
YCE	Yem Cereal and Enset LZ	North-east midland/highland
HWE	Hadiya-Kembata Cereal and Enset LZ – Hadiya sub zone	North-east midland/highland
KCE	Hadiya-Kembata Cereal and Enset LZ – Kembata sub-zone	North-east midland/highland
BAM	Badewacho-Alaba Maize LZ	North-east midland
KBC	Kedida-Badewacho Coffee LZ	North-east midland
HGZ	Hadero Ginger LZ	North-east lowland/midland
WCG	Wolayita Ginger and Coffee LZ	Central midland/(lowland)
WMR	Wolayita Maize and Root Crop LZ	Central midland/(lowland)
DMR	Dawro-Konta Maize and Root Crop LZ	Central midland/lowland
GMR	Gamo Gofa Maize and Root Crop LZ	Central midland/lowland
BCR	Basketo-Melo Coffee and Root Crop LZ	Central midland/(highland)
WWB	Wolayita Barley and Wheat LZ	Central midland/highland
GGEB	Gamo Gofa Enset and Barley LZ	Central midland/highland
OVM	Omo Valley Maize and Sorghum LZ	Central lowland
IBA	Chamo-Abaya Irrigated Banana LZ	Central lowland
BAP	Bilate Basin Agro-Pastoral LZ	Eastern lowland
SMB	Sidama Maize Belt LZ	Eastern lowland/midland
AEC	Awassa Chat and Enset LZ	Eastern midland
SCO	Sidama Coffee LZ	Eastern midland
GCO	Gedeo Coffee LZ	Eastern midland
SEB	Sidama-Gedeo Highland Enset and Barley LZ	Eastern highland
LCE	Southern Special Woredas Lowland Cereal LZ	Southern lowland
SCE	Southern Cereal, Enset and Root Crop LZ	Southern midland/(lowland)
ACE	Amaro Coffee and Enset LZ	Southern midland/lowland
SOP	South Omo Pastoral LZ	South-west rangeland
SPO	Salamago Pastoral LZ	South-west rangeland
SDP	Surma Agro-Pastoral LZ	South-western western lowland/(midland)
SAP	Southern Agro-Pastoral Livelihood Zone	South-west lowland
SOC	South Omo Crop LZ	South-west midland/(highland)
WCE	Sheka Cereal and Enset LZ	Western midland/highland
KEC	Kaffa Cereal and Enset LZ	Western midland/(highland)
BCE	Bench-Kaffa Cereal and Enset LZ	Western midland/highland
ECS	Western Coffee and Spices LZ – Eastern sub-zone	Western midland
WCS	Western Coffee and Spices LZ – Western sub-zone	Western midland
WFP	Western Forest Products LZ	Western lowland/midland

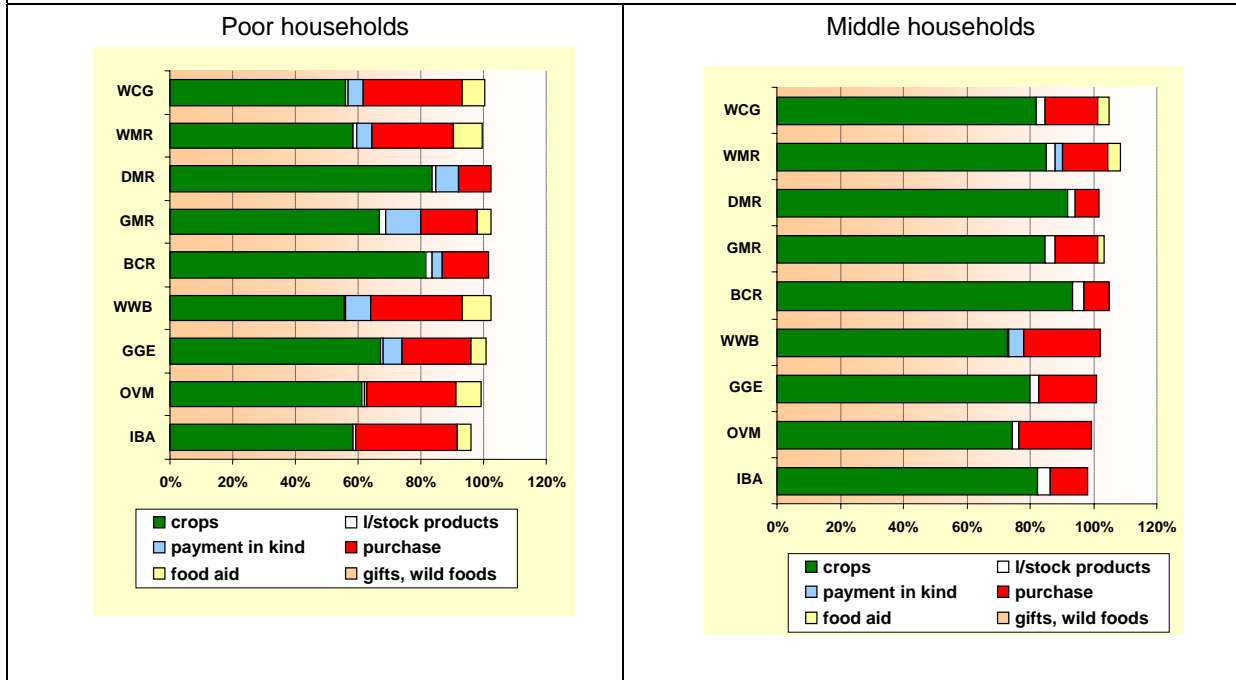
Rural Sources of Food and Cash: Main Findings and Implications

The graphics in this section offer a summary view of the two poles of household survival: how people get their food and how they get their cash. As may be seen in a third graphic item on household expenditure in the Profiles themselves, the cash is not only necessary for most people to purchase staple food during some months of the year, but is also needed to pay for essential household items: salt, spices, and stimulants (mainly coffee), and non-food items including soap and lighting oil and sometimes wood-fuel for cooking; and for clothing, school and medical expenses, production inputs, and tax.

Information on poor and middle wealth group households is shown here. They usually represent around 80% of all households, usually, but not always, with somewhat greater numbers of poor/very poor. Better-off households, who are thus rarely above 20% of total households, are generally self-sufficient in basic food, or nearly so, although they may choose to purchase preferred foods such as teff and animal products which they do not produce sufficiently for themselves. Exceptions are in agro-pastoral and pastoral areas where nobody expects to grow sufficient crops, but where everybody lives more by consuming grain than by consuming animal products. The grain is bought largely with cash from livestock sales. Other exceptions are better-off households in cash-cropping areas, e.g. in Awassa Chat and Enset Livelihood Zones and the Sidama and Gedeo Coffee Livelihood Zones, where land is at a particular premium and it is judged advantageous to devote at least as much area to cash crops as to food crops, i.e. it is more profitable to buy food with cash crop revenue than to grow more of it (although it seems all smallholders in all arable areas grow some amount of staple food).

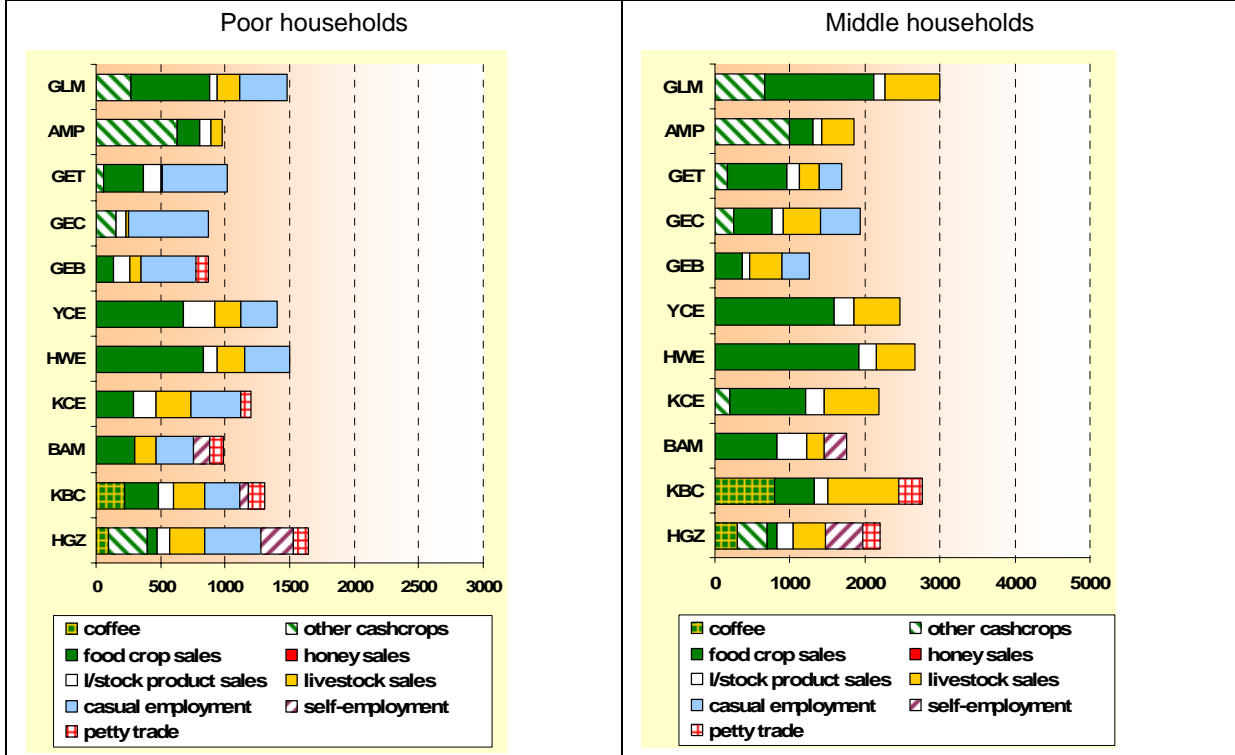


CENTRAL SNNPR – Sources of Food

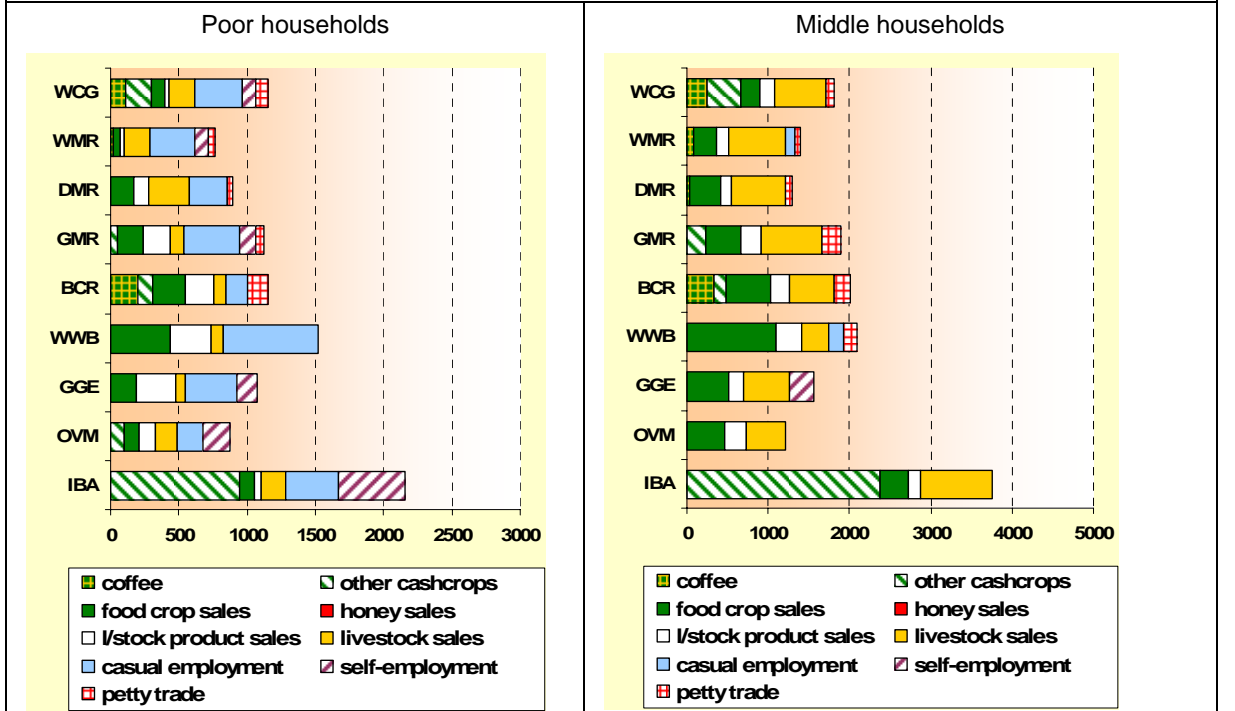


There is important variation in results within these collections of Livelihood Zones – that is partly why they are separate zones. Insofar as we may use these groupings of convenience to make general comments, we may note first that in both the north-east and central areas, which include many of the crowded locations of the Region, there is a substantial level of own-crop consumption as opposed to market purchase. Even poor households manage to produce around 60% of the food they consume, whilst middle households manage mainly above 80%. Particular exceptions in the northeast are the Hadero Ginger Livelihood Zone (HGZ), where declining soil fertility and rain failure have taken their toll, and on the positive side, Yem Cereal and Enset Livelihood Zone (YCE) which regularly produces a surplus of cereals exported from the zone on the market. In both the north-east and central areas most poor households do not normally achieve their full annual food needs as expressed in terms of an average food energy consumption of 2100 kilo-calorie per person per day. But food aid has been more widespread in the central area than in the north-east.

