

Département territoires,
environnement et acteurs
Cirad-tera

**ZONING TAKING INTO ACCOUNT
THE VERBAL REPRESENTATIONS
OF STAKEHOLDERS
IN THE AMATOLA DISTRICT
IN SOUTH AFRICA**

**Mission report
13-30 April 1998
in the Eastern Cape Province**

Patrick Caron
CIRAD/TERA n°84/98

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CONTENTS

Abstract
Keywords
Contents

1. Introduction	5
2. Methodological experimentation of zoning taking into account the verbal representations of stakeholders	8
2.1. Methodological reference : the Brazilian experience	8
2.1.1. Phase of preparation	9
2.1.2. Running the interviews and identifying the Homogeneous Spatial Units	10
2.1.3. Compiling the results and making a comparative analysis of the verbal representations of stakeholders	10
2.1.4. Integrating secondary information	11
2.1.5. Historical analysis and identification of evolutionary trends	11
2.1.6. Feed-back	11
2.2. Experimentation and methodological adaptation	12
3. Results	13
3.1. Diversity	13
3.1.1. Zone 1 : urban and “rurban” areas	14
3.1.2. Zone 2 : communal areas	15
3.1.3. Zone 3 : commercial farms	16
3.1.4. Zone 4 : mixed areas - commercial farms and communal villages	17
3.1.5. Zone 5 : irrigated lands of former Ciskei	17
3.1.6. Zone 6 : pineapple farms of former Ciskei	17
3.1.7. Zone 7 : State forests	18
3.1.8. Zone 8 : nature reserves and game reserves	18
3.1.9. Zone 9 : the coastal area	18
3.2. First model of regional space organization	18
3.2.1. Traces of apartheid policies	19
3.2.2. Industrialisation, urban employment and migrations	20
3.2.3. The coastal area	21

3.2.4. Regional development and investment of the former State of Ciskei in the agricultural sphere	21
3.3. Follow-ups and utilisation of the results	22
3.3.1. Regional diversity of “small-scale agriculture”	22
3.3.2. Interpreting R-D activities enterprised in the area of Kambashe	23
3.3.3. Support for planning at District level	23
Conclusion	25
Bibliography	26
Addenda	27

Patrick Caron - CIRAD/TERA¹

Abstract

Mr Caron came to South Africa from 13 to 30 April 1998. The mission enterprised is part of a cooperation project run by the *Centre de Coopération Internationale en Recherche Agronomique pour le Développement* (CIRAD - Centre for International Co-operation in Agronomic Research and Development), the *Institut National de la Recherche Agronomique* (INRA) and their South African partners - the Agricultural Research Council (ARC), the University of Pretoria, the Agricultural and Rural Development Research Institute (ARDRI) and the Eastern Cape Department of Agriculture and Land Affairs (ECDALA), with the support of the French Ministry of Foreign Affairs. The main objective of this project is to support development of small-scale agriculture. The aim of the mission was to complete a zoning of the rural diversity, with a double objective. On the one hand, the zoning is to allow a better interpretation of the results obtained by the research team in the area of Kambashe, by situating Kambashe in its environment, by identifying the main basis of organisation of the regional layout and the flows of money, population and products. On the other hand, highlighting the diversity of the situations allows one to envisage the validation or the adaptation of the knowledge acquired in Kambashe, in particular the elaboration of a regional typology of households. A zoning taking into account the verbal representations of stakeholders has been completed in the Amatola District. This report presents and evaluates the working methodology and the first results obtained, while a very important variety of rural situations was highlighted. Also, a model of the organisation of rural space was drafted. The potential use of the results and the follow-ups are discussed.

Keywords

South Africa - Mapping by zone - Method

Résumé

M. Caron s'est rendu en Afrique du Sud du 13 au 30 avril 1998. Cette mission s'inscrit dans le cadre d'un projet de coopération conduit par le CIRAD, l'INRA et leurs partenaires sud-africains- ARC, Université de Pretoria, ARDRI et ECDALA - en appui au développement de la petite agriculture, avec le soutien du Ministère français des Affaires Etrangères. Le but de la mission était de réaliser un zonage des situations rurales, avec un double objectif. D'une part, le zonage doit permettre de mieux interpréter les résultats obtenus dans la petite région de Kambashe, en situant celle-ci dans son environnement, en identifiant les principaux axes d'organisation de l'espace régional et les flux financiers, d'hommes et de produits. D'autre part, la mise en évidence de la diversité des situations permet d'envisager la validation ou l'adaptation des connaissances acquises et des expériences conduites à Kambashe, en particulier l'élaboration d'une typologie régionale des ménages. Un zonage à dire d'acteurs a été réalisé dans le District d'Amatola. Ce rapport présente et évalue la méthodologie de travail et les premiers résultats obtenus. Une très grande diversité des situations rurales a été mise en évidence. Un modèle d'organisation de l'espace rural a été ébauché. L'utilisation potentielle des résultats et les suites à donner sont discutées.

Mots-Clef

Afrique du Sud - Zonage - Méthode

¹Centre de Coopération Internationale en Recherche Agronomique pour le Développement, Département Territoire, Environnement et Acteurs.

1. Introduction

The Umthiza project in the Eastern Cape Province (cf. map 1 and 2) is conducted through a co-operation between South African and French institutions. The operations under way are of two types (Bonnal et al., 1998).

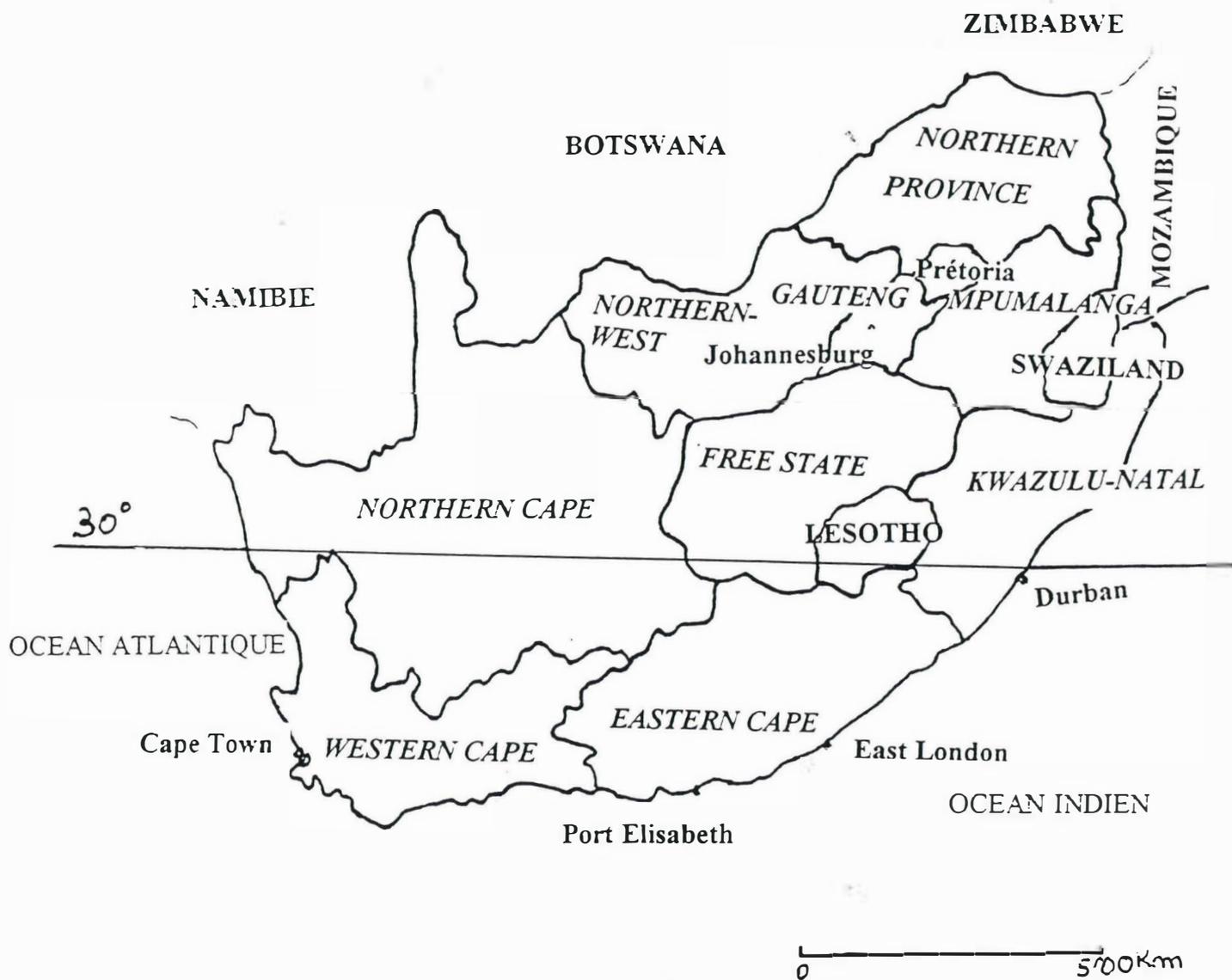
With the first type of operation, one deals with the activities related to the Umthiza² project, in the strict sense of the word, which concerns the analysis of the agricultural and farming systems in a small region in the former Ciskei, the area of Kambashe. The institutions concerned are the Agricultural Research Council (ARC), the Eastern Cape Department of Agricultural and Land Affairs (ECDALA), the Agricultural and Rural Development Research Institute (ARDRI) and the *Centre de Coopération Internationale en Recherche Agronomique pour le Développement* (CIRAD - Centre for International Co-operation in Agricultural Research for Development). The project received financial aid from the French Embassy.

