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***Livelihood strategies in rural Transkei
(Eastern Cape Province): how does wool
production fit in?***

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By S. Perret, University of Pretoria / CIRAD, November 2002

1. Introduction

The rural Transkei area of the Eastern Cape is one of the poorest regions of South Africa. Livelihood systems resort much on claims and non-farming sources of income, and many depend on migrant labour. Against these heavy odds, some farming activities take place and wool production forms a significant activity in the area. Although often not intensive, wool production keeps a lot of different households busy. The purpose of this contribution is to understand and represent the diversity of livelihood systems in rural communities of the Transkei area, and more specifically to put farming and wool production activities into perspective as components of these livelihood systems. Empirical socio-economic research has been carried out in several case-study communities of the Transkei area.

2. The Eastern Cape province: poverty as the legacy of spatial discrimination

Economy and the development features of South Africa show a dual character. The Human Development Index is 0.702 for the country as a whole (UNDP, 2002, 1995 figures). However, Gauteng province (mostly urban, including Johannesburg and Pretoria) and Western Cape province (urban, including Cape Town, and commercial farming) have a HDI over 0.80, comparable to the indexes of Mexico, Croatia or Poland. These two provinces did not include any Bantustan area during apartheid era. The Eastern Cape province has a HDI of 0.507, comparable to the indexes of Kenya or Cameroon. It included two former Bantustans, namely Ciskei and Transkei. Such a differentiated situation directly results from the past apartheid policy. It excluded black people (76% of the population) from owning or renting land outside the 14% of the country that was delineated as reserves, then bantustans or self-governing territories. Moreover, land remains mostly state-owned, and granted to users through traditional authorities and regulations. These areas are typically rural poor areas ("poverty traps", May, 1998), where most people live under harsh conditions of deprivation. Apartheid involved incentives, laws and institutions that favoured large farms and discriminated against smaller, labour intensive farming systems (Lipton *et al.*, 1996). Apartheid also gave large white farmers privileged access to natural resources, financial and agribusiness facilities, and rural infrastructures, while black areas still suffer severe backlogs on all the above listed. The basis for the bantustan structure was laid early by the British in the 1890s with the introduction of a Council system for the Transkei, and the incorporation of headmen into the system. The self-administration process was set up with the implementation of apartheid in the 1950's, and continued until Transkei and Ciskei became nominally independent in 1976 and 1981 respectively (Khanya, 2000). The Eastern Cape area was particularly affected by the major policy changes over the last ten years, with the gradual removal of Apartheid legislation since 1990, the re-

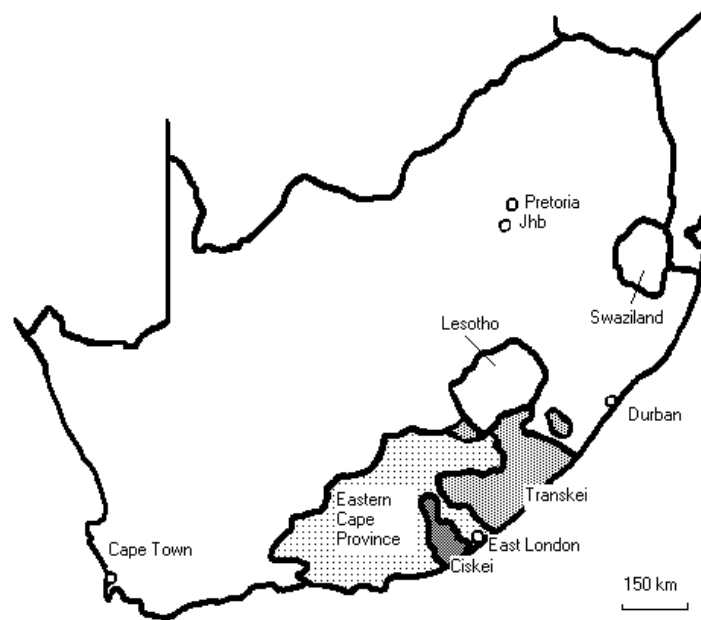
amalgamation of the two independent homelands in 1994, and the creation of the current Eastern Cape Province (see map).

Bembridge (1984) described the history and the main socio-cultural traits of the Transkei area. He especially underlines the prominence of labour out-migration since the end of the 19th century and its implication on livelihoods and activity systems at household level in rural areas. It is currently estimated that one quarter of the total South Africa mining labour comes from Transkei, resulting in the fact that about 60% of the adult inhabitants (15 to 64 years old) are female (Verschuren, 2000). Such migration results from the relatively well-developed non-agricultural labour market in South Africa (mines and industries). Off-farm labour long provided higher paying opportunities than farming for rural black people (Low, 1986). In line with the household economic model (Ellis, 1993), such off-farm market dominates households work incentives and labour allocations. After migration to off-farm employment, labour remaining in the rural areas is first allocated to production to home consumption, and, only at last, remaining labour is allocated to production for sale. Off-farm employment opportunities seriously deplete the available labour supply of rural households for farming. Workers remaining on the farm are those with the lowest opportunity costs as defined by the external labour market. The off-farm labour market favours men. Thus, many rural households are *de facto* headed by women or pensioners for whom household and child rearing responsibilities pre-empt extensive field labour in agriculture.

The Eastern Cape is currently one of the poorest provinces in South Africa, with 70.7% of its 6.2 millions inhabitants classified as poor. It also shows the highest unemployment rate, 48.5% (Central Statistics Service, Population Census, 1996; Statistics South Africa, Rural Survey, 1997). As a result, a large number of households rely on pensions (40%) or remittances (23%) (at national level, pensions represent 23% of the income of poor households compared to 5% for the non poor; May, 1998). Wages represent 23% of household income, while farming represent only 4% on average. Poverty in this province is deeply entrenched with 27% of households earning less than R400 per month, and only 11% earning more than R1500 per month¹. The province accommodates 3.7 million non-urban inhabitants, while the population of both former homelands is also 3.7 million. Even though not superimposed, those two figures greatly overlap.

Map 1. Location of the current Eastern Cape Province, inclusive of the two former homelands Ciskei and Transkei.

¹ At the time of the surveys (mid 1999), 1US\$ would cost about 6 Rand. In 2002, 1US\$ costs about 10 Rand.