NORTH-EAST SNNPR – Sources of Cash

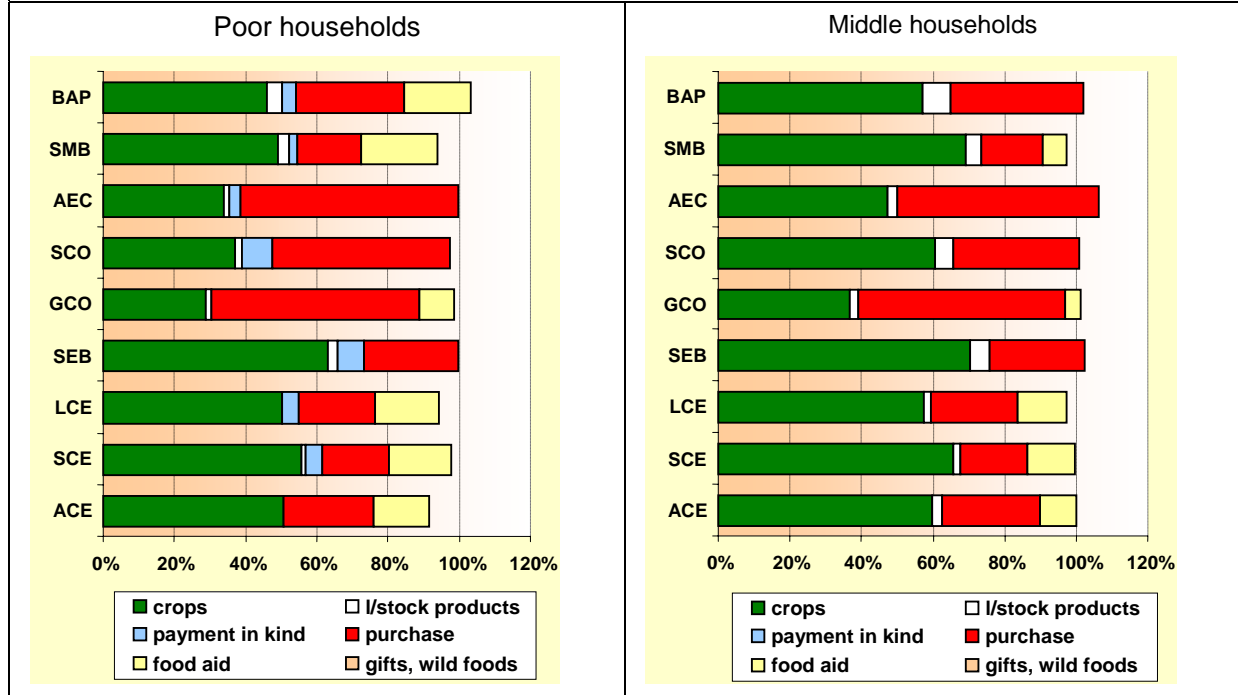


CENTRAL SNNPR – Sources of Cash



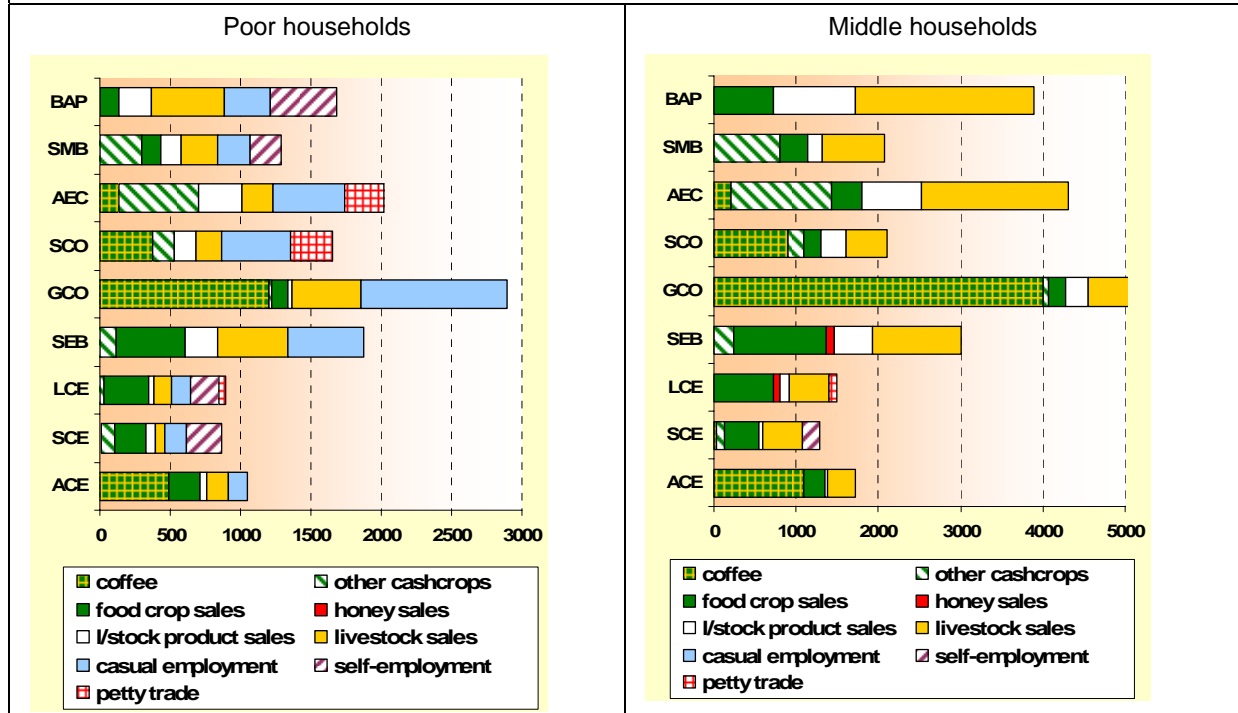
There is a common pattern throughout of poor people relying quite heavily on cash earnings from casual employment. Livelihood Zones in the north-east are generally somewhat more dependent than those of the central area on crop sales – both food and cash-crops – as a proportion of their overall cash income. Equally generally, the central area Livelihood Zones are somewhat more dependent than those of the north-east on livestock and livestock product (chiefly butter) sales, especially the middle wealth group households. An exceptional area is the lowland Chamo-Abaya Irrigated Banana Livelihood Zone, where the value of the bananas (substituted by cotton amongst those without access to irrigation) is very high due to demand reaching from as far as Addis Ababa.

EAST AND SOUTH SNNPR – Sources of Food



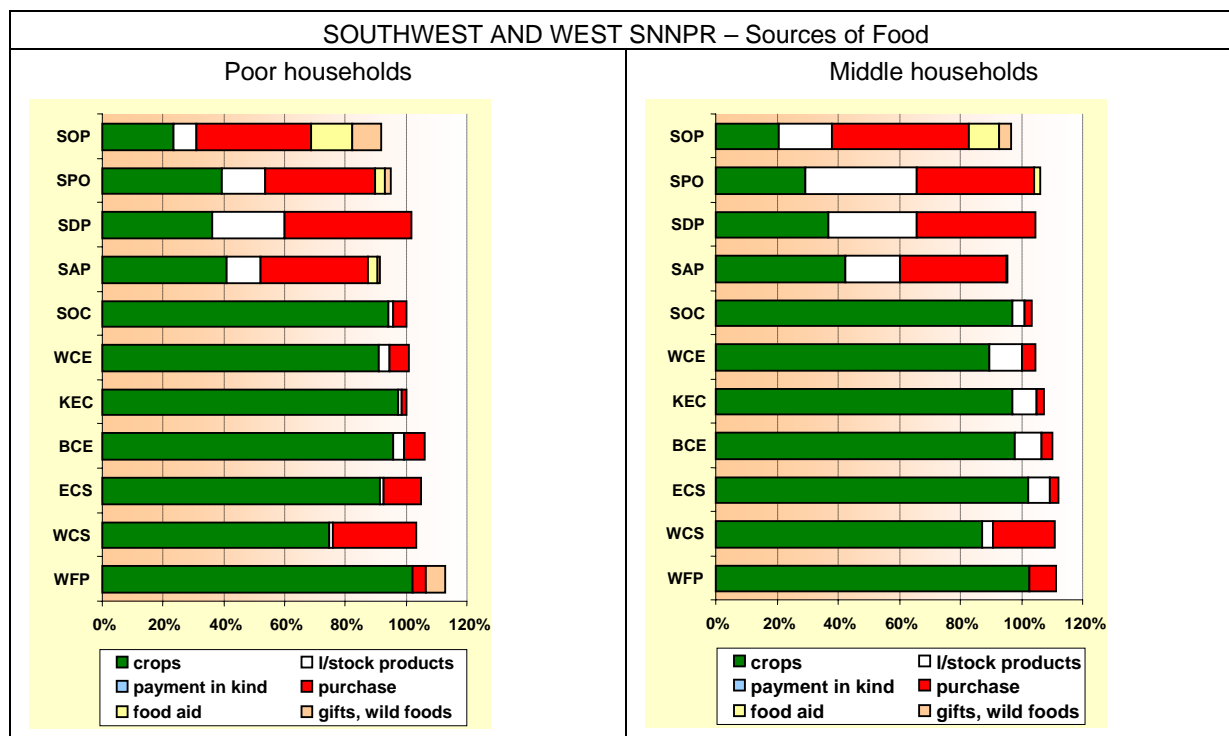
The eastern Livelihood Zones in the graphics go down to SEB (Sidama-Gedeo Highland Enset and Barley) - and the last three zones are the southern ones. The southern Livelihood Zones are essentially at lower altitude than the eastern Livelihood Zones (with the exception of the Bilate Basin Agro-Pastoral Livelihood Zone – BAP), and this is part of a connection between them: over recent generations people from the crowded high midlands and highlands have settled, or been settled, in neighbouring low midlands and lowlands as cultivators. The overall pattern is of significantly less consumption of own-grown food than in the north-east and central areas, and therefore a considerably greater dependence on the food market. However the food sources picture masks a quite acute difference in wealth between the eastern and southern areas, which becomes clear when we look at the cash income side:

EAST AND SOUTH SNNPR – Sources of Cash



The cash earnings of the eastern Livelihood Zones are far higher than in the southern Livelihood Zones, such that even poor households in the east earn substantially more than middle households in the south. Particularly outstanding is Gedeo Coffee Livelihood Zone (GCO), well known for the quality of its cash crop which inter alia gives evidently quite lucrative employment to poor people as laborers. In the east too, there are major earnings from sales of livestock and livestock products. This is not surprising in the Bilate Basin Agro-Pastoral Livelihood Zone (BAP), but is counter-intuitive in densely populated and cultivated areas elsewhere, including the Awassa Chat and Enset Livelihood Zone (AEC). The earnings here, as in other crowded parts of the Region, reflect not large numbers of animals, but rather the profit from fewer, largely cut-and-carry fed animals, chiefly cattle, which either produce the milk for butter which is sold as far as Addis Ababa, or are oxen fattened after use as plow animals and sold also to urban meat markets as far as Addis Ababa. The significant livestock-related earnings by poor people is an apparent conundrum, given that they generally own very few animals, especially cattle. The answer lies precisely in the difficulty of keeping cattle where grazing is in very short supply and fodder must be brought to the animals. This involves considerable labor, and wealthier people effectively employ poorer people to provide some of it through the *yerbee* system, whereby an agreement is made that one household takes on the maintenance of animals owned by another, and in return is allowed all or part of the milk, as well as possibly a proportion of the progeny – especially if it concerns smallstock. Similarly, the system can be used in relation to fattening of oxen, where a part of the profit goes to the household effectively hired to look after the animal. This is an important redistribution of wealth from livestock.