With the second type of operation, one also deals with the work initiated by the University of Pretoria, ARC and the *Institut National de la Recherche Agronomique* (INRA), on farm typologies which were carried out on a region that includes the previous study area. These activities are, in this case, financed jointly by South Africa, the Foundation for Research Development (FRD) and by France, the *Ministère de l'Éducation Nationale, de l'Enseignement Supérieur et de la Recherche* (MENESR) and the *Ministère des Affaires Étrangères* (MAE), within the Franco-South African Research Tender 96.

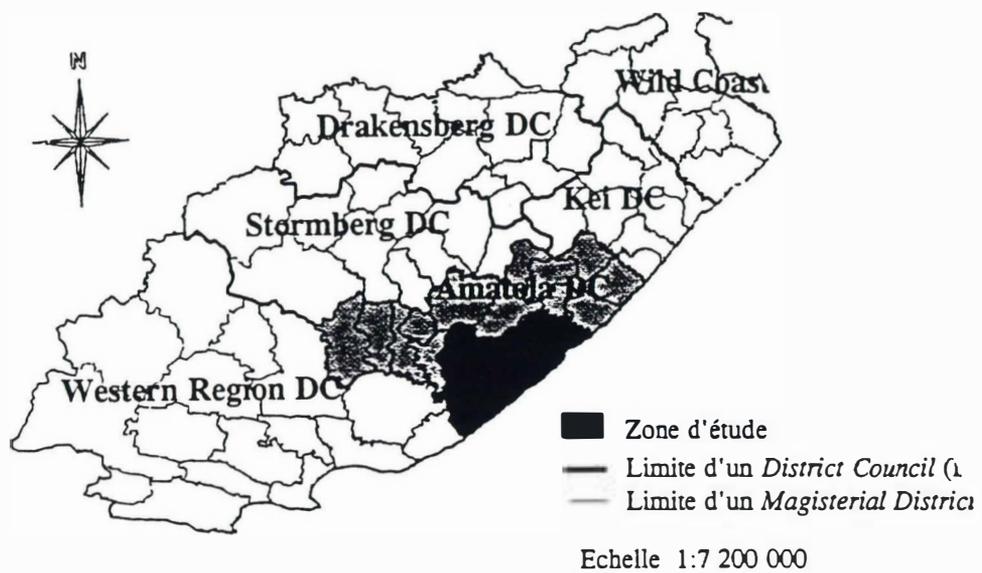
It is important to mention that, with regard to the choice of areas, the complementarity of the approaches, the products expected or still, the teams involved, all activities are co-ordinated (Bonnal et al., 1998).

The mission has two aims. On the one hand, the mission aims to implement a study on the management of the commons in the Kambashe area (which represents the work enterprised by Florence Lasbennes and which will not be detailed in this report).

² The Umthiza project was developed by ARC. The objectives of the project are i) to create a training and experimenting centre called Umthiza Centre, close to East London, whose purpose is to ease the modernisation of small farmers in the former Ciskei; ii) to conduct a pilot operation in a small area of former Ciskei, in this case Kambashe area, situated in the South of the former homeland, which counts a dozen villages. At present, only the second objective concerns the two French institutions involved. The complete project is still in its first stage, where the organiser is still busy assessing the necessary financing. A more detailed description was made during various previous missions by CIRAD and by INRA: P. Bonnal and P. Kleene in June 1996; C. Laurent and B. Hubert in June 1996; P. Bonnal in October 1997.



Carte n° 1 : Les 9 Provinces de l'Afrique du Sud (in Zariroh et Laurent, 1997).



Carte 2 : Province de l'Eastern Cape :
zone d'étude et limites des *Magisterial Districts*
et des *District Councils*.

On the other hand, the mission aims to complete a zoning of the rural areas, with a double objective in mind. The zoning must enable a better interpretation of the results obtained in Kambashe area, by situating Kambashe in its environment, by identifying the main basis of organisation of the regional layout and the flows of money, population and products. Furthermore, highlighting the diversity of the situations allows one to envisage the validation or the adaptation of the knowledge acquired in Kambashe, in particular the elaboration of a regional typology of households. Creating a zoning taking into account the knowledge of stakeholders was chosen. This methodology was conceived and experimented in Brazil within a project supporting the development of family-based agriculture in the Nordeste Region, by CIRAD/TERA and its Brazilian partners (Caron, 1997). Research was done with regard to planning at *município*³ level, in a context where the State is becoming less and less committed and is transferring the responsibilities for development support to the *municípios*. The objective was then to gather available knowledge, in order to map out operational elements for planning the rural development at the established scale.

This type of work relies on the understanding of the social processes which condition, and which have conditioned, the organizing and managing of rural spaces. Furthermore, rural stakeholders are enticed to participate in the planning process, through the stimulation of a dialogue bearing on the prospects and stakes of development.