Within the rural areas of the Eastern Cape province, 84% of the households access land for agricultural activities (crops), and 76% access grazing areas. More than 95% of households farm mainly for subsistence purposes. Only 3% mention profit as a reason for farming (Statistics South Africa, Rural Survey, 1997).

3. Material and methods: Case studies at local level in Transkei

From such a contrasting picture at province level, a number of questions arise as far as farming and wool production are concerned at local rural level. Considering the prevailing pensions and remittances as sources of income, what is the actual role of farming? Who is farming and how? What are the different farming styles and livelihood systems that involve wool production? Is there any room for innovation and improvement in wool production? Whom with? The following chapters intend to provide some form of answers, through the socio-economic analysis of case-study communities of the Transkei area.

In 1999, a LandCare project² was initiated in the Eastern Cape. The project has as immediate objective the creation of financial stability in targeted communities by means of agriculturally directed interventions. For the most appropriate interventions, the Project stated to first determine the needs and potential of the targeted communities and the area through socio-economic studies and establishing a link between research and application of technologies in the communities. Those studies initially focussed all their efforts on five selected communities in the Transkei and Ciskei area, then extended to other communities of the Eastern Cape.

² The South African LandCare Programme is driven by the National Department of Agriculture. It is a community-based and government-supported land management programme. It is a process focused towards conservation of the natural resources through sustainable utilisation by a community with a conservation ethic, created by education and community-based monitoring of these resources. The LandCare Project of the Eastern Cape (Integrated Multiple Livestock and Crop Agricultural System Development) has been launched in 1999. The overall goal of this programme is to optimise productivity, food security, job creation and better quality of life for all.

The following results were drawn from households interviews that were conducted in three communities of Transkei from April to July 1999: Xume, Mount Fletcher, and Nyandeni. The approach included the application of structured questionnaires on technical, social and economic topics. Then household typology schemes were set up (see box 1). All detailed results and analysis at community level have been made available (Perret, 1999; Perret *et al.*, 2000). Since the three communities show striking similarities, it has been chosen to aggregate and synthesise the information gained from the different surveys (most figures are actually averages drawn from the different situations, a value range is proposed when deviation is significant).

Box 1. Typological approaches

According to Jary & Jary (1995), a typology designates “*Any classification conceptual scheme. It may or may not be exhaustive within its empirical frame of reference. The role and utility of any typology is relative to the theoretical or practical perspective within which it is formulated*”.

The use of typologies has a long lineage in sociological analysis. Typologies have been used in rural sociology primarily to distinguish the social and economic characteristics of farming (Whatmore, 1994). Even within this specific focus, however, farm typologies may differ in terms of (i) unit of analysis, (ii) criteria for classification, or (iii) analytical purposes.

In recent works on agricultural systems (Perrot & Landais, 1993; Landais, 1998), the term *typology* designates both (i) the procedure that leads to building-up household types, and (ii) the system of types itself resulting from this procedure.

A typology is usually an attempt to group activity units according to their main modes of operation and their common characteristics. Farm typologies were first applied in intensive production contexts, for diagnosis and technical change purposes (Capillon, 1986; Perrot & Landais, 1993; Landais, 1998). They tend to be extended to rural households in the context of developing rural areas (Laurent & Centres, 1990; Laurent *et al.*, 1998; Perret, 2000). Within the framework of rural development support projects, designing a typology will imply grouping, then describing households with similar needs, with regards to the project's objectives.

Typology schemes represent formalisations of the complexity of the rural world at local level, and analytical ways of making sense of this world.

The essential steps of the procedure and their adaptations have been detailed by Capillon (1986), Perrot & Landais (1993), Mettrick (1994), Landais (1998) and Perret (1999).

4. Results: community features and household typology

4.1. Communities' features in Transkei area

4.1.1. Socio-economic traits

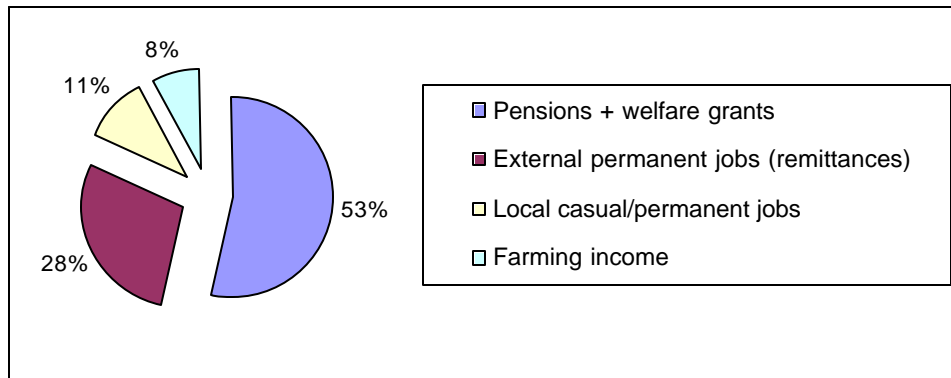
Most generally, the households are extended families, accommodating about 6 persons. Old pensioners, looking after their grand children, head many households, whereas adults are often absentees. 50% of the households' head are older than 59 years, whereas half of the communities' population is under 15 years old. A third (33%) are headed by a woman (either single, widowed, divorced...), while 10% are headed by a married woman, whose husband works far away.

Most household heads (85%) were born in the community or married a member of the community. Only 15% are immigrants.

Among the households, about 60% earn some cash income from farming. However, only 9% use farming as their main source of cash income. About 40% of households have access to remittances from a working spouse or children (outside the community), while about 40% also have access to one or two pensions (old age- or sick-pensions). Only 9% access salaries and wages from permanent local jobs and 6% from non-permanent, casual local jobs. Five percent of households access welfare payments (childhood, disablement...).

The average household cash income is around R6 000 per annum³. A quarter earns less than R2 400 p.a., whereas another quarter earns more than R8 400. Figure 1 shows the proportion of money flows from different sources in one of the studied communities (Xume), and confirms the overwhelming influence of pensions and remittances on livelihood build-up.

Figure 1. Proportion of cash income from different sources in Xume, Transkei (proportion of money flows from different sources at the community level, survey sample)



Most (95%) households indicated that they are short of money, at least during certain periods of the year (generally between November and March, for the poorest). Substantial number of households (about 60%) perceived themselves of not having access to enough food, at least during certain periods of the year (generally January to March). 70% indicate that they have debts outstanding.