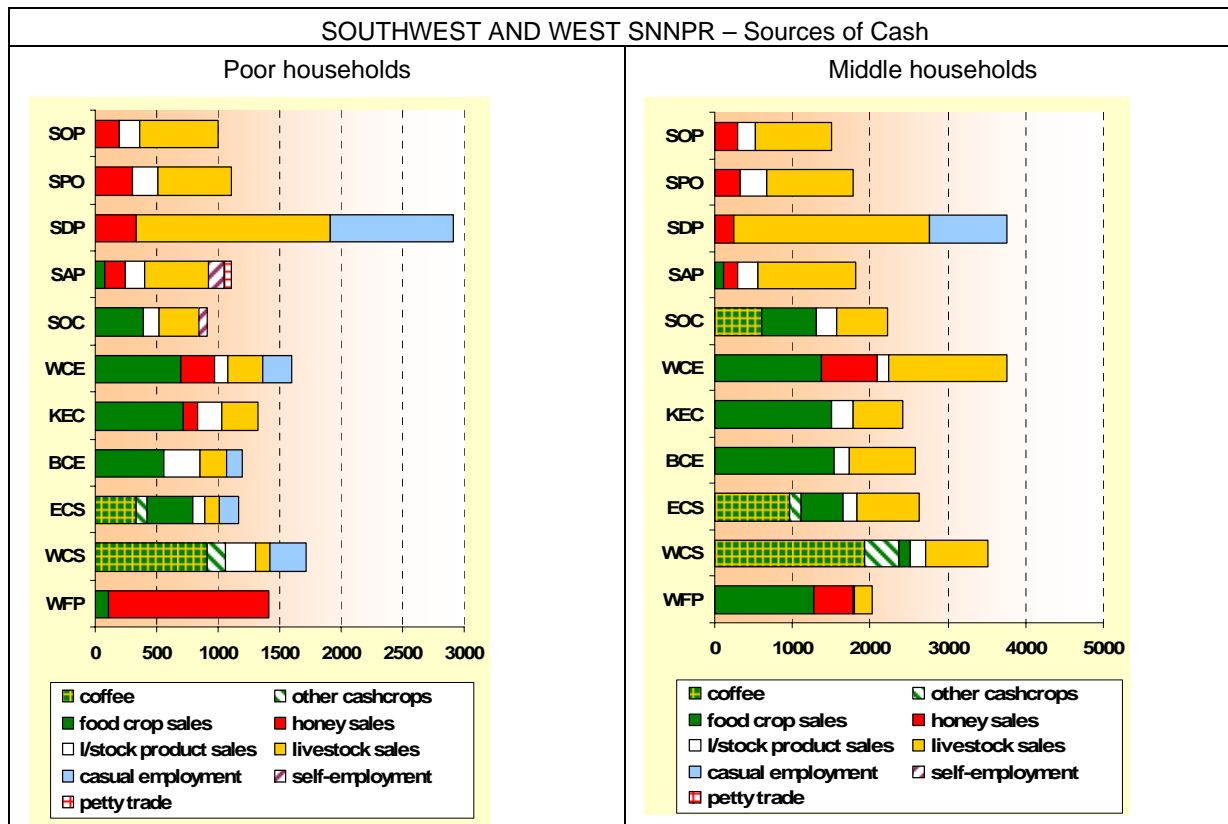
In the south, trypanosomiasis has limited cattle rearing, and only the Amaro Coffee and Enset Livelihood Zone has success with coffee as a cash crop, whilst 'self employment' tends to mean cutting and selling firewood, which finds its market up the hill. This is a prerogative of lowlands generally, but based on a natural resource which cannot generally sustain the rate of exploitation.



The graphs show a clear but not surprising contrast between the south-western lowlands (which go down to SAP – Southern Agro-Pastoral Livelihood Zone) and the rest, all of which represent the western area of SNNPR except the first, SOC - South Omo Crop Livelihood Zone which is a midland to highland area on the edge of the south-west.. The south-west lowlands are mainly inhabited by Nilotic groups who rely essentially on livestock rearing but undertake crop production to differing degrees – so that some are labelled as 'agro-pastoral', some as 'pastoral'. No such group normally gets even half of its food from its own cultivation, and indeed better-off households tend to gain no more than others from agriculture in terms of stocks per capita, whilst they own substantially more livestock. As was mentioned earlier, these livestock-oriented people may drink far more milk than most farmers, but they actually depend more on the consumption of grain – purchased or grown – than on milk consumption, in common with virtually all pastoralists today in Africa and beyond. On the whole the south-western rangeland Livelihood Zones have received far less food aid per capita than most of the other areas so far discussed; this is largely no doubt due to the rarity of severe rain failures, but also perhaps in some measure due to the isolation of these areas from the mainstream of the Regional

economy and polity. However the South Omo Pastoral Livelihood Zone (SOC) is an exception, having experienced repeated drought in the past and received significant amounts of food aid. Even here, however, the major hike in livestock prices experienced in 2005 ought to lessen any food aid requirements for some time.

In the other Livelihood Zones shown, the complete lack of food aid reflects the very high degree of self-sufficiency in staple crops and thus also a generally low degree of dependence upon the market – which is fortunate because these areas are in the main also isolated from the Regional mainstream, and indeed often from any main road.



The picture of sources of cash in the south-west rangelands shows only one surprise, and that is the element of ‘casual employment’ in the Surma Agro-Pastoral Zone which is largely associated with work in the gold mining areas beyond the Zone, mostly in neighboring Bero woreda. In the western livelihood zones there is quite a diversity of income sources, as between crop and livestock (and products) sales and items from honey to spices and coffee which are partly produced but also partly collected from the forest areas. The difference between forest-bound collection (together with some hunting) and minor crop production on the one hand, and more extensive crop production and livestock keeping on the other, broadly reflects an ethnic divide between indigenous groups and the large and increasing population of officially settled and self-settled people from further – often much further – north. The current indications are that the latter mode of livelihood is gaining the upper hand, and increasing numbers of indigenous people will join it as best they may as natural forest disappears with some rapidity.

In summary, SNNPR shows many and contrasting kinds of livelihood. The most characteristic types, however, are those which manage to support exceptionally dense rural populations living largely by primary production (and generally without substantial food aid). These are the great majority who occupy the central, eastern and north-eastern midlands and highlands. Despite some damaging fluctuations in rainfall hitting especially cereal production, and occasional blight on enset and pest attacks on sweet potatoes, and increasing costs of chemical fertilizers to augment the minimal contributions of animal dung, and advancing trypanosomiasis added to a host of common livestock diseases, and newly severe malaria debilitating humans in lower elevations, people succeed to a remarkable degree in maximising what the land can support. The Region has major advantages in its bimodal rainfall regime which extends food cultivation through much of the year, shared between cereal crops and root crops, together with enset as a perennial buffer. However the data in the Profiles shows that except in the minority of locations where enset is the overwhelming staple, maintaining stands of mature enset is generally possible only for the wealthier half of the population, whilst poorer people are forced by need – especially in years of reduced grain production – to cut enset

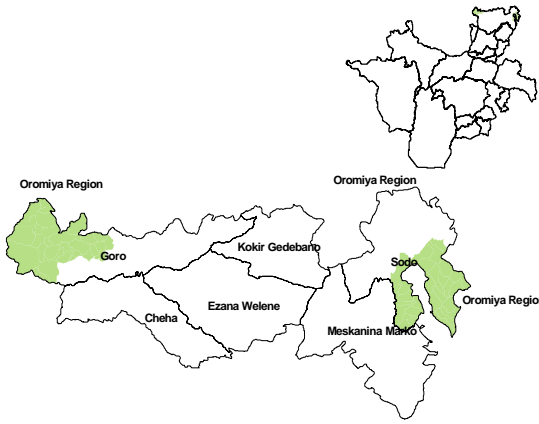
before it is mature, thus losing by far the greater part of the food potential of the plant. This calls into question whether enset is really a viable standby for poorer people in most of the territory.

SNNPR's extensive niche ecologies favor important cash crops, dominated by coffee, and these are crucial to the region's ability to pay for a net market importation of staple food in the form of grain. But not the least remarkable feature revealed by the Household Economy Baseline Study has been the importance of livestock and their products across the wealth groups, to some extent for consumption but especially for sale. The data tell us that so far from being a rich person's prerogative, earnings from livestock are crucial for even poor households to make ends meet. The principal fact is that the conversion of local vegetation into meat and butter, when very scarce local grazing must be painstakingly augmented by collected matter including crop residues, grasses and enset leaves, is worth the high labor and risks of production. The reason is the high price levels resulting from urban demand largely from beyond the Region's boundaries, which also drives other parts of the cash crop economy. In this way SNNPR is crucially linked to the central economic area of the country, dominated by Addis Ababa.


Rural Livelihood Zone Summaries

NORTH-EAST AREA

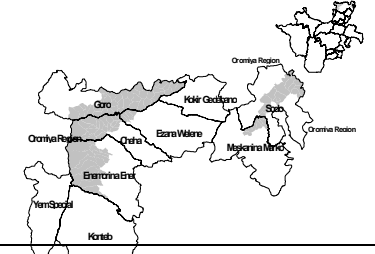
1: Gurage Lowland Maize and Teff Livelihood Zone

	<p>Split between the eastern and western lowlands of Gurage Administrative Zone, and between the Rift Valley and Omo Valley drainage systems respectively, this livelihood zone is relatively food secure and has not been targeted for food aid. Land holdings are relatively high, with poor households possessing at least a hectare, and better-off households up to five hectares. Even poor households normally grow upwards of 80% of the staple food they consume. Maize, sorghum and pulses are produced as food crops and teff is the main cash crop, but maize, wheat and peppers are sold as well, altogether bringing 60-80% of cash earnings. There are also some fruits and sugar cane. Livestock sales bring 10-20% of cash earnings; but there is a major problem of trypanosomiasis in the western part. There is no labor out-migration, but poorer farmers depend on working locally for others for part of their annual income.</p>	<p>Main Food Crops & Livestock Maize, teff, wheat Cattle Goats & sheep</p> <p>Main Income Sources Sale of: Cereals Livestock Local casual employment</p>
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2: Alaba-Mareko Lowland Pepper Livelihood Zone

	<p>This relatively food secure zone has a valuable cash crop industry that attracts migrant laborers from other zones. The population is relatively sparse and land-holdings are large enough to allow even poor households to grow nearly 60% of their food needs as well as gaining more than 60% of their cash earnings from sale of peppers, as do middle and better-off households. In addition teff and other crops are sold. Livestock production, especially cattle, is important for middle and better-off households, where sales amount to some 20% of annual cash earnings. Even poor households make around one-tenth of their income from selling butter. There is no irrigated production, and rain failure has affected production in recent years; but floods from the neighboring highlands are also a frequent problem, although at the same time as causing damage they deposit fertile silt.</p>	<p>Main Food Crops & Livestock Maize, wheat, sorghum Cattle Goats & sheep</p> <p>Main Income Sources Sale of: Peppers Other crops Livestock Livestock products</p>
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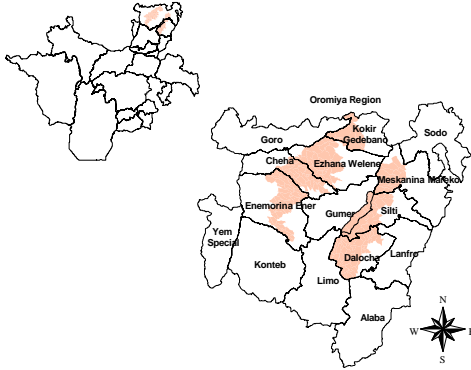
3: Gurage-Siltie Enset and Teff Livelihood Zone

	<p>This is a fertile midland/upper lowland zone, but until recently the increasing population has been unable to cultivate a large part due to government set-aside for the resettlement program and to trypanosomiasis, which severely inhibits local oxen production and encourages today some use of tractors to open the new land. Elsewhere both hand-hoes and ox-plows are used to cultivate, the latter especially for</p>	<p>Main Food Crops & Livestock Enset, maize Cattle Goats</p> <p>Main Income Sources</p>
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teff and Niger seed (the oilseed *noug*), which are the principal cash crops (together with some *chat*, coffee and onions) reaching the capital via the Jimma-Addis Ababa highway, as do livestock sold for annual festivals. Enset is the main staple food, together with maize (mostly eaten 'green'), sorghum and chickpeas, as well as some annual root crops: yams and taro. Erratic spring or main summer rains can be particularly damaging to production given the high moisture requirement in this relatively hot area, and the long cycle cereals (maize, sorghum) need both rains. In good years especially, Better-off households rely on engaging the local seasonal labor offered by poorer farmers.