A need for organizing the available information led, in the case of Brazil, to experiment an original process of diagnosis. The organisation of information from which orientations could be defined, with regard to supporting the agricultural sector, does not ease the decision-making process. The available information is usually sectorial (pedology, climatology, demography, production volumes, health, etc) and is not up to date. It does not account for the transformation processes of the rural world. While censuses might exist, they deal with the description of objects in relation to administrative boundaries which, if they are meaningful for government intervention, are not always pertinent to understand the evolutions and prospects of agricultural production. Two options were then adopted :

- the first option consists in developing the knowledge of stakeholders who have a good knowledge of the environment because they have lived and worked in it. The choice of variables which explain and account for the diversity and the dynamics of the situation, is not determined a priori, but becomes the object of the surveys (Perrot and Landais, 1993). The produced knowledge is structured from the verbal representations of stakeholders who have already unconsciously completed the essential part of the analytical work of the complex situations. Experience has confirmed the importance of the verbal representations of stakeholders, whose expert capacities prove to be very productive. In addition to new knowledge, where stakeholders integrate spatial, technical, economic and social dimensions

³ *Município* refers to the smallest Brazilian politico-administrative entity which has executive and legislative powers. In the semi-arid Nordeste Region, the span of a *município* covers many thousands of square kilometers.

of the processes of production and consumption, a structuring support is created. Contrarily to an agro-ecological zoning made from a soils map or with a geographic information systems (GIS), which rely on the exploitation of aerial photography and census data, for example, the variables which are taken into account are not chosen a priori in function of the competence field of the expert in charge of the analysis;

- the second option consists in using cartographic support as the basis for dialogue and the portrayal of knowledge. It allows the persons interviewed to express themselves while referring to specific locations, material objects, geographic boundaries, etc. Thanks to the cartographic support, an attempt is made to characterise spatial diversity and dynamics and to translate them in a new cartographic representation.

To reach the objectives, the same options were adopted for completing a zoning in South Africa. Of course, in this case the context is different and the use of such a methodology - zoning taking into account the verbal representations of stakeholders - then appeared experimental.

The work team included Mr Patrick Madikizela (ARC), Mrs Nobuntu Mapeyi (ARDRI), Mrs Kuthala Tolbat (ECDALA), Ms Florence Lasbennes (CIRAD/CNEARC), Mr Mehdi Saqqali (CIRAD/IEDES), Mr Laurent Lhopitallier (IFAS) and Patrick Caron. Dr Willie Burger and Dr Johan Carstens (ARC), Mrs Elsona Van Huyssteen and Prof. Johan Van Rooyen (University of Pretoria), Mr Wim Van Averbeke (ARDRI), Mr Nariman Kayltash (ECDALA) and Mrs Maryke D'Haese participated to the initial conception phase of the methodology. Furthermore, Mr Bonnal (CIRAD), Dr Laurent (INRA), Dr Cochet (*Institut Agronomique Paris Grignon*, INA-PG) and Mr Anderson participated to the phase of analysis of the results.

Choice of the study area

The study area was to include Kambashe area (cf. map n°3), where research was undertaken in 1997 (Zarioh and Laurent, 1997). Where possible, the area was to extend up to the limits of the administrative territorial unit which includes this area, i.e. the Amatola District, which was defined during the last administrative subdivision, after the abolition of apartheid, when nineteen magisterial districts⁴ were aggregated. In addition to the urban areas of East London and King William's Town, the district includes part of the former homelands of Ciskei and Transkei, as well as part of the Border region (situated between Ciskei and Transkei) which is mainly occupied by large white commercial farms.

The zoning of the whole district could not be achieved during the mission, due to its 21 000 km² surface area. As a result, the study area adopted includes six magisterial districts: East

⁴ The magisterial district is an administrative unit inherited from British colonisation, which ranges from 500 to 1500 km². However, the magisterial district has no executive power and its representatives are not elected but nominated by the District Council (in this case the Amatola District).



UMTHIZA

Umthiza Development Centre

(Section 21 Company, Reg. No 960766708)

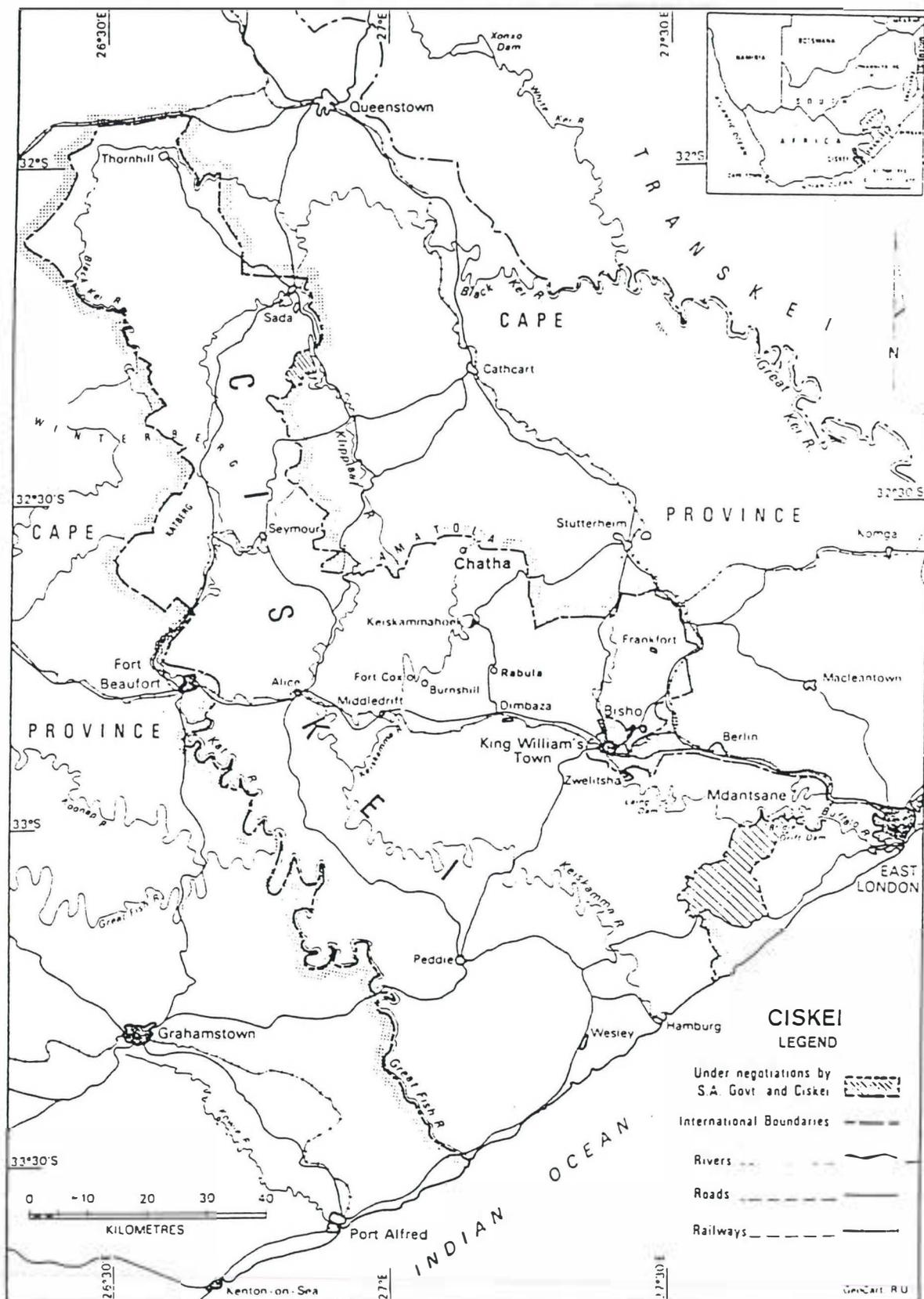
FIG 2: MAP OF THE TARGET AREA

1. MPOFU
2. VICTORIA EAST
3. KEISKAMMAHOEK
4. MIDDLE DRIFT
5. ZWELISHA
6. PEDDIE
7. MDANTSANE
8. EAST LONDON
9. KING WILLIAMS TOWN
10. KOMGA



UMTHIZA 3

Carte n°3 : La petite région de Kambashe et les Districts Magisteriaux voisins.