Making use of Van Averbeké's necessary cash income standards⁴, Verschuren (2000) found out that 83% of the households belonging to the different communities surveyed showed a ratio available cash income/necessary cash income below 1, while 54% of households have a ratio below 0.5.

- *The communities show striking demographic figures (old household-heads but very young population), and deep poverty traits.*

³ Which besides corresponds to an annual old-age pension grant (R500 / month in 1999).

⁴ Van Averbeké (quoted in Verschuren, 2000) suggested standards for defining a poverty line for rural Eastern Cape. He stated that an adult should have R2700 per year, and a child younger than 15 years old should have R1200 per year. However, this standard does not consider self-consumption from crops or livestock, nor it considers the uneven access to all goods at reasonable prices by rural households. At national level, May (1998) identified a poverty line reflecting the monetary value of consumption that separates the poor from the non poor. This cut-off point considers the poorest 40% households (just under 50% of the population) as poor, giving a monthly household expenditure level of R353 per adult equivalent.

Box 2. Main results from a PRA-based survey in one of the case study community: Xume (Khanya, 2000)

The community of Xume lies in the northern part of the Amatola District of the Eastern Cape Province, in former Transkei area. A participatory rural appraisal (PRA)-style survey (Khanya, 2000) was carried out in Xume at the same time as the typology study reported here. The findings from the PRA survey underline the major problems facing people in Xume:

- Access to the basics: lack of domestic water (women are walking up to an hour return to fetch water), poor roads making access difficult, especially to the clinic, seasonal diseases and malnutrition, lack of electricity, HIV/AIDS is not recognised and little seems to be done about it, lack of attention to street children and orphans;
- Access to production means and facilities: lack of fencing, so roaming animals eat crops, lack of irrigation water, which would reduce risks and increase productivity, livestock diseases are reducing productivity, as is stock theft, skills are lacking;
- Lack of purchasing power, so that local businesses are not thriving and there is little money to circulate around;
- Institutional problems also affect Xume: pensions and grants are not always being paid, there is a lack of support services, some groups are forgotten (youth, unemployed), there are poor links with the local government authorities (TRC), bureaucracy is limiting opportunities, people are very unaware of what is happening about projects and departments, and the TRC is not accountable.

4.1.2. Activity systems

The communities analysed here show the typical characteristics of any subsistence farming community with about 95% of households having access either to a garden (close to their residential site) or arable dry land. Only a third access a communal garden but about 85% of households grow crops in the different plots. They plant and/or plough mechanically, with a hired tractor (70%), their own oxen or donkeys (25%) or their own tractor (5%). Almost 40% have significant, regular crop production out of these fields, mainly in summer. The major crops are maize, bean, cabbage, pumpkin, potato and spinach. Only about 5% sell their products.

Even though rural households are often referred to as subsistence-oriented households, self produced and consumed food represents only about 30% of the households' overall diet (on average) (confirming Fedrigo's data, 1999). Due to conservation problems and low purchasing power, meat is seldom consumed on a daily basis, and livestock is slaughtered occasionally for ceremony purposes.

Those who grow crops point out the lack of water and droughts as the main constraints to crop production (81% of answers)⁵, then lack of fence (15%), then thefts, rocky soils and poor fertility, diseases, lack of equipment, remoteness of fields, weeds...

Almost all households own poultry (90%) and pigs (75%). Of these households only 5% are marketing animals, meat and/or eggs, and in 85% of the households, a woman takes care of farm-yard animals.

In most communities of former Transkei, there is no camp system for collective management of grazing areas, each and every one may access rangeland. Eighty

⁵ At national level, water is by far the input most needed by rural households (Forgey et al., 1999).

percent of households have a *kraal* (corral), on their residential site. Ownership of livestock amongst the households is prevalent with 60% of households owning cattle (or keeping it for relatives), 70% owning sheep (meat/wool purposes), and 40% owning goats (mainly indigenous). Among the stock-keepers, only 20% of sell either animals or meat. A much larger percentage (80%) of sheep owners sell wool, mostly to speculators. Some others own donkeys and/or horses.

In Ciskei area, Betterment Planning policy and measures⁶ along with populations' evictions, movements and re-settlements, were implemented more strongly than in Transkei (Lasbennes, 1999). Grazing camps usually do exist in Ciskei, and more community members are not granted arable land or grazing areas.

Table 1. shows the different combinations of livelihood and activity systems observed in one of the case-study community (Xume). Particularly, it reveals that farming activities are very often part of those systems. 38% of the households rely on one single type of activity or source of cash income, the majority combines 2, 3 or more activities.

Table 1. Livelihood & activity systems in Xume community, Transkei (% of households involved in, survey sample)

No income	4
Pension/Welfare + Farming	22
Remittances only	15
Remittances + Farming	16
Farming only	9
Pension/Welfare only	9
Pension + Farming + Remittances	6
Local job only	5
Local job + Farming	4
Pension + Remittances	5
Other combinations	5

- *The communities carry out significant farming activities, and basically, they are communities of livestock-keepers and wool-growers.*

4.2. Towards a regional typology scheme of rural households

Diversity in rural settings manifests itself in the different types of farming systems (Ruthenburg, 1980), in the different livelihood systems (Ellis, 2000), and then in the variety of responses to development actions (Capillon, 1986), which one can observe amongst rural households with a common economic and natural environment.

Typological techniques have been implemented in order to address this diversity (see box 1), and to accompany the planning of actions by the LandCare project. This supposed that they should match the frame and the objectives of the LandCare Programme, i.e. referring explicitly to farming activities, although attempting to highlight the diversity of livelihood systems.

The criteria for classification were suggested by secondary data (prevailing livelihood systems) and discussed with local stakeholders, who expressed their viewpoints on

⁶ *Imposed land management planning and regulations on farming and livestock systems, implemented at village level from the 1940's up to the 1970's.*

factors accounting for differences between households. It seemed relevant to distinguish pensioners from adults-headed groups. The former access a permanent and reliable source of cash income, they may have accumulated skills, assets and livestock, but finally unfortunate changes might occur shortly for most of these households (death or disease), whereas the latter rely on wages, remittances and/or off-farm activities, with or without on-farm activities and income.