Sale of:
Teff
Oilseeds
Livestock & products
Local laboring
Remittances

4: Gurage-Siltie Midland Enset and Chat Livelihood Zone

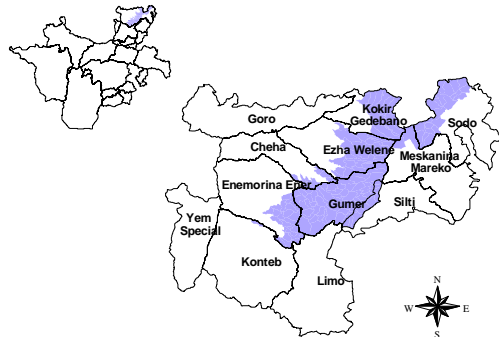


This zone supports a particularly dense population, producing a wide variety of crops as well as the main staple, enset, and the main cash-crop, *chat*. There have not been serious climatic problems. Even the poorer households produce an unusually high proportion of their basic food requirement – around 70%; but unlike the middle and better-off groups they sell rather few crops and depend heavily for cash on casual work locally and in urban centers, including Addis Ababa. Middle and better-off households get up to 40% of their cash from livestock and livestock product sales. All groups receive significant remittances from family members working long-

term in Addis Ababa: for the better-off this provides upwards of 25% of their overall cash earnings. However this long-standing source of income is under some threat as competition for work in the capital has intensified with migrants from many other areas and there are official restraints on street vending. The official tax on *chat* entering Addis has reduced its local offtake and price. Pest attacks on enset and coffee berry disease have been recent constraints to production. This has been a food secure zone, but it has been under some economic stress.

Main Food Crops & Livestock
Enset, mixture of cereals
Cattle
Sheep & goats
Main Income Sources
Sale of:
Chat
Other crops
Livestock & products
Rural/urban work
Remittances

5: Gurage-Siltie Highland Enset and Barley Livelihood Zone

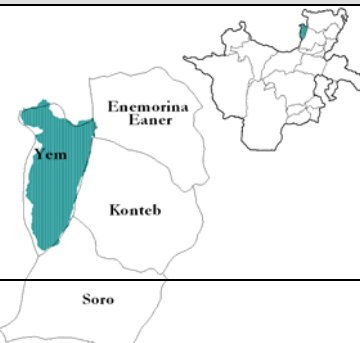


This highland (*dega*) zone has historically been self-sufficient in crop production, and households remain generally food secure, with even poor households growing as much as 70% of their staple food requirement. But the pressure of an increasing population on a limited space of arable land puts the future in question, and already there is major work out-migration of young men as far as Nazareth, Addis Ababa and even Dire Dawa, although men from poorer households tend more to look for local employment, which brings in nearly 40% of their annual cash earnings. Apart from

enset the main food crops of the zone are those typical of high elevations in Ethiopia: barley, pulses, Irish potato, kale (*gomen*). Space for pasture is so limited that it is difficult to graze oxen and even some better-off households have only one ox, and must share with neighbors to put together a plow-team. Nevertheless middle and better-off households depend on selling livestock for up to one-third of their annual cash income. Apart from food crops, land is used for eucalyptus plantations where trees for a single household often number in the hundreds: not only does this provide firewood for domestic purposes, but after two years poles are a potentially valuable item for sale as far as Addis Ababa especially for scaffolding for the burgeoning construction industry.

Main Food Crops & Livestock
Enset, barley pulses, potato
Cattle
Sheep & goats
Main Income Sources
Sale of:
Chat
Other crops
Livestock & products
Rural/urban work
Remittances

6: Yem Cereal and Enset Livelihood Zone



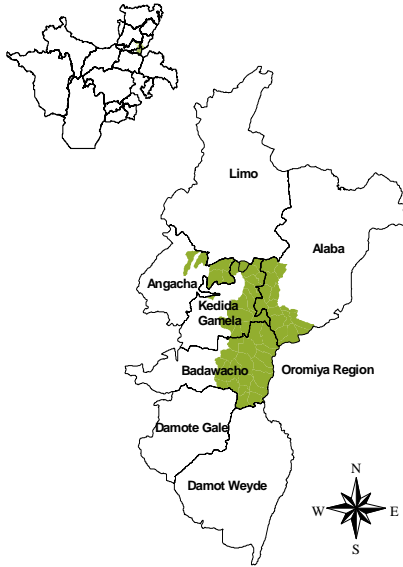
This livelihood zone is not only food secure but a source of surplus cereals and pulses for the wider market of neighboring Oromiya. The terrain is upper midland to highland in terms of altitude bands, with three factors making for an advantageous agricultural and animal husbandry picture: reliable rainfall, low population density (and therefore land-holdings higher than in more crowded neighboring zones), and a lack of the trypanosomiasis which ravages cattle in lower-lying zones. However the soil is only moderately fertile, and the use of

Main Food Crops & Livestock
enset, wheat sorghum
Cattle
Sheep & goats
Main Income Sources

chemical fertilizers is less than optimal due to cost. Enset is the main staple, but the full set of annual field crops is cultivated: wheat, barley, teff, maize, sorghum, and pulses. The middle and better-off households, with over 60% of the population, produce all the staples they need to consume, and poorer households produce nearly 80% of their requirement. For sources of cash income, crop sales predominate (including Irish potatoes), but livestock sales and products give 30-40% of earnings for all wealth groups. In addition, poorer households depend on laboring locally and elsewhere for about 20% of their cash income.

Sale of:
Teff
Pulses
Irish potatoes
Livestock & products
Casual labor

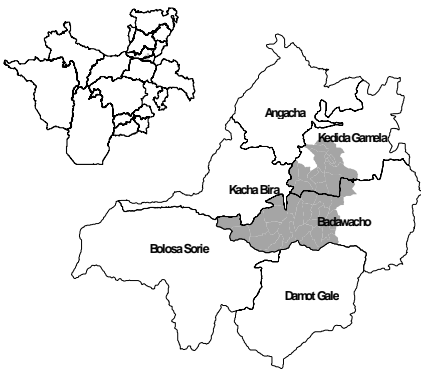
7: Badewacho-Alaba Maize Livelihood Zone



Low population density, relatively large landholdings per household, flat and fertile soils, and a *woina dega* agro-ecology together provide a conducive environment for agricultural production in this zone. However, the limiting factor is rainfall, and recurrent drought has been the cause of frequent production shortfalls in recent years, so that poorer households have depended on food aid to cover somewhat over 20% of their basic requirement even in a non-crisis year, whilst other households normally depend on the market for some 20% of their requirement. The basic staple, maize, is supplemented with sorghum, haricot beans and finger millet. Teff and maize are the main marketed crops, with good road access to main markets, including Shashamene – people sell teff and buy cheaper grains. However, for the better-off livestock sales are the single highest income earner – mainly cattle. Beyond selling some crops and livestock, poor households make ends meet by a variety of economic activities, including casual labor, selling firewood, and petty trade.

Main Food Crops & Livestock
Maize, sorghum, beans
Cattle
Sheep & goats
Main Income Sources
Sale of:
Teff, maize
Livestock & products
Rural/urban work

8: Kedida-Badewacho Coffee Livelihood Zone

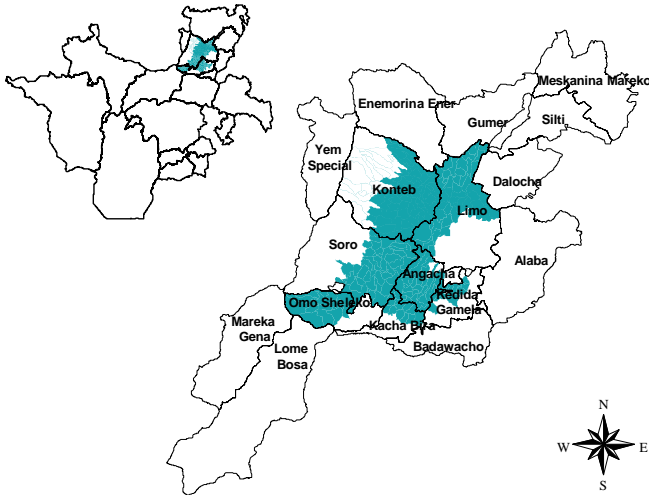


livestock/products (mainly butter) sales, casual employment and petty trade. Nevertheless, shortage of land is becoming a more acute problem for the poorer half of the growing population, and this threatens to limit their self-sufficiency in the future.

This midland zone is characterized by coffee production; but teff and wheat are also important cash crops, whilst for middle and better-off households livestock sales come a very close second to combined crop sales. At the same time, most households are able to depend on their own crop consumption for 65-85% of their staples requirement, and even the very poor (about 25% of households) produce half of their needs. With such a diversified production and market base, livelihoods have been food secure in this zone. The very poor rely heavily on working for others locally or elsewhere, but the poor (roughly 30% of households) have a better balance of crop sales,

Main Food Crops & Livestock
Wheat, teff
sweet potatoes
Cattle
Sheep & goats
Main Income Sources
Sale of:
Coffee
Teff
Livestock & products
Local/migrant labor

9/10: Hadiya-Kembata Cereal and Enset Livelihood Zone

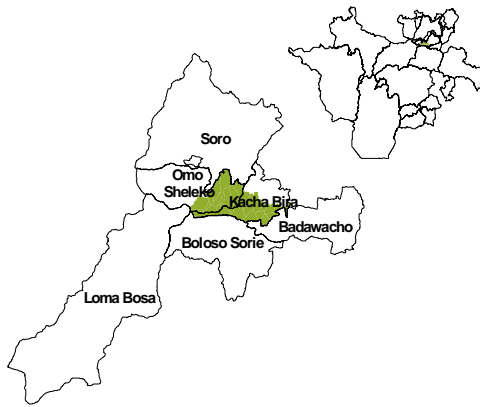


This is the largest zone in the north-east part of SNNPR, and it is densely populated. The terrain lies in the upper midland and highland altitude bands, where rainfall has been relatively reliable over recent years and despite relatively limited landholdings the population has very largely managed to remain food secure. The chief cereal is wheat, both as a consumption and cash crop. Poor and very poor households purchase or obtain as direct payment for labor between 30% and 50% of their annual staple food needs,

mainly in maize and processed enset – *kocho*. The zone may be split into two sub-zones, Hadiya and Kembata, which are differentiated by the amount of major crops produced, which is somewhat higher in the Hadiya area with slightly larger land-holdings for the middle and better-off, and with crop sales forming a greater proportion of the income of all wealth groups. On the other hand, in the Kembata area livestock sales are comparatively important for all wealth groups, and especially the poor, whilst the very poor are extremely dependent on casual work to make ends meet.

Main Food Crops & Livestock
Enset, wheat Cattle Sheep & goats
Main Income Sources
Sale of: Wheat, pulses Potatoes Livestock & products Rural/urban laboring

11: Hadero Ginger Livelihood Zone



This zone is one of chronic and frequently acute food insecurity, where poor households received nearly 10% of their basic food requirement from food aid in the reference year. It consists of lowland to midland terrain which is rugged and in large parts uncultivated due to poor soil cover. Where there is cultivation, conditions have been unfavorable over recent years, with small landholdings, relatively infertile soils, frequent rain failure and declining livestock numbers due in part to endemic trypanosomiasis. The cash-crop ginger which characterizes this zone is somewhat drought resistant, and in bad years people try to market more in order to get by; but the glut as well as poor quality reduces the

product price considerably. The main food crops are maize and sweet potatoes, with a shift towards the latter in recent years. Normally the poor (roughly 50% of households) manage to grow about 45% of their staple food requirement, whilst other households grow between 60% and 75% of requirement. All wealth groups depend heavily on the market for the balance of their food. Usually ginger and declining amounts of coffee account for some 25% of poor households' annual cash earnings whilst another 25% comes from casual laboring, including work migration which increases in bad years. By contrast, better-off households get by far the greater part of their cash from both cash crops and livestock sales, in about equal proportions.

Main Food Crops & Livestock
Maize, sweet potatoes Cattle Sheep & goats
Main Income Sources
Sale of: Ginger Coffee Livestock & products Rural/urban work

CENTRAL AREA

12: Wolayita Ginger and Coffee Livelihood Zone



This zone is mainly midland, although in the west it slopes down to dry midland and upper lowland. An increasingly dense population occupies arable plots of necessarily diminishing size, and intensive cultivation has led to increasing soil infertility for food crops. Nevertheless, middle and better-off wealth-groups, who number about 40% of total households, are normally able to produce 80-90% of their food requirements. But rains have been untrustworthy, and for the poor and very poor a serious hunger gap often appears when sweet potatoes fail in the spring season and maize planting is delayed so that the green

maize consumption is late. Enset, cassava and other root crops only fill the gap to a limited extent, and it has been normal for the very poor households to obtain some 10% of their annual food requirement through food aid, and poor households 7%, and even middle-wealth households 4%. On the other hand, growing conditions are conducive for two perennials, ginger and coffee, and despite fluctuating prices ginger production in particular has recently expanded. Nevertheless, the better-off and middle groups normally make somewhat more money from livestock sales than from cash-crop sales, whilst for the poor casual work brings in more than cash crop sales, and the very poor depend on casual work for fully 60% of their income, implying high vulnerability to any climatic or market shock which diminishes labor demand.