Carte n°4 : L'ancien Ciskei (d'après De Wet, 1995).

London, King William's Town (which includes the former districts of Mdantsane and Zwelitsha), Komga, Keiskammahoek, Middledrift and Peddie. They were chosen to represent a diversified set of territories, which include the main urban centres, part of the former Ciskei (including Kambashe), part of the former Border region and part of the coast. The study area⁵ thus covers 7 500 km².

2. Methodological experimentation of zoning taking into account the verbal representations of stakeholders

2.1 Methodological references : the Brazilian experience

The principle applied here is to represent on a synthetic map the diversity, organisation and evolution of the space studied. The rural space is indeed that defined by Bertrand (1975) : "a whole in which natural elements are combined logically with human elements. On the one hand, the whole forms a structure whose visible part is the rural landscape, in the plain sense of the word. On the other hand, it constitutes a system which evolves under the combined action of physical and human actors and processes". To map out a model⁶ of the complexity of situations, different types of information are mobilised, as for, at first, the representations which stakeholders make for themselves about reality. These informations allow the diversity of space and the factors which explain or reveal it, to be characterised. They are systematised during the interviews with stakeholders who have a complete or partial knowledge of the space. The analysis is then refined and completed, thanks to the comparative analysis of the statements made by different stakeholders, the direct observation of the landscape and human activities, and the secondary statistical, bibliographical or cartographic data which concern natural resources, infrastructures, demography, etc.

The methodology relies on the notion of the Homogeneous Spatial Unit (HSU), defined as a spatial unit within which productive resources, their utilization, their management by stakeholders, and the difficulties encountered, constitute a homogeneous set of problems whose variability is minimal at the adopted scale. Also, six stages of methodology are defined (cf. annex).

⁵ Here is the detailed area coverage for each district: East London, 1 509km²; King William's Town, 2 553 km²; Komga, 1 388 km² ; Peddie, 1 717 km²; Keiskammahoek, 563 km²; Middledrift, 713 km²; adding up to 8 443 km². The maps used for the surveys did not include the eastern parts of the magisterial districts of East London and Komga.

⁶ Creating a model is not, in this case, a normative process. It is about designing models which are understood as "symbolic, artificial and intelligible representations of the situations one deals with...a mental representation" (Le Moigne 1990)

2.1.1. Phase of preparation

The phase of preparation includes different activities :

- the study of secondary data, censuses as well as the study of bibliographical and cartographic documents;
- field observation with emphasis on landscape and human activities;
- selection of a map on which interviews will rely. Stakeholders must be able to find where the locations they know on the map without difficulty, thanks to roads, rivers, villages, high-lying areas etc. Other cartographic documents are reproduced at a similar scale, so as to facilitate overlays;
- selection of a sufficient number of stakeholders to cover the complete study area. For each portion of the territory, different persons are selected. Their socio-professional background is different, so as to confront the differentiated perceptions which they have of the same space;
- working out an open discussion medium. The productive activities represent the privileged variable⁷ through which discussions are engaged. They include non-agricultural rural activities. The hypothesis formulated here is that one deals with a synthetic variable whose forms express the complexity of the stakeholders' decisions and strategies. Other quantitative and qualitative variables (or groups of variables) complement the synthetic variable : natural resources (climate, topography, soils, vegetation, hydrological resources, etc); land tenure structures (distribution, type of exploitation, etc); infrastructures (gravel roads, sand roads, dams, wells, storage facilities, agro-industries, schools, etc); farming and production systems (typology, characterisation and numerical importance of each type); access to markets (amount of goods sold, commercialisation and supply networks of basic services - i.e. water, electricity - needed for production, local competition, labour market, etc.); socio-professional organisations as well as support projects and services. At the end of the discussion, the interviewed person is invited to express him-/herself on the main constraints and opportunities of the area and on the support projects which are possible: support to investment, infrastructures, new products and markets, etc.

⁷ Who does what, where, when and how ? What are the historical evolutions ? What was done before, since when and why it is no longer done ?

2.1.2. Running the interviews and identifying the Homogeneous Spatial Units (HSU)

The interview is individualistic and open. After presenting the work objectives and getting a cartographic overview from the map, the role player identifies the area known to him/her. The person is then asked to distinguish the different HSUs which he/she understands as per the areas of productive activities⁸.

Each HSU identified in this way is then characterised thanks to the open framework questionnaire (henceforth referred to as “interview matrix”). Based on this information, the role player is then asked about the pertinence of his/her initial subdivision work. In the process, questions are raised (e.g. Should not the two adjacent - or non-adjacent - areas, which were differentiated at the beginning of the interview, be merged, seeing their characteristics? Conversely, does not a road crossing a HSU bring people, who live close by, to implement new commercial or industrial activities? Should not a new HSU be delineated?). A new tracing is made. Each interview results in the production of one map and with a legend representing the characteristics of each HSU.

2.1.3. Compiling the results and making a comparative analysis of the verbal representations of stakeholders

All the results are highlighted by overlaying the maps obtained during each interview. Three types of problems can then arise :

- some areas are not described;
- contradictions between the verbal representations of stakeholders are found;
- the information given agrees but the boundaries of the HSUs do not coincide.

The two first types of problems are solved by doing further interviews. With regard to the third type of problem, the factor(s) which explain(s) the differentiation between two adjacent HSUs are identified. This factor can be the soil type, irrigation access, mining practice, etc. The limit between two HSUs is then drawn according to the factor(s) identified, while using secondary information if necessary.

A complete map of the HSUs is thus created. In some cases, the HSUs can be merged in Agricultural Units, composed of different HSUs with some similar characteristics. For example, this situation can apply to all the irrigated areas, public or private, around dams or along a river.

⁸ Tracing paper is placed on the map. Two interviewers guide the interview. The first one sees that the person draws and delineates freely on the map, and updates it as needed. The second interviewer records any complementary information into a matrix which is organized according to the open framework questionnaire.

A legend, which gives a summary of the information collected during the interviews, accompanies the map.

2.1.4. Integrating secondary information

Secondary information is then integrated into the initial map. Whether computerised or not, a geographic information system is created. Thematic maps can be extracted from that system, depending on the needs and demands (map of land tenure conflicts, of production basins, of water supply problems, etc).

2.1.5. Historical analysis and identification of evolutionary trends

Thanks to known bibliographies and to the expertise gained during the interviews, one tries to understand the historical events and phenomena which have led the spatial organisation to develop as it is represented on the synthetic map. One no longer focuses on diversity alone, but tries to understand diversity by taking into account forms of territorial and social organisation. Space is looked at in its entirety and the exercise integrates the influence of different stakeholders and of exogenous phenomena and events.

It is then a matter of defining the links which exist between different HSUs : financial flux, flux of products and labour, complementarity and synergy, competition and even conflicts for the mobilisation of production means or access to markets. It is possible to define indicators in order to monitor changes : volume of one type of production, changes in land value, irrigated areas, number of farming employees or number of installations, etc. They are very diverse and are supposed to account for specific changes in each location.

Once the dynamics of occupation and exploitation of the territory are defined, we can develop different prospective scenarios.

2.1.6. Feed-back

After the analysis, in order to make sure that care is taken to confirm and validate the work completed and to promote integration of the stakeholders into the planning process of rural development, a feed-back of the results is organized in a three-stage period :

- to the stakeholders who were mobilised;
- to the different socio-professional categories and institutions working in rural development to widen dialogue, by being careful to adapt technics of communication to respondents;
- to those responsible for planning.