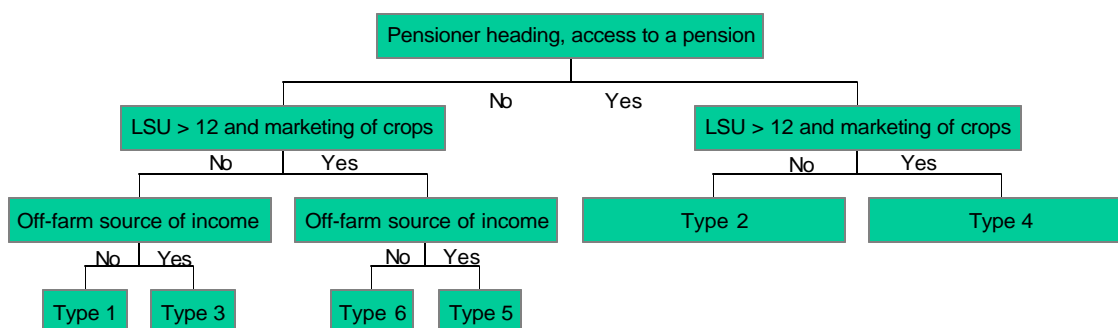
On the other hand, it seemed also wise to identify clearly the poorest among the poor, and finally those significantly involved in farming (full-time farmers). Such ideas led the manual grouping, according to a classification tree (figure 2). Further statistics confirmed the coherence and significant differences between types in each community (Student's *t* distribution test, see table 2 for an example in Xume).

Table 2. Main features per type in Xume (different letters attached to figures refer to significant differences between means, tested by Student's *t* test at P=0.1)

	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6
Total cash income per household	< 1200a	8670b	3010c	9220b	6700bc	2740c
Total cash income per capita	< 100	1334	550	1620	905	620
Farming cash income	0a	< 100ab	< 100ab	540c	180b	2220d
Number of animals owned/kept						
cattle	< 2	< 7	3	6	5	6
sheep	< 4a	< 10a	7a	37b	50b	64b
goat	< 3	< 10	5	4	9	10
Marketing of animals	No	No	No	Yes	Yes	Yes
Marketing of wool	No	Yes	Yes	Yes	Yes	Yes
Expenditures for inputs to farming activities	0a	285b	300b	550bc	790c	770c
Expenditures for external food supply	770a	1760b	1700b	1670b	1980b	1470b
Number of relatives accommodated in the household	5.2	6.5	5.5	5.7	7.4	4.4
Available labour force	2.2	1.8	2.1	1.8	2.5	2.4
Gender of the head	F	F	M or F	M	M	M or F
Age of the head	46a	70b	48a	72b	49a	50a
Access to a pension	No	Yes	No	Yes	No	No

(Cash Incomes & Expenditures in ZAR per annum, all data are averages, except maximum indicated with a prior <).

Figure 2. Household classification tree: the first step of household typology



(LSU: Large Stock Unit)

The following is an attempt to build up a regional typology of households in rural areas of Transkei:

Non-farming types

1. *Very poor single female-headed households*
2. *Pensioners with some subsistence farming activities*
3. *Off farm workers with external activities and sources of income*

Farming types

4. *Livestock-keeping pensioners*
5. *Off farm workers owning livestock, with off farm activities and sources of income*
6. *Full time farmers*

The main features of each type are described thereafter. All types were identified in the different communities, although their proportions vary. Such differences seem to depend on the communities' location: remote and deep rural communities (such as Mount Fletcher) show relatively less poverty, more full-time farming, less off-farm activities and income, than urban-influenced communities (such as Nyandeni).

Type 1. Very poor single female-headed households (5 to 15% of households)

They are mainly single female-headed. Some are immigrants and were not given access to arable land. The head can be around 55-60, and then support some of her children and grandchildren, or can be young, around 30, with her young children, families remain rather small (5). They possibly access low remittances or gifts in kind by relatives (local solidarity), or welfare grants for children. When existing, spouse is away and do not work or do not send any money. The total yearly cash income is below R1200. There are debts outstanding, and no savings. Subsistence farming activities remain scarce (no or occasional crop growing activities, with no or low yields, some farm-yard animals, no marketing). The heading woman is in charge of all farming activity. There are only few livestock, never marketed. No expenditure is dedicated to farming activities. These households are short of food and money all year round. The strategy of such households is defensive (survival strategy), striving to get a job for someone in the household, secure some subsistence production when possible, and/or rely upon local solidarity.

Type 2. Non farming single pensioners-headed households (15 to 20% of households)

All these households access one or two pensions. Thus, their minimal annual income is R6000. Half of them combine pensions, remittances from children or external jobs' salaries of adults. Thus, the average yearly income is relatively high (about R8500 on average). Cash income from farming is scarce and low.

A large majority of these households are widowed-woman headed. The head is 70 years old (average). They live with some of their children and grandchildren (6.5 members on average, mostly adults).

Most of them grow crops in a garden or arable piece of land, with low yields and no marketing. Chicken and pigs are self-consumed as well. Some households own few cattle, and some sheep or goats, also slaughtered for self-consumption. They do not

market animals or meat. A small quantity of wool may be sold to speculators. The heading woman is involved in each and every decisions and activities on farming. Expenditures for farming activities are around R300 (mainly for seeds, tractor hiring, some vet-medicines).

Such households are mainly supported by pensions, although aiming at some subsistence farming and access to complementary external income for the adults. The main threat is the head's decease, resulting in pension loss.

Type 3. Off farm workers with external activities and sources of income (10 to 40% of households)

All these households have off-farm activities or sources of income. In most of them, the spouse or a child works outside the community and send remittances monthly to the household. In other cases, the spouse access local occasional or permanent jobs, or a disablement-welfare grant. The head may either be male or female, about 50 years old on average. The household accommodates 5.5 relatives on average, adults and children. Available family labour force is around 2 on average.

The total yearly income is extremely variable (around R3000 on average). Income from farming activities is scarce and low (less than R100/year). They spend R1700/year on average for food supply.

Most of them grow crops in a garden or arable piece of land, with low yields and no marketing. Chicken and pigs are self-consumed as well. Some sell piglets occasionally. The heading woman is involved in each and every decisions and activities on farming, and takes care of crops and farm-yard animals with children. These households own few livestock, for self-consumption, wealth storage. None is marketed. Those owning sheep can occasionally sell small quantities of wool to speculators. Decisions on livestock are made by the heading man or the spouse in case of remote off farm activity by the husband. Females and children take care of livestock.