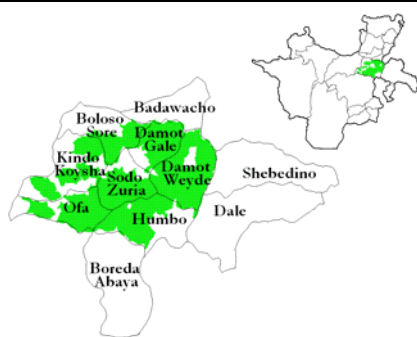
Main Food Crops & Livestock

Maize
sweet potatoes
Cattle
Sheep & goats

Main Income Sources

Sale of:
Ginger,
coffee, teff
Irish potatoes
Livestock & products
Rural/urban work

13: Wolayita Maize and Root Crop Livelihood Zone



This livelihood zone covers most of the midland and upper lowland/dry midland terrain of the Wolayita Administrative Zone and therefore most of its population. Population pressure dictates generally very small landholdings, but maximum use is made of what there is, with possibly the most varied cropping in all Ethiopia, spread between two growing cycles per year. But rain failure as well as pests such as the sweet potato butterfly frequently push part of the population over the hunger threshold and onto relief food aid. In ordinary production years, relative success, as exemplified by better-off and middle-wealth

households, requires use of at least half-a-hectare of land, allowing a household normally to be nearly or actually self-sufficient in staple food. The main food crops are maize and beans intercropped, and sweet potatoes in two harvests, whilst enset is generally small in volume but important as a backstop in the lean months of February to May. Secondly other cereals are grown as well as a variety of root crops, whilst teff and coffee are cash crops. With very scarce grazing, livestock must be largely hand-fed with crop residues and fodder bought on the market. By far the biggest investment is in cattle, and for better-off and middle households the greater part of their annual cash earnings actually come from livestock and butter sales, including fattened oxen for the festival meat markets as far as Addis Ababa. These owners also contract poorer households to keep and fatten some of their stock, rewarded by a share in the sales, so that poor (but not very poor) households gain about one-third of their cash in this way. By comparison, crop sales are far less important across the board. Very poor people depend on casual work earnings for about 80% of their cash earnings, poor people for about 45%, so that somewhat over half of all households are heavily dependent on working away from their own land.

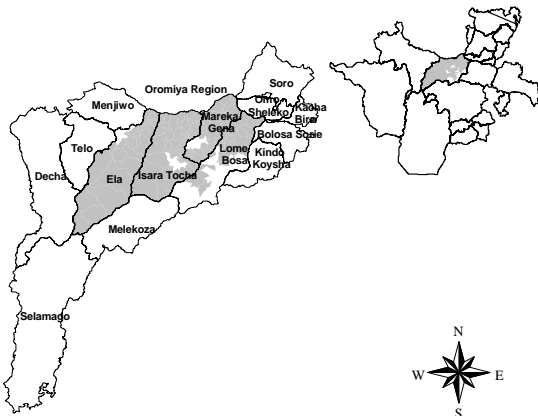
Main Food Crops & Livestock

Maize, beans
sweet potatoes
enset
Cattle
Sheep & goats

Main Income Sources

Sale of:
Cattle, butter
teff, coffee
Irish potatoes
Casual work

14: Dawro-Konta Maize and Root Crop Livelihood Zone



This midland and upper lowland zone is relatively food secure, since food crop cultivation by the moderately dense population, on land between quite rugged hills, is so successful that even the roughly 20% of very poor households normally produce some 75% of their staple food. This includes not only maize and other cereals on 70% of the land, but enset, sweet potatoes, taro and beans on the rest. There is no specialized cash crop, but households sell some maize and one-half to two-thirds of the teff and pulses they produce. Coffee is a secondary sales item, partly because of coffee berry disease. Livestock, especially cattle, are important

products, providing the 45-60% of the cash earned annually by middle and better-off households, and including sales of fattened oxen and butter. Poor households also get about 30% of their cash from livestock production, often jointly owning a cow with a better-off farmer and gaining half the profit in return for maintaining the animal. Very poor households depend heavily on members going away on migrant work, especially for the coffee harvest in Jimma area of Oromiya Region.

- Main Food Crops & Livestock
- Maiz, enset sweet potatoes
- Cattle
- Sheep & goats
- Main Income Sources
- Sale of:
 - Cattle and butter
 - Maize, teff, pulses
 - Migrant work

15: Wolayita Barley and Wheat Livelihood Zone

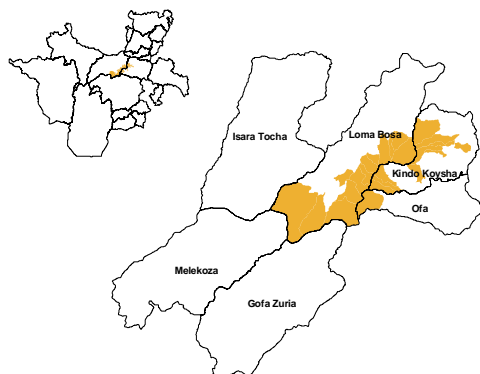


This mountainous zone has a highland and wet midland ecology, and hosts a dense population. The poorer half of the population is food insecure in most years, and receives food aid. This is not so much because of periodic rain failure as because of the chronic pressure on land which results in both small landholdings and difficulties in finding grazing and fodder for oxen, so that at least half of all households have no oxen and must either cultivate by hand-hoe or hire oxen in return for labor on the owner's plot. Grazing is so limited, and fodder so expensive to buy, that poor

people even find it increasingly unprofitable to contract with livestock owners to herd their cattle in return for a share of the milk and progeny. The main food crops are annuals spread between two rainy seasons: barley, wheat, pulses, sweet potatoes, Irish potatoes, and other root crops. These are backed up by the perennial enset, which helps breach lean periods of the year. Even better-off households, supporting 8-10 people, have only about a hectare of arable land, and they are unable to grow all their requirements of staple food; poorer households normally produce about half of their requirement. Most of the annual types of food crop are sold, even by poorer households, since all households must obtain cash for essential expenditure. Poor households (but not the very poor) likewise sell the best part of the butter they produce from their one or two cows, providing some 20% of their annual income. But they depend for about 50% of income on seasonal laboring locally or beyond the zone, and the very poor labor for as much as 70% of their cash income; at this level of poverty even the lunches provided by employers are a significant contribution to the family food budget.

- Main Food Crops & Livestock
- Barley, wheat sweet potatoes
- Enset
- Cattle
- Sheep & goats
- Main Income Sources
- Sale of:
 - Cereals
 - Root crops
 - Livestock & products
 - Local/migrant labor

16: Omo Valley Maize and Sorghum Livelihood Zone



Despite unreliable rainfall in this lowland area, crop and livestock production are usually sufficient for the population to be food secure through consumption of own produce and purchases from the market. The main food crops are maize, sorghum, haricot beans and sweet potatoes. Subsidiary food crops such as taro and yams are also cultivated. The main cash crop is teff. The middle and better-off households who form the substantial majority make far more of their cash income from sales of livestock and their products rather than from crops sales. However, opportunities for off-farm income have been few: local farm laboring

employment is limited, and the poor are not used to migration for work (although new commercial plantations in neighboring Woito in the Omo Valley may change the picture). The poor make about 20% of their cash from laboring, 35% from livestock, another 25% from crop sales and much of the rest from grass and firewood sales. They have also received food aid amounting to somewhat under 10% of annual food consumption. Trypanosomiasis is a major hazard, and this together with malaria render the lowest parts of the zone uninhabited and uncultivated to date.

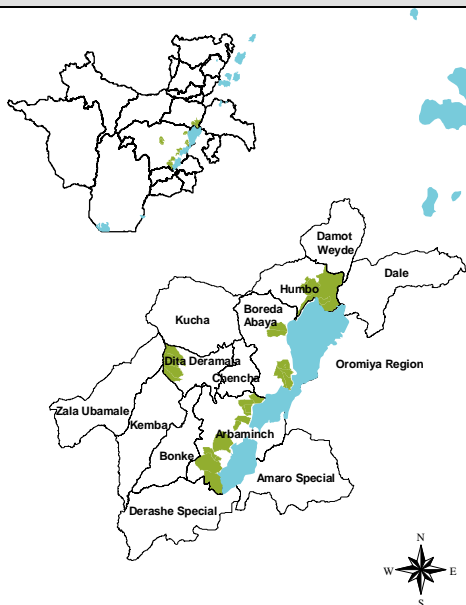
Main Food Crops & Livestock

Maize, sorghum, pulses, root crops
Cattle
Goats

Main Income Sources

Sale of:
Livestock & products
Teff
Grass, firewood

17: Chamo-Abaya Irrigated Banana Livelihood Zone



Although this lowland zone is characterized by irrigated banana production, not all kebeles have access to irrigation, and there the main cash crop is cotton. As regards bananas, the profitable bulk-production of this perishable luxury item is based on access to the main road via Awassa to Addis Ababa, which runs through the main part of the zone from the main local center of Arba Minch: i.e. the majority of the bananas are sold in the largest urban market of the country. Raw cotton is also sold in Awassa and Addis for processing, whence some of it returns to the big local garment factory in Arba Minch. The dominant food crop from the relatively large landholdings of the zone is maize, together with haricot beans and sweet potatoes. Middle and better-off households are usually self-sufficient in staple foods, although they sell some of their stock and buy preferred but more expensive items on the market, such as teff. Abundant pastures allow even poor households to keep three to five cattle, and fattened oxen gain

added value because of the direct road access to Awassa and Addis. The zone is essentially food secure and is indeed one of the most prosperous in the Region (although there are income differences between those who have irrigation and those who don't, and poor households have received some food aid). However, the area suffers from erratic rainfall, including sometimes extensive dry periods in the rainy season which diminish irrigation, but also from floods which damage both irrigated and rainfed production.

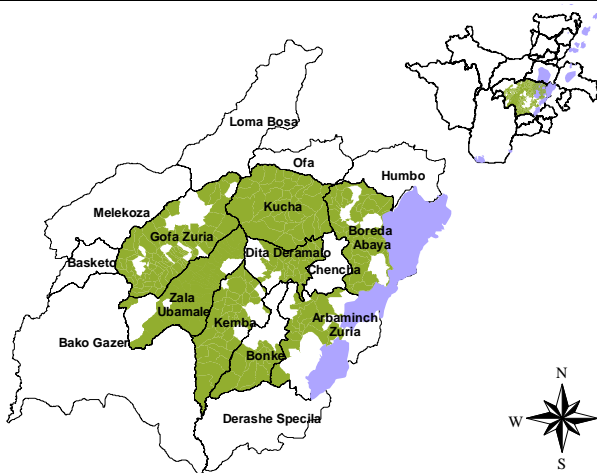
Main Food Crops & Livestock

Maize, sorghum, pulses, root crops
Cattle
Goats

Main Income Sources

Sale of:
Bananas
Cotton
Livestock & Products
Local casual labor

18: Gamo-Gofa Maize and Root Crop Livelihood Zone

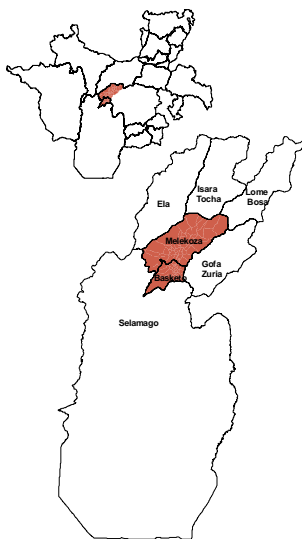


This is an extensive zone of hilly and undulating midland and upper lowland terrain. It is highly food insecure due to a combination of factors: high population density, therefore small landholdings for the majority of households; low soil fertility; frequent rainfall irregularities; endemic trypanosomiasis; and relative isolation, with poor roads and market access, as well as poor coverage with health and education services. Fewer than one in five households are normally self-sufficient in staple food production, whilst the very poor fifth and the

poor third of households have respectively received food aid amounting to about 9% and 5% of their annual basic food in the reference year.. The food crops are maize, enset, sweet potatoes, taro, teff, and yams. Enset and root crops are an important hedge against losses of the less drought-resistant maize; but need forces the poorer majority of households to cut their enset before it matures (after 4 years), so that two-thirds of the potential food from a plant is lost. Although all wealth groups sell crops to some extent, none makes as much as half of annual earnings from this. It is livestock and butter sales that bring the biggest portion of cash to the better-off and middle groups; at the same time butter sales bring in some 20% of the annual cash earnings of the poor and very poor, and this is made possible by the system of caring for the stock of richer owners in return for a share of the milk and sometimes the progeny. The very poor also gain about 20% of their income from selling firewood and collected grasses. However by far the main source of cash for all the poorer households is casual employment, including migrant work on state farms in Jinka, Awash, Shashamene and Ziway.