2.2. Experimentation and methodological adaptation

Before the mission was enterprised, Dr Burguer and Mr Madikizela (ARC) organised preliminary contacts with the relevant institutions, gathered the cartographic matter, defined the time-table for interviews and selected stakeholders. These were contacted through the Transitional Representative Council (TRC)⁹ and all were invited to come at a specific time to the TRC premises. Many of them were TRC members, but the choice made also included other persons representing diverse organisations and socio-professional categories (cf. annex 4).

The cartographic basis of the work is composed of four 1: 250 000 cadastral maps from the Chief Directorate of Survey and Land Information, published in 1987. On these maps, one can read villages and towns, major and secondary roads, rivers and streams, contours, forests and nature reserves as well as administrative boundaries. In order to facilitate the interviews, the maps were enlarged to the scale of 1: 178.571.

The first two days were dedicated to defining the survey protocol and developing the interview matrix. Two criteria for identifying diversity were adopted. Besides the productive activities and considering the demographic characteristics of the rural areas of the former homelands - where the population is made of very young and very old people - and considering the importance of pensions and incomes from migration, it was decided to pay particular attention to income sources.

The interview matrix includes various topics such as facts observed, explanatory factors, perspectives, which are placed in a certain order to facilitate the progress of interviews (cf. annex 3).

The way interviews were conducted was adapted to the specific conditions. Each day, the team went to a new magisterial district. The dozen or so persons present were then split into three or four survey groups. Within each group, the interview related to an area which corresponds approximatively to the magisterial district, so as to make later a comparative analysis of the verbal representations of the stakeholders. The area, however, was not limited to administrative boundaries, so that coherence and continuity between surveyed areas could subsequently be ascertained. During the twenty-two interviews completed, around fifty stakeholders were involved. The interviews never went over two and half hours, otherwise it became difficult to request people's participation. Such a time limit can be a constraint for making the best of the participants' input. One must therefore be selective, be careful of not using the interview matrix exhaustively and be appreciative of the role player's ability to transmit his/her knowledge so as to complete, eventually, the interview at a later stage.

⁹ The representation of the Amatola District for the Magisterial Districts, composed of nominated members.

During the second part of each day, the team then proceeds to make a comparative analysis of the results obtained. At first, the results of each team are presented to the other teams. After overlaying the various maps, a new map of the surveyed area is drawn, highlighting what matches or what does not match from one interview to the other. The most characteristic HSUs are looked at, such as forests, urban areas, irrigated areas and the villages which have access to them, among others. What is remaining then is little differentiated. Depending on the information contained in the interview matrices, the team decides either to differentiate further HSUs, or to report the general information and that of a particular location on the matrix which accompanies the new map. The boundaries of each HSU are drawn by comparing the method used in each interview (by aggregating villages, in function of a piece of information which is contained in the map, such as a road, a river, etc.) and by retaining the method which is found to be the most pertinent one, as per HSU characteristics. Each day, a synthetic map is thus produced as well as a corresponding information matrix.

After the interview and the comparative analysis have been carried out, a map showing the whole study area is drawn, by juxtaposing the maps of the magisterial districts, by verifying what makes sense and what does not, concerning the overlaying areas, by reconciling HSUs which are sometimes distant one from another but which present similar characteristics, and by creating a homogeneous system of HSU names. All the information gathered is then written down in a matrix characterising each HSU.

3. Results

The mission was of very short duration. It was impossible to finalise the work envisaged in a few days. The objective was to complete the first three stages of the methodology and to draft a first map. On the basis of the HSU map, a first model of spatial organisation (fifth stage) was developed. The results of the draft must be understood as hypotheses which might be refined, clarified and validated.

3.1 Diversity

At the beginning of the interviews, the stakeholders usually say that “everything is the same, the main incomes deriving from pensions”. Afterwards, the map looks to be an excellent support of communication to highlight the diversity of the situations, even if it calls for elements which are not represented on it (for example, the means of transport to commute to work in town everyday).

The HSU map is temporary and is not shown in this report for this reason. Boundaries of HSUs are not completely accurate and need to be validated. Their characteristics¹⁰ still need to be confirmed. So far, the HSUs have been brought down to nine agricultural zones :

3.1.1. Zone 1 : urban and “rurban” areas

In zone 1, six HSUs can be distinguished :

- 1a. **The town of East London**, regional economic capital, with its residential areas.
- 1b. **Secondary towns**, which constitute a conurbation linking King William’s Town, Zwelitsha and Bisho (political capital of the Province).
- 1c. **Tertiary towns** such as Berlin and the **small rural towns** of Peddie, Middledrift, Keiskammahoek and Komga. These towns display less intense economic activities than in the previously-mentioned towns, but offer many services (i.e. administration, supply, craft industry, transport, etc.) which are accessible to local populations, including those of nearby rural areas. While these small towns might be limited, they nevertheless offer possibilities for employment as well as the clearance of agricultural products.
- 1d. **East London townships**, of which the main one, Mdantsane, was erected in 1963 to receive the black population from East London.
- 1e. **Industrial areas** of East London (West Bank and Fort Jackson), of King William’s Town and Zwelitsha, Berlin and Dimbaza. These areas have developed considerably between 1980¹¹ and 1994 in former Ciskei, due to fiscal advantages and to subsidies granted to industrials in order to promote employment. The effect of the end of apartheid was that this financial support stopped and a drop in the economic activity could be felt.
- 1f. **Urban-influenced communal areas**, which are defined by the grouping of villages. The workers who live in these villages go to town or to industrial areas to work, daily, thanks to short distances and to the fact that private (taxis) and public (bus, trains) transport systems are organised for commuting. Depending on the area, the pole of attraction is either East London, King William’s Town-Zwelitsha-Bisho, or Dimbaza. The money generated from working in town is the main source of income for the majority of the population. This situation can be defined as being characterised by an urban proletariat (working place, lifestyle) who lives in a rural environment.

¹⁰ For each HSU, all the information gathered was organised on the basis of the interview matrix.

¹¹ Date of independence of Ciskei.

The urban and peri-urban area is made of two groups : a territorial continuum which extends from East London to the North-West, along the Buffalo River, and which is characterised by major communication routes (roads, railways) and by the succession of urban and industrial centres; pockets of villages which are influenced by small rural towns, which are linked to one another and to the territorial continuum by a network of tarred roads.

3.1.2. Zone 2 : communal areas

These areas are made of villages from former Ciskei where one finds a collective land tenure system. Four HSUs can be differentiated :

2a. A **mountainous area** (or an area cut by valleys) to the North of the magisterial districts of Middledrift (Amatola Basin) and of Keiskammahoek, on the first foothills of the High Veld. The importance of diversified peasant systems has been mentioned¹².

2b. A **peri-urban area**, made of a group of villages from where, thanks to an efficient taxi transport system, many persons go to work in town, every day, in parallel to local agricultural production. This is the case of an area located at around 40km West of East London, which is crossed by the road going to Port Elizabeth and Cape Town. Villages there are old. Also, contrarily to neighbouring HSUs (cf. HSU 3 and 4), the peri-urban area has not been occupied previously by commercial farms, probably due to the fact that the characteristics of the natural resources are not very suitable for agricultural production (undulating relief).

2c. A group of villages where **agricultural activities are diversified** (horticulture and mielie for self-consumption, cattle breeding and small-scale breeding). Everywhere, agricultural abandonment and the importance of migrant income and social transfers has been mentioned. Such villages are found in the magisterial districts of Peddie, Middledrift, Keiskammahoek and King William's Town, in former Ciskei.