These households point out sheep diseases, and breeding problems (no mating) as their major constraints on farming. Expenditures for farming purposes are R300 on average.

Such households aim at securing an external sustainable source of income, along with some farming for subsistence and some additional income (based on opportunities). Accumulation of capital and social status through livestock is also part of the strategy. Job loss, as major source of income, is the major threat.

Type 4. Livestock-keeping pensioners (12 to 25% of households)

All these households access one or two pensions. Thus, their minimal yearly income is R6000. Half of them combine two pensions and/or remittances from children or external jobs' salaries of adults. Thus, the average yearly income is relatively high (about R9000 on average). For most of these households, farming is gainful and represent R550 on average⁷.

A large majority of these households are headed by a couple of pensioners (70 year-old on average). They live with some of their children and grandchildren (about 6 members on average). The average labour force is about 2.

Most of them grow crops in a garden or arable piece of land. Some have significant yields and market vegetables occasionally and locally. Chicken and pigs are self-

⁷ The information gathered does not seem fully reliable, especially about wool supply and the price paid to farmers for wool. Farmers were reluctant to deliver proper accounts during the interviews, and most probably hid some cash incomes.

consumed. The heading male is involved in each and every decisions and activities on crop production (with or without support of his spouse and children), whereas pig and poultry management remains a female activity (often with children support). These households own large stock. Sheep and goats are slaughtered for self-consumption, and some lambs are sold locally. Wool is also sold to speculators. The main constraints that are pointed out by these stock-keepers are sheep diseases and ticks, and limited access to medicines, vaccines, dipping tanks and the like. Limited access to water, and theft are also mentioned. Expenditures for household supply in food reach R1700/year on average, whereas expenditures for farming activities are around R550 on average (mainly for seeds, tractor hiring, vet-medicines). Pension remains the major source of income, however, these households aim at self consumption & subsistence farming, accumulation and social status through stock keeping, access to complementary external income for the adults, marketing for additional income. The main threat is the head's decease, resulting in pension loss. Also, transmission of farming assets and land rights to younger relatives has been mentioned as being an issue.

Type 5. Off farm workers owning livestock, with off farm activities and sources of income (13 to 18% of households)

All these adults headed household make a living with off-farm jobs. Most husbands work outside the community and send remittances on a monthly basis to the household. Some combine it with old age-pension when they accommodate an old relative. Total yearly income is around R7000 on average. All of them generate income out of farming (R200/year on average, see footnote ²). All these households are headed by a couple of adults (around 50 years-old on average). They live with their children (7.5 members on average). Family labour force is around 2.5 on average. All of them grow crops in a garden or arable piece of land. Some have significant yields. Chicken and pigs are self-consumed. Piglets or poultry can be occasionally sold locally. Farm-yard animal husbandry and crop production are female business. These households own large stock. Sheep and goats are slaughtered for self-consumption, and some lambs are sold locally. Most of them market wool to speculators. The main constraints that are pointed out are sheep diseases and ticks, and limited access to medicines, vaccines, dipping tanks. Expenditures for household supply in food reach R2000/year on average, whereas expenditures for farming activities are around R800 on average (mainly for seeds, tractor hiring, vet-medicines). These households pursue a dual objective, i.e. (i) wealth storage, additional income and social status through stock-keeping, and (ii) access to complementary external income for the adults. They also promote self-consumption and subsistence farming. The main threat is a possible job loss (mine crisis). Ageing may also result in declining farming activities.

Type 6. Full time farmers (4 to 30% of households)

All these adult headed households make a living mostly from farming activities. Some combine this income with occasional local jobs or support by children (remittances). Total yearly income is around R2800 on average. Farming activities generate R2200/year on average (see footnote ⁵).

Most of these households are headed by a couple of adults, some by a single woman (50 year-old on average). Families are rather small, with adults and their children (4.5 members on average). Family labour force is 2.5 on average. All heads were born in the community.

All of them grow crops in a garden or arable piece of land, some have significant yields, but do not sell. Chicken and pigs are self-consumed. Piglets or poultry can be occasionally sold locally. Pig and poultry husbandry is a typical female business, whereas crop production is a family business.

These households own livestock. Sheep and goats are slaughtered for self-consumption. Oxen are used for ploughing. All of them market young animals and/or wool.

The head makes major decision about livestock, whereas the day-to-day management is a family business. The main constraints that are pointed out are sheep diseases and ticks, and limited access to medicines, vaccines, dipping tanks.

Expenditures for household supply in food reach R1500/year on average, whereas expenditures for farming activities are around R800 on average (mainly for seeds, tractor hiring, vet-medicines).

These households strive to achieve cash income, food security and accumulation through crop and livestock productions. Ageing may be the main threat, resulting in declining farming activities. Also, any production or market failures result automatically in weakened cash income. They also try to access off farm job, as complementary source of income.

3. Discussion

3.1. Farming systems and farmers strategies

The surveys in the Transkei communities revealed

- (1) the specific status of farming activities, which are at the same time widely practiced among households but not contributing much to cash income
- (2) their dual nature, in terms of labour allocation and decision making: crop, garden and farm-yard animal production on the one hand; stock-keeping and wool production on the other hand.

Table 3 provides examples on farming activities in one of the communities that have been surveyed in Transkei (Xume).

3.1.1. Crop, garden and farm -yard animal production

Women play a key-role in these widespread activities. Most families produce and self-consume maize and vegetables, although food security through own production is never achieved. Some households cannot access plots (type 1), but most of them try to grow crops in gardens and/or on arable land. Some even produce crops all year round (type 4, 6) despite droughts and lack of fence.

The LandCare project has initiated community demonstration plots (*e.g.* on vegetable production with simple irrigation techniques). With regard to the typology results, establishing community gardens would help landless people (type 1). Also, supporting the local organisation of seed supply, fence build-up and the like might be useful for most types. Some basic training should help as well. Finally, any initiative should strongly involve and rely on women, as key players in those production activities. On the other hand, women-headed households (within types 1,2,3 or 6) might not adopt easily labour-intensive technologies or innovations, since women are already very busy.

3.1.2. Stock-keeping and wool production

Although practiced by all types except the very poor, types 4, 5 and 6 more significantly carry out those activities, although with different strategies (see table 4).