Main Food Crops & Livestock
Maize, enset root crops Cattle Goats, sheep
Main Income Sources
Sale of: Livestock & products Maize, Teff Grasses, firewood Local and migrant casual work

19: Basketo-Melo Coffee and Root Crop Livelihood Zone

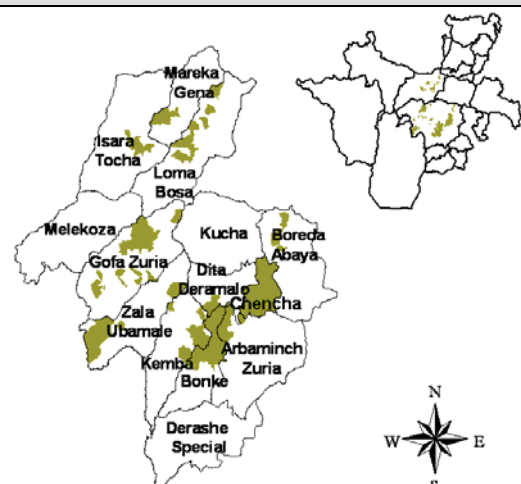


This is a food secure zone with dependable rain, fertile soils and a good balance of food and cash crops. The main terrain is midland, with a smaller wet lowland area which is cultivated but not permanently inhabited by many people. Enset is the first staple, followed by a mix of root and tuber crops including sweet potatoes, yams and taro, with a smaller amount of cassava. Maize makes an important contribution in both mature and green form, whilst there are much lesser amounts of barley and sorghum; horse beans are also grown. A good stand of enset trees insures against failure by the household for any reason to produce other food crops normally; root crops too are an important stand-by if, unusually, grain crops fail. But normally the zone is more or less self-sufficient in staples, and even the very poor are able to produce nearly 80% of their requirement. Coffee is the characteristic cash crop, but the cardamom-like spice *afromomum* is a significant cash earner too. Livestock sales are largely confined to the better-off and middle groups, but the sale of butter brings up to 30% of the annual cash of poorer households, largely from the milk gained as the reward for keeping cattle of wealthier households. But the

very poor also depend heavily on casual work for others in order to make ends meet.

Main Food Crops & Livestock
Enset, root crops Cattle
Main Income Sources
Sale of: Coffee, <i>afromomum</i> Livestock & products Processed enset, root crops

20: Gamo Gofa Enset and Barley Livelihood Zone



This is a mountainous and densely populated zone that includes the wet midland and highland agro-ecological zones of Gamo Gofa Administrative Zone. In general the population have been food secure, but arable land is at a premium and the poorer half of households operate on one-quarter to one half of a hectare. They therefore have only a very small margin for coping with the periodic production problems, whether from a late start to rains or poor distribution of showers across the season, or crop pests such as aphids attacking pulses. These households have received food aid over the years amounting to 5-8% of their annual basic food requirement. The enset and barley are complemented by wheat, sweet or Irish potatoes, horse beans and field-peas as food crops, together with some maize and haricot

beans mainly consumed green. There is no specialized cash crop, and only a limited capacity, even amongst the better-off, to sell food crops; and this is often aimed at exchanging one food for another, e.g. Irish potatoes for sweet potatoes, or pulses sold to buy maize imported into the zone. The middle and better-off make the biggest proportion of their cash from selling livestock, which like some crops find their way on the market as far as Awassa and Addis Ababa. But poorer households also commonly keep and feed one or two cows for wealthier owners, and in return get a share of the milk, from which they produce and sell butter which brings in 20-30% of their annual cash income. Otherwise, both poor and very poor households depend mainly on earnings in cash and kind from casual labor to obtain the 35-50% of required food they cannot grow, as well as essential non-food items.

Main Food Crops & Livestock

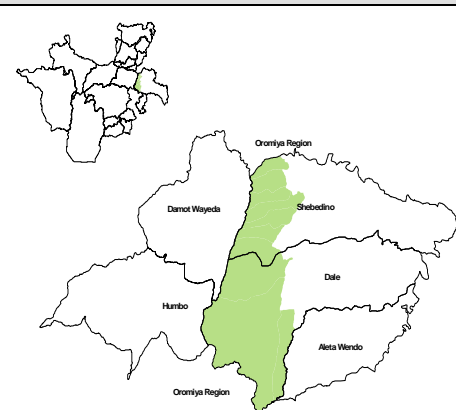
Enset, barley sweet & Irish potatoes
Cattle
Sheep

Main Income Sources

Sale of:
Livestock & products
Food crops
Casual labor

EASTERN AREA

21: Bilate Basin Agro-Pastoral Livelihood Zone



This dry and mainly flat lowland area has the perennial Bilate River as its western border, and it is along the river that most food crops are grown: maize, haricot beans, sweet potatoes, together with some enset. Much of the rest of the land area is used for extensive grazing. The unusually large majority of middle and better-off households (70%) are food secure, but it is cattle and milk products which are the basis of their economy (despite endemic trypanosomiasis). They not only make upward of 80% of their cash from sales of animals and their products, but also consume between roughly 10% and 20% of their overall food calories in the form of milk products and meat – a high proportion for people who are not pure pastoralists. But the picture is quite

different for the poor 30% of households. They produce about 45% of their requirement in food crops, not greatly different to the wealthier household who produce under 60% of their requirement (no group sells many crops); but the poor consume only small amounts livestock products, selling most together with live animals to bring in together under 40% of annual cash earnings. Otherwise they depend on working for wealthier people, especially on cultivation, and on sales of firewood. Isolation from main regional markets increases the price of food coming into local markets and decreases price of animals sold – both phenomena exaggerated in the droughts which periodically strike this area. The poor have on average received nearly 20% of their basic annual food requirement in food aid.

Main Food Crops & Livestock

Maize, sweet potatoes, enset
Cattle
Goats

Main Income Sources

Sale of:
Livestock & products
Firewood
Casual labor

22: Sidama Maize Belt Livelihood Zone



This zone covers the lowest-lying areas of Sidama Administrative Zone, with plains and undulating hills ranging between lowland and lower midland altitudes. Growing population pressure on the land, declining soil fertility, and erratic rainfall have made the zone food insecure to the extent that in the reference year the poor and very poor households (together 40% of the total) covered only 35-45% of their annual basic food requirement with their own produce and have obtained some 21-25% of their requirement from food aid. The main crop is maize, planted in the *belg* or spring rainy season; shorter-cycle crops, including sweet potatoes, haricot beans and teff are grown in the summer rainy season, and are particularly concentrated on when the maize crop is unpromising due to poor *belg* rains. The perennial enset is a backstop but not at all as important as it is in the higher neighboring areas. Cattle and goats are important assets of the middle and better-off groups and proceeds from sales of animals and

their products nearly rival the proceeds from maize and cash crop sales which make up the rest of these groups' income – mainly coffee, *chat* and chilli peppers. The main highway on the eastern border and internal all-weather link roads give good market access to the towns of the Sidama midland/highland and to Awassa city. Animal and crop sales together give poor households around 60% of their annual earnings, but the very poor only 20%. Both groups make up the rest of their earnings through casual labor locally for wealthier farmers and through sales of firewood – leading to advancing deforestation along with the expansion of agriculture as the population increases.

Main Food Crops & Livestock

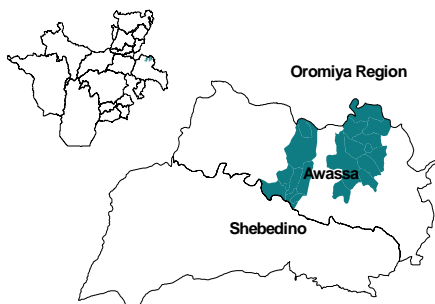
Maize, sweet potatoes

Cattle
Goats

Main Income Sources

Sale of:
Coffee, chat, chillies
Livestock & products
Firewood

23: Awassa Chat and Enset Livelihood Zone



Ranging from low to high midlands, with both hilly and flat terrain, this is one of the most densely populated parts of the Region and therefore of all Ethiopia. The zone today lives more by cash crop and livestock sales than by food production, and is relatively wealthy. Better-off, middle and poor households normally purchase about 40%, 50% and 60% respectively of their annual staple food requirements which cannot be met by the stands of enset and plots of maize, haricot beans and Irish potatoes on the very small landholdings. As such it is a food secure zone, and the small amount of food aid is associated with development projects. Chat has overtaken coffee as the primary cash crop, although the latter still makes a significant

contribution; eucalyptus poles are a secondary 'crop'. The chat industry is labor intensive in the daily picking, packaging, carrying, assembling and loading onto trucks of this perishable stimulant leaf. Thus it offers the poor substantial employment, whilst casual work and petty trade often associated with the nearby regional capital, Awassa, bring further cash. This income in turn helps the poor to save enough to invest in some livestock, including one or two cows fed by hand from which they sell milk and butter which alone give them some 15% of annual cash income.

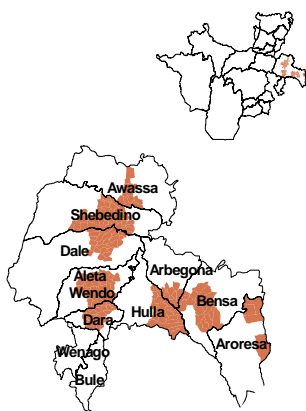
Main Food Crops & Livestock

Enset, maize, Irish potatoes
Cattle
Sheep & goats

Main Income Sources

Sale of:
Chat
Coffee
Livestock & products
Casual labor

24: Sidama Coffee Livelihood Zone



This zone covers the midland area of Sidama Administrative Region. It is densely populated, and land holdings are skewed heavily to the better-off and middle wealth groups: the better-off 20% of households hold up to eight or ten times as much land as the very poor 15%, who have just one-quarter of a hectare to cultivate, from which they normally obtain one-quarter of their annual basic food needs. But wealthier households, with larger families, do not grow more than 60% of their food needs because in general people put half or more of their land under coffee. The rest goes to enset as the main food crop, and small areas of maize, sorghum, haricot beans and root crops, and sometimes also fruits e.g avocados, pineapples. Sugarcane and eucalyptus (for poles) are also grown for the market. The middle and better-off 60% of households own substantial livestock, including up to 8 cattle, whilst very poor households own no livestock at all, and the poor 25% of households perhaps one cow, exceptionally 2,

and not more than one sheep or goat, and a donkey. The very poor rely heavily on casual work, paid in cash and kind, to obtain the 75% of their food which they do not grow. (Coffee harvesting and processing are labor-intensive, and migrant workers come into the zone seasonally.) The poor grow somewhat less than half of their food but have a more varied portfolio of income activities, including not only casual labor but sale of coffee (25% of income in a poor year for coffee), petty trading, and about 20% from livestock and milk/butter, showing the value of even one or two carefully tended animals and their young. Overall, the population is food secure, despite huge income disparities. There was very little relief food aid even in a year such as 2003-4 when both coffee production and coffee prices were low, and maize prices were high due to drought in neighboring areas.