2d. An area similar to 2c., but where rainfall-dependent agriculture is not practiced due to **the climate being arid**. Goat breeding prevails along shrub-covered areas. Such villages are found in the magisterial district of Peddie.

Areas 2a., 2c. and 2d. have also been named **remote communal areas**. These form, indeed, a patchwork of villages which, once other HSUs are identified and they all present similar

¹² Mountainous areas were practically not included in the study. Considering the mentioned importance of agricultural activities, these are situations particularly interesting for the agricultural and extension research institutions. The direct observations made in these areas - and outside the study area - reveal great diversity from one valley to another, reminding one of the cultivation found in the countries of mountainous regions in Europe. The reasons for such diversity can probably be found in the specific history of each valley, in the characteristics of the natural resources and in the fact that these valleys are more or less remote.

characteristics, are established by default : these areas are characterised by the importance, already mentioned, of social transfers and migrations. Sometimes, local sources of employment exist, such as a small brick-making business or nearby commercial farms. But such opportunities are limited. Contrarily to HSU 1f and 2b, migrations are oriented in a preferential manner towards the big urban centres and mines which are far away (Johannesburg, Cape Town).

3.1.3. Zone 3 : commercial farms

Depending on the choice of agricultural production, six HSUs can be distinguished :

3a. An area of **intensive agricultural production**, along main roads and near urban centres in the magisterial districts of Komga and East London, in the border region. Products are perishable, essentially milk and fruits (pineapple and citrus). In such areas, irrigation is frequent.

3b. An area of **extensive production**, in the magisterial districts of Komga and East London (border region) and in Peddie, along the coast. In these areas, the production of beef prevails. Pineapple production is frequent West of East London. In the case of Peddie, certain commercial farms which produce pineapples were bought back from white owners by the independant State of Ciskei in 1981, then were exploited by black producers who leased them.

3c. An area of **ultra-extensive pastoral production**, north of the magisterial district of Komga where beef is produced within larges farms. Ultra-extensive production is related to landlord absenteeism.

3d. **Irrigated citrus farms**, on the border of the magisterial districts of Peddie and Middledrift, along the Keiskamma River, employ the labour available in the villages of the neighbouring communal areas, during citrus harvesting season.

3e. **Irrigated farms practicing horticulture** in the magisterial district of King William's Town, along the Buffalo River.

3f. **Abandoned farms** in Peddie magisterial district : old pineapple commercial farms, bought back by the State of Ciskei in 1981. They have not been included in the pineapple State farms (HSU 6) nor leased.

Most commercial farms are owned by white producers. They are found in higher rainfall areas (former border region and nearby the coast, westward) and are usually near major roads. Many of them employ black farm workers from neighbouring villages or who live on site. However, some black producers settled in the district of King William's Town, during the 1960s and the 1970s, after they were expropriated from the border region (displacement of black spots). Some also settled during the 1980s on the lands of the Ciskei government.

3.1.4. Zone 4 : mixed areas - commercial farms and communal villages

These are areas where commercial farms and communal villages co-exist. Two very different situations can be observed :

4a. An area of **extensive production** (similar to HSU 3b) in Komga magisterial district, in which communal villages can still be found (black spots). Inhabitants from these villages usually work in neighbouring farms. Since 1994, there are strong tensions and conflicts, resulting in many farms being for sale.

4b. An area of **old pineapple commercial farms**, bought by the State of Ciskei in 1981, in the magisterial district of Peddie and leased to absentee civil servants. They were exploited for pastoral purposes to a greater or lesser extent. The number of animals remained low and plots are very encroached. Serious tensions and conflicts occur between tenants and village inhabitants in the area.

3.1.5. Zone 5: irrigated lands of former Ciskei

This area is made of scattered spatial units¹³ which are usually located along the Fish River, the Keiskamma River, or along one of their tributaries. The irrigation schemes were set up by the State of Ciskei and were managed by a State firm. Choice of production, crop management sequence, supplying basic services and marketing of products were imposed on the peasants who lived on these lands. Since 1994, attempts to transfer the management of these lands to private enterprisers have been made, in particular the transfer of lands to peasants who previously exploited them. The transition has not been without problems, and one can see agricultural abandonment on certain parcels of land, as well as the degradation of the facilities and agricultural implements and equipments. Depending on the choice of production that was preferred previously, one can distinguish citrus production schemes (Peddie), milk production schemes (Keiskammahoek) or vegetable production schemes (Keiskammahoek and Middledrift) on these lands.

3.1.6. Zone 6: pineapple farms of former Ciskei

These farms are found in the Peddie magisterial district. They were set up by the State of Ciskei and were managed by a State firm, after white producers were expropriated from them. They count several thousands of hectares. Since 1994, after unsuccessful attempts to transfer

¹³ This area was defined by including all the villages which have access to irrigation, and not by including only the irrigated lands.

these lands to private enterprisers, the area has become the centre of important conflicts : it has been taken over by farm workers who were not being paid since 1994, and by peasants from neighbouring villages who claimed ownership of these lands. Cattle graze on pineapple fields which have been abandoned. The facilities and agricultural implements and equipments have been damaged.

3.1.7. Zone 7 : State forests

For most, State forests are found in the districts of Keiskammahoek and King William's Town and were owned by the State of Ciskei. They are either "natural" or planted forests. With regard to "natural" forests, inhabitants from neighbouring villages collect fire wood from them and send their cattle there for grazing. With regard to planted forests, the locals can be employed as foresters, a situation which has become increasingly rare since 1994.

3.1.8. Zone 8 : nature reserves and game reserves

There is a nature reserve in East London district : Umthiza Nature reserve (HSU 8a). Furthermore, some commercial farms have gone over into game breeding (HSU 8b), in the Komga district. Outside the study area, in the magisterial district of Victoria East, a game reserve was set up, including the north part of the Peddie district (Double Drift Game Reserve). The development of touristic activities in this area is limited due to its remoteness and difficulty of access.

3.1.9. Zone 9 : the coastal area

Two HSUs can be found :

9a. **Towns, villages and touristic places**, located along the coast, including that of former Ciskei where a State firm was responsible, previously, to manage holiday resorts. These areas offer employment opportunities for the inhabitants of neighbouring villages.

9b. The **communal villages** located along the major road between East London and Port Elizabeth nearby touristic places, in the Peddie magisterial district. Incomes generated from tourism and services in the area are important. The village of Weysley, which is the seat of an important firm exploiting pineapple farms, Ulimocor, has become a small rural town, in which different craft industries can be found.

3.2. First model of regional space organisation

From the information collected during interviews and from the characterisation of the diversity found in the area, it is possible to develop a first graphic model of spatial organisation. Such a model is only temporary. We have chosen to represent the elements which structure the

organisation of rural space with four primary figures (cf. figure 1 and forthcoming paragraph). Overlaying them gives an idea of the organisation and the diversity of rural space (cf. figure 2).