Table 3. Farming activities in Xume, as per type (Percentage of households involved in a given activity, regardless of its magnitude)

Farming activities	Poor	Pensioners	Off-farm workers	Farming pensioners	Farming off-farm workers	Full-time farmers
House gardening	40%	81%	80%	79%	93%	91%
Dry land crops	40%	50%	47%	79%	60%	55%
Fruit trees	0%	12%	0%	21%	20%	9%
Chicken	80%	94%	73%	84%	100%	91%
Pigs	80%	75%	80%	74%	73%	73%
Other micro-livestock	0%	0%	7%	0%	27%	9%
Goats	40%	19%	47%	53%	93%	73%
Sheep	20%	50%	27%	95%	100%	82%
Cattle	20%	25%	33%	84%	100%	73%
Horses/Donkeys	0%	0%	0%	26%	0%	27%

Stock keeping actually corresponds to different objectives: cash income for full time farmers, additional income for pensioners and off-farm workers, accumulation and social status for all, then occasionally self-consumption of meat (see table 4). For most farmers (and more than half of the households), wool is considered the steadiest source of cash, although, price is often low and fixed by speculators. Such cash income remains actually very low. With regard to the current situation, wool may be seen as a by-product of stock keeping (except for type 6). Even significant sheep owners in types 4 and 5 do not get significant income from wool production and marketing (in spite of high expenditures allocated to farming).

- *Most types are woollen-sheep keepers, this does not make them real wool producers*
- *Only full-time farmers (type 6) are serious wool producers with an economic purpose*

Still, most households express needs for technical improvement (means of production, technical advice, training, services, infrastructures, local institutions...), and alleviation of other constraints. Farmers refer to sheep diseases, lack of remedies and services (access to vaccines, dipping tank), as the major constraints. The LandCare project also strives to focus and deliver at this level: shearing shed, dipping tanks have been built up, gene-stock renewal (introduction of rams), and training about shearing and wool sorting/grading are implemented. As a result of the typology, which highlights the plight of certain households (type 1), the LandCare projects strives to involve the very poor women in productive activities (especially wool sorting and grading).

- *Access to some basic collective production facilities would help all types (on shearing and dipping, on animal health)*

Greater attention should however be paid as to who will really benefit from that in the long run. Only households' heads of types 2, 4, 6 may be available on a full time basis (for training or on-farm demonstration for instance). In other types, *de facto* heading women can hardly avail themselves, as they are already very busy with other activities. Type 6 is the only one that is really willing and able to intensify wool

productivity (on both labour and inputs), while 5 can only intensify on inputs. Old pensioners (type 2 and 4), even though owning large herds, will hardly intensify through input supply. They may allocate more family labour.

- *At individual level, farming pensioners, as well as non-farming types, are not likely to adopt any input-based new technology or methods for wool production intensification and increase.*
- *Farming off-farm workers may intensify on inputs but hardly on labour*
- *Full-time farmers may intensify on both sides, although their limited financial capacity requires some form of support (credit scheme, production-based loans, etc.)*

3.1.3. Farmers' strategies

Two common traits characterise most types: (i) willingness to diversify livelihood systems, besides or away from farming activities, and (ii) a high vulnerability to poverty (see tables 4 and 5).

Referring to the terms defined by Ellis (2000) and Yung & Zaslavski (1992), the different diversification strategies observed result either from choice (aggressive, planned survival strategy) or necessity (defensive, short-term survival strategies).

Types 4 and 5 (and 6 to a lesser extent) seem to develop a long-term strategy (accumulation, education), and an aggressive, chosen diversification. Types 2 and 4 are willing to develop a sustainable livelihood besides pension, towards 4 or 5 (transmission of assets, education and job seeking for young relatives).

Type 3 is clearly urban / off-farm oriented, with little involvement and interest at community level. This can be also seen as a long-term, chosen strategy, although risky (one factor, i.e. job loss, may draw the household back into deep poverty).

Type 1 develops no real strategy, but rather day-to-day coping solutions.

Type 6 mostly represents people willing to shift towards type 5 or 4 (by choice). Type 1 is desperately seeking a way out of deep poverty, towards type 2 or 3 (by necessity).

Types 3 and 5 are currently striving to strengthen their livelihood systems.

Table 4. Identification of households' strategies per type.

Type	Main strategies	Main issues and threats
1	Defensive (survival strategy), striving to get a job for someone in the household, secure some subsistence and/or rely upon local solidarity.	Deep poverty. Some are landless, resulting in weak subsistence potential. Ageing, resulting in even weaker subsistence farming.
2	Self consumption & subsistence farming, access to complementary external income for the adults.	Head decease, resulting in pension loss, as major source of income.
3	Secure an external sustainable source of income, farming for subsistence and for some additional income (opportunities), accumulation of capital and social status through livestock.	Job loss, as major source of income. Ageing, resulting in declining subsistence farming activities.
4	Self consumption & subsistence farming, accumulation and social	Head decease, resulting in pension loss, as major source of income.

	status through stock keeping, access to complementary external income for the adults, marketing for additional income.	Issue of transmission of farming assets, land rights and animals to younger relatives.
5	Wealth storage, additional income and social status through stock-keeping, access to complementary external income for the adults, self consumption & subsistence farming	Job loss, as major source of income. Ageing, resulting in declining farming activities.
6	Self consumption & subsistence crop production and micro-livestock production; cash flow, wealth storage and social status through stock-keeping and wool production; access to complementary external income for the adults.	Ageing, resulting in declining farming activities. Major production or market failure, resulting in weakened farming income. Job loss, as complementary source of income

The different types identified illustrate both processes of "de-agrarianisation" and "depeasantisation" (Bryceson, 2000). Those processes represent long-term processes of occupational adjustment, income-earning reorientation, social identification and spatial relocation of rural dwellers, away from strictly agricultural-based modes of livelihood, which subsequently lead peasantry to lose its economic capacity and social coherence, and to shrink in size.

Several elements however challenge these ideas on "de-agrarianisation". Even though full-time farming does not seem to be the objective of most households, most of them undertake productive activities and use natural resources. Also, type 1 strongly relies on community solidarity networks. Informal but strong mutual credit systems exist (stokvel). Barter of labour and products are common, gifts in kind are also widespread. And finally, stock keeping plays an important role, as a social link within the community, since collective management of herds, animal keeping for neighbours or relatives, exchanges of animal, of labour, sharing of meat during ceremonies etc. are often observed.