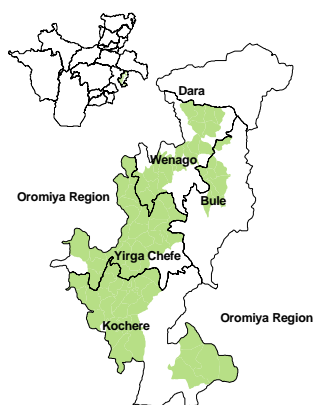
Main Food Crops & Livestock

Enset
Maize
Cattle

Main Income Sources

Sale of:
Coffee,
Other cash crops
Livestock & products
Casual labor
Petty trade

25: Gedeo Coffee Livelihood Zone



This exceptionally densely-populated livelihood zone covers the midland area of Gedeo Administrative Zone, including lower and upper midlands. It produces coffee famous for its high quality, and wealthier households own coffee bushes numbering in thousands whilst poorer households have some hundreds of bushes. After a crisis of very low coffee prices in 2002-3 due to the international market, prices had returned to good levels by 2005, and most farmers were in unions which increase profits by organising international marketing without trading intermediaries in Addis Ababa. Although coffee berry disease and coffee wilt periodically take their toll, coffee alone brings some 75% of the annual cash income of the better-off, 65% for the middle majority and 40% for the poor, who make another roughly 40% by casual work in other farmers' coffee plantations and in local pulping stations. In terms of cash income amongst all wealth groups this is the

wealthiest zone in the Region; but cash management by farmers is often weak, and some still struggle to buy food in the period before the green maize harvest in July/August or August/September, depending on the lower or higher altitude. Given that rainfall has been relatively reliable, this might explain why food aid has provided 10% of their annual food requirement to the poor 30% of households, who have to purchase from the market some 60% of their annual food. Food production comes second to coffee production for all groups; enset is the main locally-produced staple, but the zone is a net importer of staple grain. Livestock production is also of secondary priority for all wealth groups, although sales of animals and their products bring in around 20% of annual income across the board.

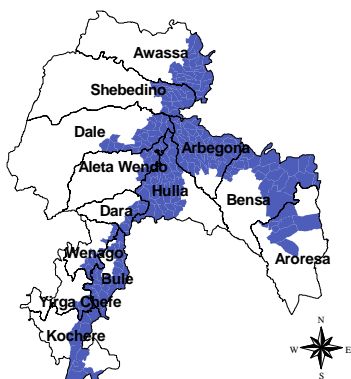
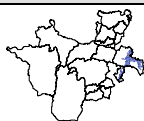
Main Food Crops & Livestock

Enset
Maize
Cattle

Main Income Sources

Sale of:
Coffee,
Livestock & products
Casual labor

26: Sidama-Gedeo Highland Enset & Barley Livelihood Zone



This hilly zone, in the extreme east of the Region, covers the highlands of Sidama and Gedeo Administrative Zones. The area is known for its high quality enset production, some of which is exported out of the zone in the processed form of *kocho*. Barley and wheat are the main cereals, although wheat rust has resulted in some substitute sowing of maize. Horse beans and peas are also grown mainly for consumption, whilst vegetables are the main cash crop: shallots, garlic, kale. Rainfall is reliable, and the area is food secure not only because of its perennial stock of enset in the field, but because livestock, especially cattle, are kept in some numbers, and even the poor are able to make 40% of their annual cash income from livestock and butter sales, and the other wealth groups upwards of 50%. All groups tend to buy grain in order to preserve enset stocks, so that the poor are able to keep substantial stands of mature trees (whereas in other enset-growing areas poor households in need tend to cut the trees before maturity at

4+ years, thus losing much of the potential food yield from the plant). In addition, in this zone poor households commonly send a member out for migrant work on the coffee harvest in neighboring livelihood zones. There has been no history of food aid distributions in this zone.

Main Food Crops & Livestock

Enset
Barley
Pulses
Cattle
Sheep

Main Income Sources

Sale of:
Livestock & products
Enset
Vegetables
Casual labor

SOUTHERN AREA

27: Southern Special Woredas Lowland Cereal Livelihood Zone



This zone covers a flat, lowland area. It is food insecure, and even in ordinary years all but the better-off have received significant food aid. The essential problem is neither land shortage nor soil infertility: it is erratic rainfall which repeatedly brings severe moisture stress to crops (and periodically outright drought), especially serious in the spring or *belg* season upon which 70-80% of crop production depends. The staples are maize and sorghum, whilst teff is the main cash crop. Only the better-off are able largely to feed themselves from their own production whilst making some 50% of their annual cash earnings from selling teff together with some maize and sorghum. Despite the presence of trypanosomiasis,

the other half of their earnings is from livestock and butter sales (including fattened oxen). The other wealth groups have received food aid amounting to some 15% of annual food requirement for middle households, 20% for the poor, and 25% for the very poor. Even with this they have not normally quite managed to consume their full minimum requirement. For the poor and very poor, own crop consumption provides 40-50% of requirement, and purchases (plus earnings in-kind from agricultural labor) cover some 25%. The difference between the middle and the poorer households is that the middle balance crop sales with sales of animals and their products, whilst the others balance more modest crop sales with, in varying proportions, casual labor and selling of firewood and grasses, although the poor also obtain about 15% of their cash from animals. All but the better-off engage in some petty trade, which gives them a small but important addition to their budgets. But the zone is isolated from major regional markets, and trade is further disadvantaged by the lack of all-weather roads.

Main Food Crops & Livestock

Maize, sorghum
Cattle
Goats

Main Income Sources

Sale of:
Teff & maize & sorghum
Livestock & Products
Firewood, grasses
Casual labor
Petty trade

28: Southern Cereal, Enset and Root Crop Livelihood Zone



The terrain of this zone includes both flat lowlands and low to mid midland. The population tend to reside in the midland areas, to avoid endemic malaria and livestock diseases in the lowlands. But they cultivate nearby lowlands as well as their midland plots, especially since in the latter the soils are declining in fertility from overuse. In the Konso area the traditional terracing is a response to particularly degraded soils. Lack of grazing in the midland areas has increasingly induced farmers to send cattle down to the pastures of the lowlands

Main Food Crops & Livestock

Sorghum
maize, enset
Root crops
Cattle
Goats

despite the depredations of trypanosomiasis. The bulk of grain crops are grown in the lowlands: sorghum and maize mainly for consumption, and teff as the main cash crop of the entire zone (some coffee and chat are grown in Konso). The midlands provide some secondary cereals – wheat, barley – but the important element is enset and root crops, because these are a backstop when drought, the chief hazard of the zone, destroys the less resistant cereal crops. These are also sold in modest amounts. In normal production years households overall produce between 55% and 75% of their food needs. This is a markedly food insecure zone, and all households, including the better-off, have received food aid which even in ordinary years has amounted for poor, middle and better-off households to around 20%, 15% and 10% of annual food requirement respectively. The middle and better-off have very similar cash income portfolios, balancing crop and livestock sales, and adding some petty trade; the better-off have somewhat greater profit from livestock. The poor, on the other hand, make ends meet through a diversity of activities: crop sales, casual labor, petty trade and traditional beer-making, firewood sales and modest sales of animals and butter.

Main Income Sources
 Sale of:
 Teff
 Livestock & products
 Firewood
 Casual labor
 Petty trade

29: Amaro Coffee and Enset Livelihood Zone



This hilly midland to lowland zone has many production advantages: fertile soils, rainfall in two seasons allowing both long and short cycle annual food crops as well as enset and cassava as perennials, and a good ecological niche for coffee production. However repeated drought in recent years has rendered the zone food insecure to the extent that all wealth groups have received relief food assistance ranging from about 20% of annual food requirement for poor households to 7% for better-off households. A longer-term problem is the population pressure which severely limits the size of landholdings; in addition, limited grazing in the midlands combined with trypanosomiasis especially in the lowlands combine to reduce livestock holdings. A shortage of plow oxen (none owned by the poor and very poor households who number just under half of total households) reduces the production of

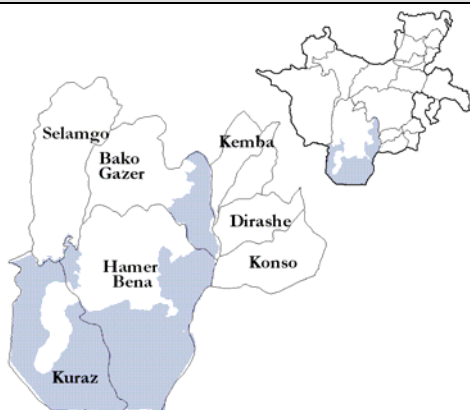
cereals and pulses which are grown in the lowlands. The chief food crops are maize and haricot beans, supplemented by the enset and cassava grown in the midland elevations. Teff is the main cash crop from the lowlands, and is known on the wider market for its high quality. Coffee is the cash crop of the midland, but there are few pulping stations in the zone. Coffee sales are important for all wealth groups, and even the very poor gain around one-third of their annual cash earnings from this, whilst for the middle group it brings two-thirds. For the rest of their income, poorer households sell other crops and a few livestock and some butter, and undertake casual labor which is mainly local coffee-picking. Wealthier households sell crops and livestock in differing proportions, but only the better-off gain more than 20% of cash income from livestock.

Main Food Crops & Livestock
 Maize, beans
 enset, cassava
 Cattle
 Goats

Main Income Sources
 Sale of:
 Coffee,
 Teff
 Livestock & products
 Casual labor

SOUTH-WEST AREA

30: South Omo Pastoral Livelihood Zone



This is a semi-arid rangeland zone in the basin of the Omo River, with low and erratic rainfall. The zone is crossed by the Weyto river and numerous seasonal rivers that originate in the bordering Kuttume Mountains to the east and west and drain down to the valley basin in the wet season. The Hamar are the largest of five pastoral groups who inhabit the area. Wealth is particularly gauged by cattle ownership: the better-off households (25% of total households) have up to 70 cattle and up to about 200 smallstock, mainly goats; middle households (45%) have up to 20 cattle and 80 smallstock; and the poor (30%) not more than 5 cattle and 25 smallstock. Although the economy is overwhelmingly based on livestock, there is some

cultivation of sorghum and maize on the sandy soils of the plains on the valley bottom, using both the modest rainfall of the main season between March and June and irrigation fed by run-off from the Kuttume Mountains. Despite great disparities in wealth, the livelihood patterns of all households are very similar. Like most pastoralists in the world today, the bulk of their diet is grain purchased on the market; milk, meat and blood (siphoned from live cattle) are an important element, but give even the better-off not much more than 25% of their food calories. Own crops normally give all households around 20% of their food requirement (added to by small amounts of collected bush-foods) whilst purchased grain gives some 40-50%. Frequent rain failure has rendered the population food insecure, and all wealth groups have received annual relief food amounting to 8-14% of annual food requirement. Although better-off households obtain as much as four times as much cash as poor households, the patterns are again similar across the board, with 80-90% of cash coming from sales of animals and their products (largely butter) and the rest from honey sales. Extreme distance from main regional markets renders selling prices low and imported grain prices high – to the extent of creating economic shock if there is drought in the source zones.

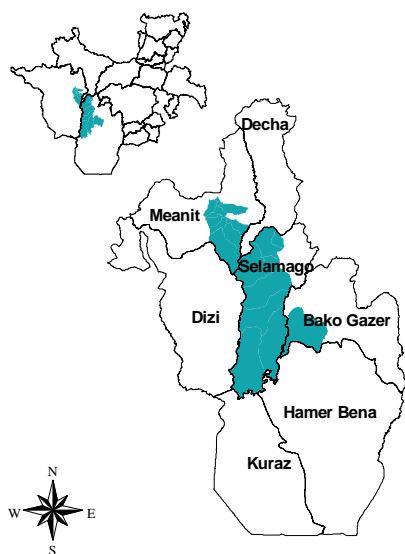
Main Livestock & Food Crops

Cattle
Goats
Sheep
Sorghum,
maize

Main Income Sources

Sale of:
Livestock &
products
Honey

31: Salamago Pastoral Livelihood Zone



Consisting of the lowland area of Salamago woreda, this sparsely populated livelihood zone is the home of two pastoral ethnic groups, the Mursi and the Bodi. The zone has been more or less food secure, and has received little food aid over recent years. The terrain is predominantly a clay loam plain covered with thick grasses. The southern border is the Omo river, whilst a handful of small rivers run through the plain from the bordering midlands to the north. Rainfall is low but reliable, and grazing usually plentiful, supporting mainly cattle with some goats, and allowing milk production sufficient to provide a proportion of the diet (in terms of calories) which is remarkably high even for a pastoral population: around 40-45% for the middle and better-off wealth groups who make up 75% of total households. However, the economy is not purely pastoral: maize and sorghum are grown under shifting cultivation using the main rains between March and May. The rains in the three last months of the year are important for pasture regeneration, not cropping. However, during this period use is made of the annual flooding of the Omo River,

and people move south to the river banks to grow cereals by the flood-recession method. Overall it is the poor, with fewest livestock, who depend most on growing crops, providing some 35% of their annual food, whilst another 35% comes from the market. The other wealth groups buy more grain than they grow. The cash sources to pay for this and other essentials are the same for all households: in order of magnitude, livestock sales, milk and butter sales, and honey sales. Such food insecurity as there has been has come not so much from rare drought as from disruptive clashes between the Mursi and Bodi and from periodic hikes in grain prices when drought has struck neighboring grain-source areas.