3.2.1. Traces of apartheid policies

Apartheid policies, which stopped only recently, left strong marks on the landscape and the organisation of rural space. In this study, we can differentiate two areas whose limits correspond to the border of former Ciskei (cf. figure 1). Apartheid policies resulted mainly in :

- the appropriation of the natural resources which were most favourable to agriculture (high rainfall, low uneven areas for mechanised agriculture, etc.) and setting up white commercial farms (zones 2 and 4) in the border region and the coastal area westward (old pineapple production basin). Of course, the characteristics of natural resources could not be used as the only explanation for ethnic spatial distribution. Even if there is an indirect link between them, wars and the fact that communities are closer or further to urban centres and to major roads have also played an important role;
- the differentiation of land tenure systems : private properties in commercial areas (zone 3); mixed and extremely complex tenure systems in communal areas (zone 2), resulting from successive administrations and creating many strata which, today, have given rise to numerous conflicts and claims. Furthermore, one finds tribal lands, trust lands and private lands. In fact, the situation is much more complex than that. While this was the situation until the independence of Ciskei, the government in place assumed the right to own all the lands, while only lands for collective use (through a headman) or leased private lands were allowed;
- population displacements : forced removals of black spots, villagers and private Xhosa farmers who reside in “white areas”, in the border region or other regions of the country, but also white farmers who were expropriated when Ciskei became independent. The demographic pressure resulting from the displacements in former Ciskei, reinforced the attraction for generating extra-agricultural incomes via migration, especially since black agriculture was not in a position to compete with white commercial farmers for economic reasons, in so far as the attribution of subsidies was unequal. This pressure as well as the deregulation of the local mechanisms of the management of the commons, which results from population flows, could also be the cause of erosive phenomena which are ground for concern. Furthermore, a few black villages still exist in the border region. Conflicts with surrounding farm owners have developed since 1994 (HSU 4);
- The application of the betterment planning policy in many villages, a policy which radically modifies housing practices (grouping in residential areas), exploitation practices as well as practices of management of the environment (delimitation of areas suitable for cultivation on top of hills and by default, of grazing areas on the rest of the communal territory. This policy, among others, contributed to deregulating local mechanisms for the management of the commons.

3.2.2. Industrialisation, urban employment and migrations

Towns offer employment opportunities in the secondary and tertiary sectors and offer access to health, education and administrative services. Where one lives in relation to the city and to industrial sites, in relation to major roads and to transport systems strongly influence the way space is structured.

The spatial distribution of the population is very irregular. The distribution concentrates essentially in the South-East / North-West territorial continuum of the urban and “rurban” areas (Zone 1). This situation results, firstly, from the forced removal of the populations mentioned above, and secondly, from the tax assistance policy to industries in former Ciskei and from migration phenomena, which can be categorised in the following way :

- daily movements from the “rurban” area (HSU 1f) towards neighbouring urban and industrial areas to go to work;
- step by step migrations : a young family member from a remote communal area (HSU 2a, 2c and 2d) migrates at first towards the “rurban” area (HSU 1f), then towards a township (HSU 1d), thus progressively coming closer to the labour market. Family members are thus scattered. Even while it is not inhabited, the house of the native village, in the communal area, is constantly being occupied;
- migrations from remote communal areas to urban and industrial centres which are far (Johannesburg and Cape town). Migrants usually send a portion of their income to their family. However, miners returning to the village after they have been made redundant seems to have occurred frequently during the last years.

Depending on where one lives in relation to towns (HSU 1a, 1b, 1d and 1e) or to small rural towns (HSU 1c), and depending on the transport conditions to reach them, we can distinguish various concentric areas around employment centres and major roads (cf. figure 1) : the “rurban” ring (HSU 1f), which is, in some way, the dormitory rural area for the urban labour, the peri-urban ring (HSU 2b) and the remote communal areas (HSU 2a, 2c and 2d). In each case, the demographic characteristics, the migration flux, the structure of the incomes, the functions attributed to agricultural production and the work force it employs, are specific and inter-dependent.

In the remote communal areas, the characteristics of the natural resources play an important role, especially since, locally, agriculture often represents the only productive activity. This is the case for the valleys (HSU 2a), in which peasant systems have remained.

3.2.3. The coastal area

Due to its influence on the amount of rainfall, proximity to the coast helped define spatial distribution under apartheid as well as the agricultural utilisation of the land. But this factor is also affected by transport conditions, due to the position of major roads, urban employment and the development of economic sites and activities.

The situations encountered on the coastal area (zone 9) are quite specific : importance of private initiative, domestic employment and employment in the touristic sector, major communication roads.

3.2.4. Regional development and investment of the former State of Ciskei in the agricultural sphere

The development of rural space by the former government of Ciskei resulted in the production of scattered areas in which one can find :

- areas in which investments were consistent in the field of agriculture. These investments concerned the implementation of irrigation infrastructures (zone 5) or State capitals and labour intensive farms (pineapple farms in zone 6). Everywhere, State services were always available and their disappearance, after 1994, have created serious land tenure problems as well as investment valorisation, transfer to private enterprisers, not to mention the fact that many civil servants have not been paid salaries;
- areas in which expropriation of commercial producers resulted in the relative abandonment of agricultural production. These areas are considerably encroached when, in the communal villages of the area (HSU 4b) or near the area (HSU 3f), pressure on the resources is considerable and agricultural abandonment is intense¹⁴. Land tenure conflicts become accentuated;
- maintaining commercial farms near the coast;
- the creation or maintenance of state forests, mainly in the highly uneven areas of the North of the study area (zone 7), for commercial or ecological purposes;
- the investment in urban and “rurban” areas (roads, electricity, water conveyance), which reinforces the attractiveness of towns and the intensity of migration phenomena.

Concerning agricultural production, this policy resulted in the co-existence of areas in which problems are intensified since 1994, and of marginal areas in which agricultural

¹⁴ The abandonment of mechanised ploughing, financed by the administration, was signaled many times as being one of the factors which explain the increasing importance of agricultural abandonment.

abandonment is considerable. After the State of Ciskei disappeared, the ecological, economic and social results of its policy were heavy.

As we have seen previously, in addition to the identification of the present diversity of the situations, the surveys made enabled the gathering of numerous information relating to the transformations in process. They also enabled the identification of evolution factors which might not be directly linked to the local or regional situations, as with the characteristics of the labour market, and in particular with the main urban and industrial centres of the country.

Highlighting such factors of evolution and diversity might not allow for a regional over-determinism of the agricultural situations and might not hide the importance of the local dynamics. These have not been taken into account in this study.

3.3. Follow-ups and utilisation of the results

During the last days of the mission (27-29 April), a discussion seminar on the results was organised in which representatives of ARC, the University of Pretoria, ARDRI, ECDALA, CIRAD, INRA, IFAS and INA-PG took part.

3.3.1. Regional diversity of “small-scale agriculture”

The discussions made at first were about the utilisation of the results in order to understand better the regional diversity of agricultural farms and rural households. On the basis of the diversity of agricultural situations, it seems possible to formulate hypotheses related to the diversity of what is called small-scale agriculture. These hypotheses can then be used as a stratification basis for the development work of a regional households typology. We can thus distinguish six situations :

- farmers living essentially of salaries and practicing horticulture and small-scale breeding in “rurban” and peri-urban areas, as well as in proximity of touristic sites (zone 1, HSUs 2b and 9b); production of milk, fruits or vegetables for local market is also found, although in small amount;
- farm workers who work on commercial farms or used to work on State farms; they practice horticulture and small scale breeding, and sometimes breed cattle on the owner’s land, in areas where conflicts are numerous (zones 4 and 6);
- farmers, settled on irrigated schemes, who are brought to assume new responsibilities since the disappearance of the State of Ciskei;
- farmers (often elderly people) of remote areas (HSUs 2c and 2d), in which agricultural abandonment has intensified, and where agricultural activities are reduced to horticulture and small scale breeding for self-consumption and the local market, and sometimes reduced to cattle breeding on collective grazing areas;

- small black commercial farmers, in small numbers, established around the white commercial areas in the district of King William's Town (HSUs 3b and 3e); the main activities are the production of cereals, vegetables and cattle breeding;
- peasants from mountainous areas, North of the study area (HSU 2a), in which diversified agricultural production systems are predominant.