Types 3 and 5 seem to be the current livelihood models for adult-headed households, corresponding to two different strategies: strong off-farm, urban influenced livelihood system (3), and combination of on-farm and off-farm sources of income, with accumulation through stock keeping (5).

3.2. Households' evolution: what is next?

Heavy odds on rural people (HIV -AIDS, migration processes, off-farm job crisis), and global and African trends that seem unavoidable (diversification, de-agrarianisation, de-peasantisation; Bryceson, 2000; Ellis, 2000) force to draw the analysis towards a more dynamic perspective, although through weak assumptions.

Each type's strategy has been described in table 4. Table 5 refer to an attempt to foresee the possible trajectories of the existing types, according to the issues and threats that have been identified during the surveys. Although providing a seemingly dark perspective, this procedure is based upon trends or events that are possible (job losses, production or market failures), realistic (failures in farm assets transmission, decease of the old pensioner heading the household) or merely natural (ageing), in the next five to ten years.

Type 3 (Off-farm workers) seems to be the most unstable, as the possible trajectories are very diverse, according to the factors incurred. For all types, the factors' likelihood of occurrence are obviously also very diverse, and highly dependant on external interventions or opportunities (*i.e.* land access and land tenure transmission system, off-farm job opportunities, access to credit and production means, to markets). Finally, the identified dynamics do not take account of the emergence (or disappearance) of new types. One can imagine for instance that improvement in wool production factors (*e.g.* shearing shed, dipping tanks, vet inputs, transport facilities made available) and wool marketing (*e.g.* better supply chain and agribusiness linkages, increasing and stable prices) should undoubtedly generate an overall improvement for type 6, then probably for types 4 and 5, some of them becoming commercial wool growers, as a new type that does not currently exist.

In the long run, such intensification may however be jeopardized by the overwhelming tendency / willingness to diversify activities and sources of income by rural people. A wool production based development objective should consider the emergence of a new type of commercial wool-producers, which would attract some households from existing types (mostly 4,5,6), rather than improving them marginally. This would involve heavy efforts in improving the production circumstances (technical and financial facilities) and the marketing circumstances (clearer institutions, improved quality, more stable and higher prices). None of this exists currently, hence the complex, extensive and scattered nature of wool production features and strategies at local level.

Table 5. Types' dynamics: identification of the possible trajectories and factors.

Current types	Possible trajectories	Factors, conditions and results
1	2 3 6	Ageing, then access to a pension Access to a job or to welfare grants Access to arable land, to production means
2	1 3 6	Head decease, no external source of income Head decease, access to external source of income Access to production means, market opportunities
3	2 6 1 4 5	Ageing, then access to a pension Job loss, enough farming skills and assets to shift to farming Job loss (or no more news from working husband), little subsistence activities Ageing and accumulation (money, livestock) Accumulation (money, livestock)
4	5 6 3 2	Head decease, access to external source of income, succession Head decease, no external source of income, succession and concentration of production means on an adult headed household Head decease, access to external source of income, no succession Head decease, ageing and end of farming –stock sold-
5	4 6	Ageing, then access to a pension Job loss
6	4	Ageing, then access to a pension

The trajectories of type 2/4 households and of the relatives highly depend upon the succession process than would be implemented (modalities of transmission of patrimony, assets and animals).

All households may also remain pertaining to the same type, as an effect of ageing as a unique factor, with gradual decline in farming potential and likelihood to access an external job.

4. Conclusion

Despite common constraints and discrimination, rural people of Transkei rely on a series of different activities and sources of cash income, as livelihood systems. Poverty is not a static condition among households, as they may shift from one type to another, due to life-cycle or other factors (May, 1998). Ellis (2000) identified several of these factors to diversification: seasonality, risk, labour market, credit market failures, assets, coping behaviour.

The household life-cycle appears to be a key factor, as ageing enables access to a pension. Pensions play a paramount role in households' livelihoods (about 50% of the overall cash flow at household level in Transkei). Like off-farm income, they do not seem to undermine the development of farming, but conversely to support it in some cases (accumulation, access to inputs).

A question remains as to what is next? Households' heads are ageing, while a half of the community population is under 15 years old. HIV-AIDS is a major threat to life expectancy and labour force availability⁸. Thus, transmission of farming potential is a major issue in most households that have been interviewed. Young people are not willing to take over farming activities, due to uncertainty about land tenure and land access issues, backlogs in services and infrastructures, lack of skills and self-confidence, constraining climatic conditions.

As stated since the outset, labour market (mines and industries, urban markets) still influences rural livelihood strategies, and remittances represent the second component of livelihood. Besides, the weakness of local job opportunities and businesses in Transkei is striking.

Transfer payments (passive non agricultural earnings; Bryceson, 2000) clearly dominate livelihood build-up, while local services or trade remain little developed, as non-agricultural activities. Kirsten (1996) highlighted "the lack of diversity in the rural non-farm economy and a virtual absence of small-scale industries and other value-adding activities".

In Transkei, high risks and weak coping abilities, weak credit and product markets explain why full-time farming, although adapted to harsh conditions (sheep keeping and wool production), remains an alternative strategy and provides low cash income. Still, several types develop such activities as an accumulation tactic. Crop production seem to be a dilemma for households, which have to strike a balance between their willingness to secure some food, and possibly to gain alternative income, and the recurrent exposure to high risks, lack of markets, inputs and labour.

⁸ *Even though overwhelming, the sensitive HIV-AIDS issue was not addressed during the surveys. The pandemic is currently devastating South Africa: in 2002, more than 5 million South Africans are HIV positive. It is estimated that a quarter of the young adults population (between ages 20-29) is currently HIV positive. The life expectancy is of 68 years, it is likely to drop to 48 by 2020 (Forgey et al, 1999). Already affected labour force will suffer further decline: -18% by 2005, -26% by 2020 (see Department of Health, Medical Research Council, USAID websites). In rural areas, the combination of poverty, male migrations from highly infected areas (mines), uncertainty and risks, and the disempowered status of women facilitate the transmission of HIV. Furthermore, illness increases the risk of becoming impoverished (death, pension loss, job loss, weakened labour force for farming activities, etc.).*

The complex and differentiated features of wool production circumstances at local level actually reflect a very constrained situation: wool production and marketing are neither easy nor really profitable at the moment. The surveys clearly reveal that full-time farmers are not the wealthiest groups amongst the community's households. Furthermore, full-time farming is clearly not the reference or the target status for rural people in the surveyed communities. Despite its increasing scarcity, off-farm employment sways inner labour allocation (many men are absentees), thus activity systems at household level (women, pensioners, and young relatives form the available workforce, the two first rule most households).