Main Livestock & Food Crops

Cattle
Goats
Sorghum
Maize

Main Income Sources

Sale of:
Livestock &
products
Honey

32: Southern Agro-Pastoral Livelihood Zone



This zone covers a flat lowland terrain which was traditionally a grazing ground. Settled agriculture is a recent phenomenon here, largely rainfed except for some irrigation from the Weyto river in the Konso part of the zone. The crops grown are sorghum, maize, and some teff for sale. But there is still a main dependence upon livestock: own crops amount to around 40% of household food consumption across all wealth groups, but crops sales are very low, and it is livestock and livestock products which bring in by far the bulk of cash inter alia for the purchase of grain to make up another 40% of household food. The balance of food comes essentially from the consumption of milk from own herds. This is a low rainfall area at the best of times, and agricultural risk

has been magnified in recent years by erratic rains and periodic drought, which have also affected the condition of livestock, and therefore their market value and milk output. The poor have been unable to obtain much more than 90% of their annual food requirement, even with a small addition of food aid. Since they have fewer livestock than others, they try to make ends meet with additional activities: honey collection (also done by other wealth groups), petty trade, selling local beer, making pots, collecting firewood and incense-gums for sale. In the future, without an extension of irrigation greater dependence on agriculture is likely to mean greater food insecurity.

Main Food Crops & Livestock
Sorghum, maize
Cattle
Goats & sheep

Main Income Sources
Sale of:
Livestock & products
Honey
Teff

33: South Omo Crop Livelihood Zone



This zone comprizes both midland and highland terrain, but it is in the midland that the majority of the population, essentially the Ari ethnic group, live. The main food crops are a mix of grains – maize, barley, sorghum together with beans – and root crops: enset, yams, sweet potatoes, taro, cassava. Maize and beans are sown twice in the year, using the spring and summer rains, which have been reliable and abundant over the years. This has been a food secure area, and the economy achieves a good balance between crop and livestock production. Households across the wealth groups manage to produce virtually all the staple foods they need, and all groups earn substantially from selling surpluses. The middle and better-off also grow coffee and make about one-quarter of their cash from selling the harvest. But despite

endemic trypanosomiasis all wealth groups make at least 40% of their cash from livestock and their products, and in the case of the poor nearly 60%. The poor also sell firewood. The earnings of the better-off, at up to ETB 4000 per year, compare well with those of better-off people in many less remote midland zones.

Main Food Crops & Livestock
Maize, beans
enset, root crops
Cattle
Sheep

Main Income Sources
Sale of:
Maize,
Coffee
Livestock & products

34: Surma Agro-Pastoral Livelihood Zone



This lowland to dry midland zone, bordering on Sudan, is sparsely populated by Surma pastoral clans. They depend more for their living on livestock than on agricultural production, and have managed to maintain a food secure economy. The chief livestock are cattle, which number almost as many as the goats also kept. These give all households an important part of their diet in milk: between 25% and 33% of total food calories depending on wealth. Own crops – maize, sorghum, beans, sweet potatoes, cassava – give somewhat more, from about 35% to 40% in terms of calories. The balance comes from market purchases of grain, and it is livestock sales which bring households from half to three-quarters

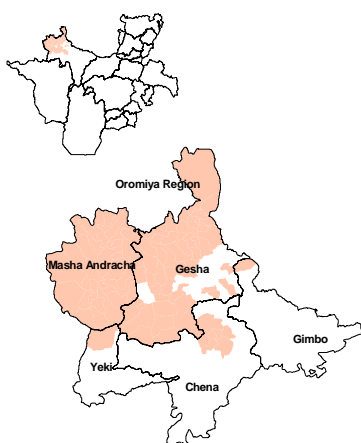
of their cash. Otherwise they sell some honey, and make significant money from working in neighboring gold mining areas, chiefly in Bero woreda. Insofar as there is any short-term food insecurity, it comes from livestock raiding between the Surma and neighboring pastoral groups. Market price shocks occur when drought reduces marketed surplus grain from neighboring areas. And a longer-term problem which reduces pastoral productivity is the plethora of livestock diseases.

Main Food Crops & Livestock
Maize
Sorghum
Root crops
Cattle
Goats

Main Income Sources
Sale of:
Livestock & Products
Honey
Gold mining work

WESTERN AREA

35: Sheka Cereal and Enset Livelihood Zone



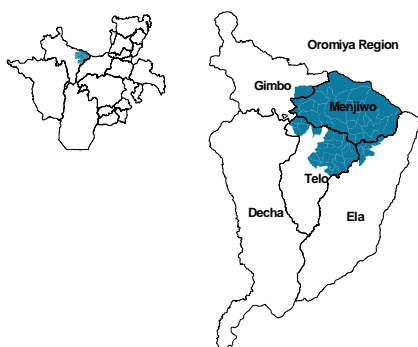
Covering midland and highland terrain of the Sheka and Kaffa Administrative Zones, this livelihood zone is fertile, sparsely populated, has reliable rainfall, and is food secure. Land holdings are comparatively large for SNNPR, so that even poor households have up to two hectares. Maize, teff, pulses and a little wheat are complemented by stands of the perennial enset. Cattle are kept in some numbers (even the poor have as many as four cows and sometimes a plow-ox, whilst the middle-wealth half of households have up to 15 cattle as well as a team of oxen). Between staple crops and livestock products households across the board are self-sufficient in food, although the poor buy small amounts of maize from the market before harvest if they don't want to over-consume green maize. The wealthier a household, the more it is livestock which bring in the annual cash. For the poor, crop sales form a larger proportion of their income; these are the food crops, since there is no special cash crop. They also sell honey and take on a little casual work for neighbors as well as selling some firewood. Production is

periodically reduced, but never critically, by crop disease and pest, including bacterial wilt on enset. Both diseases and wild animal attacks affect livestock production. However the 'bad year' is not in the local vocabulary. Numerous streams offer the potential for irrigation development; however the zone is remote from major markets, and this diminishes the value of all produce.

Main Food Crops & Livestock
Maize, enset pulses
Cattle
Sheep & goats

Main Income Sources
Sale of:
Livestock
Teff & other food crops
Honey
Firewood

36: Kaffa Cereal and Enset Livelihood Zone



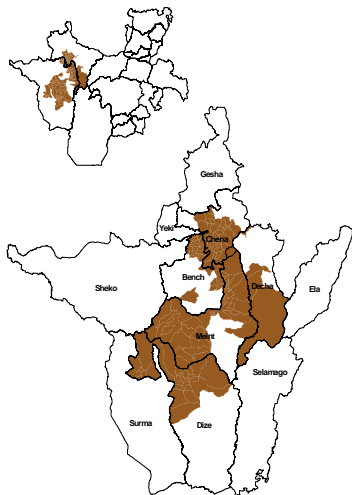
This largely midland zone occupies the north-eastern part of Kaffa Administrative Zone. Slow progress in planned road construction means that this remains one of the most isolated zones in the Region, with most kebeles inaccessible by road throughout the year. This in turn means that most localities of the zone are particularly poorly connected to outside markets, limiting possibilities of product sales and other economic activities. However, the sparse population, on reasonably large landholdings with fertile soils and reliable rainfall, are markedly food secure, and even poor households produce virtually their entire staples requirement: maize, wheat, sorghum, barley, teff,

pulses, enset. The difference between these and wealthier people is that the latter consume significant amounts of milk (for settled cultivators) from their 5-10 cattle, whilst the poor need to devote all the milk from their single cow to produce butter for sale. All wealth groups make 50-60% of their annual cash income from crop sales mainly to local woreda towns. Most of the rest comes from sale of livestock and their products. The poor also sell honey. There are no special cash crops. This is to date a largely self-contained economy, not wealthy, but economically secure.

Main Food Crops & Livestock
Maize, other cereals & pulses
Enset
Cattle
Sheep

Main Income Sources
Sale of:
Food crops
Livestock & products
Honey

37: Bench-Kaffa Cereal and Enset Livelihood Zone



This is a midland zone with reliable climatic conditions and sufficient land per capita to make it productive and food secure, although deforestation and soil degradation are increasing problems. The population contains some immigrant minority ethnic groups who are socially/culturally isolated and may suffer some economic disadvantage. Generally all wealth groups are self-sufficient in food crops, with maize as the main cereal, harvested mature in October but also eaten green in July, whilst enset is a backstop which can be cut and processed at any time of year. There are no cash crops, and in terms of marketing of crops and livestock (and butter) there is some disparity between the east and west of the zone. The west is crossed by the main highway connecting Mizan Teferi via Bonga to Jimma; the east suffers from relative isolation, with a poor secondary road network. Overall, households across the wealth groups make roughly half of their annual cash from crop sales and half from livestock and product sales. The middle group depend somewhat more than others on crop sales; the poor gain proportionately more income from butter than live animal

sales: they have only a handful of smallstock, and from their one nor two cows, rather than drinking much milk (as do the wealthier households) they concentrate on butter production and sales. Casual employment is a minor feature even for the poor, but those in the west have the advantage of coffee plantations and large private farms in nearby areas beyond this livelihood zone, whilst those in the east rely on finding local work.

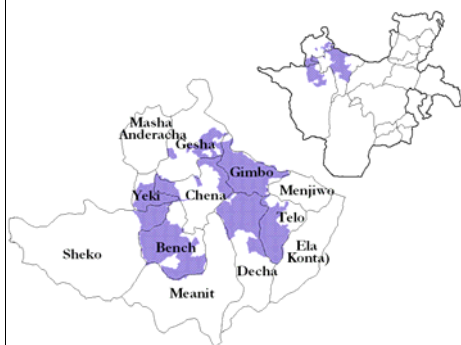
Main Food Crops & Livestock

Maize
Enset
Cattle
Sheep

Main Income Sources

Sale of:
Maize
Livestock & products
Casual labor

38/39: Western Coffee and Spices Livelihood Zone



The main populated part of this zone is midland terrain, but there are also stretches of tropical lowland and mountain forest. The zone is food secure, with maize and sorghum as the common cereals, with cattle and sheep kept in generally modest numbers due to shortage of pasture areas; spices growing wild in forest areas are collected for sale. There is a comparatively modest dependence by the poor on casual labor earnings. Within this overall picture there are differences between the west and east of the zone which merit a division into two sub-zones. In the west, coffee sales (including wild coffee) are something of a speciality and more spices, particularly

ginger and turmeric, are also sold. Food self-sufficiency is quite high, with even poor households producing nearly 80% of their staple consumption. Livestock holdings are comparatively small, although households make 15-20% of their cash from sales of livestock and their products, and most of the rest from spice and crop sales. In the east the accent is more on food-crop production, including enset and teff, with very high food self-sufficiency but with less income from spices (principally cardamom) and coffee, but somewhat larger livestock holdings and profits from these. The livelihood zone as a whole benefits from the presence of the Mizan Teferi – Bonga – Jimma highway for onward marketing. Apart from the common crop and livestock pests and diseases, there is little to threaten food security unless it is bouts of civil conflict between indigenous ethnic groups and immigrant groups who are particularly concentrated in the west.

Main Food Crops & Livestock

Maize, sorghum, enset
Cattle
Sheep

Main Income Sources

Sale of:
Coffee
Spices
Food crops
Livestock & products
Casual labor

40: Western Forest Products Livelihood Zone



This zone contains one of the few remaining extensive natural forest areas in the country, with tropical species covering lowland and low midland elevations. The products of this forest, especially wild root crops, honey, wild coffee and some small game, have traditionally formed the main livelihood of the indigenous population, but they have also increasingly practiced shifting cultivation with hand-tools. By contrast, another part of the population are mainly self-settling immigrants from the north (rapidly increasing in numbers in the last ten years) who have imported northern agricultural techniques, clearing wide areas of forest and plowing established fields with oxen. These have also begun more

livestock rearing and planting coffee and some peppers; and there are also large private and state farms. The trend is for the traditional livelihood system to turn quite rapidly into the fixed farming and plantation system as the population rises and forest rapidly diminishes. Taken as a whole the population is food secure. The poor, who are heavily represented by indigenous people, purchase very little food, and depend for about 70% of their consumption on own crops and 25% on collected forest foods. They are well able to cover their food needs, and they make by far the greatest proportion of their cash income from honey sales, both from their own hives and from collection from wild hives. The other wealth groups are entirely self-sufficient in their own cultivated staples (maize, sorghum, finger-millet). The middle group make about 60% of their cash from crop sales, the rest from honey sales and some livestock sales. The better-off make almost all their money from crop sales, with very modest livestock sales. Some crops and honey find their way via traders to the Administrative Zone capital, Mizan Teferi, and onwards to Jimma.

Main Food Crops & Livestock
Maize, sorghum Forest (wild) yams Honey Cattle Goats & sheep
Main Income Sources
Sale of: Food crops Honey Coffee (including some wild) Livestock & products