In its current features (extensive production, poor quality), wool production represents a compromise within farmers' strategies: it remains a possible and steady source of cash income and goes well along with an accumulation / social status, but at the same time, income are low and risk is high.

Even though exposed to increased management issues and to a larger number of factors, diversified livelihood systems gain coping possibilities and are less vulnerable (Ellis, 2000).

5. References

- Bembridge, T. J. (1984). *A systems approach study of agricultural development problems in Transkei*. PhD dissertation, University of Stellenbosch, 685p.
- Brooks, K. (2000) *Improving opportunities for the rural poor in South Africa through land reform and more effective public investment*. South Africa's strategy for rural development, Executive summary. World Bank working paper, June 2000, 9p.
- Bryceson, D. (2000) Rural Africa at the crossroads: livelihood practices and policies. *ODI, Natural Resource Perspectives*, numb. 52, 6p.
- Capillon, A. (1986) A classification of farming systems, preliminary to an extension programme. In: Butler, C., Flora, C. & Tomecek, M. (Eds.), *Farming Systems Research & Extension: Management & Methodologies*, Kansas State University, USA, pp 219-235.
- Carter, M.R. & May, J. (1999) Poverty, livelihood and class in rural South Africa. *World Development*, 27(1): 1-20.
- Ellis, F, 1993. *Peasant economics. Farm households and agrarian development*. Second edition, Cambridge, University Press.
- Forgey, H. et al. (1999) *South African Survey 1999-2000*. South Africa Institute for Race Relations (publ.), Johannesburg, SA.
- Fedrigo, P. (1999) *Diagnostic agro-alimentaire (consommation, transformation, commercialisation) en zones rurales de l'ex-Ciskei (Eastern Cape, Afrique du Sud)*. Unpublished DESS thesis, IEDES-Paris I / CIRAD, 115p.
- Jary, D. & Jary, J. (1995). *Dictionary of sociology*. HarperCollins Publ., Glasgow, UK. 774p.
- Khanya (2000). *Institutional Support for Sustainable Rural Livelihoods in the Eastern Cape. A case study of Xume Administrative Area, Transkei*. Full report, November 1999, 204p.
- Kirsten, J. (1996) The potential for creating additional rural livelihoods in agriculture and the rural non-farm sector in semi-arid areas: a case study in the Northern Province. In: *Land, labour and livelihoods in rural South Africa. Vol. 2. Kwazulu - Natal and Northern Province* (Lipton, M., Ellis, F & Lipton, M. Editors), Indicator Press, Durban, SA, pp 303-334.
- Kirsten, J., Perret, S. & Van Zyl, J. (2000) *Land reform and the new water management context in South Africa : Principles, progress and issues*. Seminar of the

- Natural Resources Management Cluster and Land Policy Thematic Group, The World Bank Washington, DC. 27 September 2000, 23p.
- Landais, E. (1998) Modelling farm diversity: new approach to typology building in France. *Agricultural Systems*, 58(4): 505-527.
- Lasbennes, F. (1999) *Management patterns of collective renewable resources at a village scale. A case study in the Kambashe area (Eastern Province, Ciskei, South Africa)*. Unpublished DAA thesis, CIRAD-CNEARC-ENESAD, 80p.
- Laurent, C. & Centres, J.M. (1990). *Dairy husbandry in Tanzania: A development programme for smallholders in Kilimanjaro and Arusha regions*. INRA work paper, Versailles, France, 111p.
- Laurent, C.; Van Rooyen, C.J.; Madikizela, P., Bonnal, P. & Carstens, J. (1998) Household typology for relating social diversity and technical change. *Agrekon*, 38 (special issue): 190-206.
- Lhopitallier, L. & Caron, P. (1999). Diversité et recomposition de l'espace rural dans le district d'Amatola, province du Cap de l'Est. *L'Espace Géographique*, 28 (2): 170-184.
- Lipton, M.; Ellis, F. & Lipton, M. (1996) *Land, labour and livelihoods in rural South Africa. Vol. II: Kwazulu-Natal and Northern Province*. Indicator Press, Durban, SA.
- Makhura, M.; Rwelamira, J.; Perret, S. & Lhopitallier, L. (2000) *Rural incomes and their linkages with public investment. Case of Nebo District of The Northern Province and Amatola District of The Eastern Cape*. World Bank / University of Pretoria, Working Paper, 20p.
- May, J. (editor) (1998) *Poverty and inequality in South Africa*. Summary report. 55p (www.polity.org.za)
- Mettrick, H. (1993). *Development-oriented research in agriculture*. ICRA Publ., Wageningen, The Netherlands. 291p.
- Perret, S. (1999) *Typological techniques applied to rural households and farming systems: Principles, procedures and case studies*. University of Pretoria, Work Paper 99/2, CIRAD Tera, num 65/99, 35p.
- Perret, S., Carstens, J., Randela, R. & Moyo, S. (2000) *Activity systems and livelihoods in the Eastern Cape Province rural areas (Transkei)*. University of Pretoria / CIRAD, Work Paper 2000/2, CIRAD Tera, num 28/00, 35p.
- Perrot, C. & Landais E. (1993). Research into typological methods for farm analysis. The why and wherefore. In: *Systems studies in agriculture and rural environment*. Brossier et al., editors, INRA publ., 415p. (pp 373-381)
- Ruthenberg, H. (1980) *Farming systems in the tropics*. Oxford Science Publications.
- Verschuren, H. (2000). *Socio-economic profile of Transkei and Ciskei*. Unpublished Msc thesis, University of Wye, London, UK, 56p.
- Whatmore, S. (1994). Farm household strategies and styles of farming: assessing the utility of farm typologies. In: Van der Ploeg, J. & Long, A. (editors), *Born from within: Practices and perspectives of endogenous rural development*. Van Gorcum, Assen, The Netherlands. 298p.
- Yung, J.-M. & Zaslavski, J. (1992) *Pour une prise en compte des strategies des producteurs*. CIRAD, collection "Documents Systemes Agraires", Num 18, 72p.