Furthermore, the work enterprised shows that, if the support for agricultural development calls for technical and financial interventions, other themes appear important in the relevant context. It regards, in particular, land reform (redistribution and regularisation), judicial and institutional support in order to facilitate the transfer of public productive investments to private enterprisers, services and infrastructures in rural areas and the organising of marketing channels while the circulation of men and merchandise evolve considerably.

3.2.2. Interpreting R-D activities enterprised in the area of Kambashe

Zoning allows a better analysis of the situations and problems encountered in a specific place, while taking into account its geographic position as well as the transformations linked to the economic and social environment. Zoning might, thus, enable a better identification of individual and collective initiatives which need to be encouraged, and a better conception of local interventions and a better planning of the necessary means for their implementation.

Kambashe area is, for example, situated at the intersection of four HSUs :

- an area of commercial farmers, in the North (HSU 3b);
- a "rurban" area in the North-West (HSU 1f), in proximity of the East London-King William's Town roads (Mimosa Park and Welcome Wood villages), in which agricultural production is marginal;
- a peri-urban area in the South-East (HSU 2b), in proximity of a main road which goes in the direction of East London.
- a remote area in the centre, away from the main communication roads.

This result differs from agro-ecological zoning which has already been put forward (Zarion and Laurent, 1997). With a perspective of identifying actions to support the agriculture sector, the agro-ecological zoning completes ours.

3.3.3. Support for planning at District level

Using the zoning method to support the planning of rural development at Amatola District level was also discussed. Creating information systems on the basis of which administrations

which have been recently set up (since 1995) can organise their decisions and conceive new projects, is indeed an important stake.

However, today, the conditions are not met for implementing this new planning project. On the one hand, the results presented in this report are draft results. Information related to certain areas are missing or are imprecise. The HSU limits are approximative. More work is needed to update, refine and validate this first draft. On the other hand, the study area does not correspond to the whole of the Amatola District territory (but to around one third). Finally, and this might be the most important point, zoning, as a tool, was not designed in relation to this usage. For these reasons, a co-operation work with the the Amatola District Council turns out to be at first necessary, in order to specify the nature of the results expected on the one hand, and on the other hand to define the methods for using these products. What could be expected from it is to create a system of decision making through the production and distribution of information to rural stakeholders, by calling on specific mechanisms of dialogue and mediation. The map, as (im)perfect as it can be, can not solve the participation problems of the farmers or professional organisations to these processes. The map can, nevertheless, promote participation by offering a ground for reflexion for the definition of priority projects concerning regional development, financial and technical support to individual and collective initiatives, legislation, price policies, etc. Institutional innovation for supporting a collective decision making processus is the prime condition of the implementation of such a project.

In other respects, the limits placed on the map are fixed representations in the mind of people. But, situations evolve and become transformed. New HSUs can appear, disappear, spread or shrink. Their characteristics change. Zoning only represents a picture at a given time, but such a picture makes a mark on people's minds. As Brunet says (1990), "once produced, the pictures last much longer than the real facts for which they were substituted". If such a map was to be used in view of supporting planning, it is then necessary to imagine a system of follow-ups to the situations and to the actualisation of information. For this, it would be convenient to identify indicators of change for each area and for the area as a whole, and to implement the necessary means to collect and process information.

These conditions and orientations have been discussed. If there was to be a follow-up to this project, it would involve the following steps :

- a study of the planning needs for the Amatola District (analysing the present practices, listing available information, identifying the needs concerning information), and the development of suggestions related to the use of zoning for planning;
- extending the zoning process to the whole of the Amatola District, after the formalisation of the methodological adaptations which were identified during the testing phase;
- validation of the data collected during the interviews through feed-back, field observations and surveys as well as the compilation of secondary information;
- making a synthetic map and systematising the collected information;

- implementation of the supporting procedure for planning.

Conclusion

Spatial diversity is very strong. It can be explained partly from the history of the study area, characterised by spatial marks which are still very evident. Zoning allowed the main characteristics of these marks to be identified. The first results should enable us to assess the actions carried out in Kambashe area and to identify new ones. In addition, these results should provide hypotheses on the organisation of regional space, in order to start research activities at that scale.

Furthermore, implementing a new project has been put forward. It deals with the support for rural development planning at district level. The procedure would then seek to contribute to the formalisation of individual and collective projects. The ambition is to create new representations, new models, to inform and to arouse reflexion and debates so as to take decision for action. In a procedure of Research-Action, the role of the research is to conceive, to experiment and to validate methodologies, such as zoning taking into account the verbal representations of stakeholders, but also to identify the fields and limitations of application of the methods.

The zoning methodology which has been experimented is based on the successive steps of description of the diversity, and based on it, on the comprehension of the agricultural situations at local level and at the level of the district. This analysis allows evolutions in progress and transformation dynamics to be brought to the fore. It can then be used by decision makers to develop scenarios and to define more appropriately the extent of their interventions.

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ADDENDA

1. Timetable of the mission
2. Methodology of zoning taking into account the verbal representations of stakeholders
3. Open framework questionnaire (interview matrix)
4. List of stakeholders

ADDENDUM 1**Timetable of the mission**

April 14	:	Arrival in East London
April 14-15	:	Workshop : methodological and logistic preparation for zoning
April 16-23	:	Zoning interviews and field surveys
April 24-26	:	Synthesis of the results
April 27-29	:	Presentation and discussion of the results (workshop)
April 30	:	Visiting the area of Kambashe
		Return to France
May 1	:	Arrival in Montpellier

ADDENDUM 2

Methodology of zoning taking into account the verbal representations of stakeholders

LE ZONAGE À DIRE D'ACTEURS : CONTRIBUTION À LA PLANIFICATION MUNICIPALE

LE CAS DE JUAZEIRO (ÉTAT DE BAHIA, BRÉSIL)

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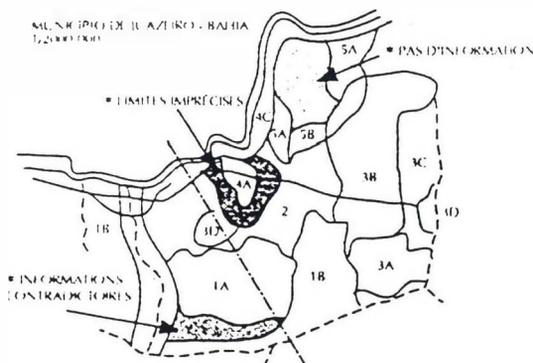
MÉTHODOLOGIE



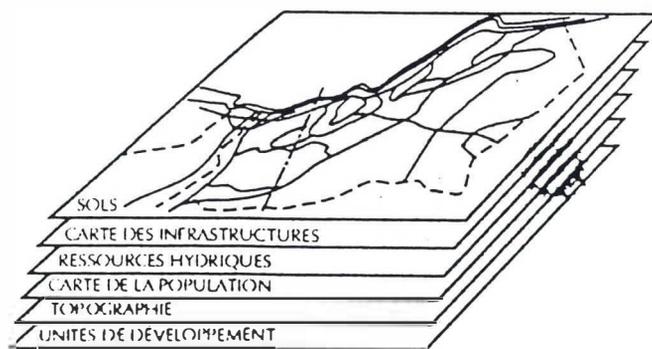
- 1 Étude bibliographique et cartographique
Sélection du document cartographique de travail
Élaboration du guide d'entretien
Sélection des personnes ressources



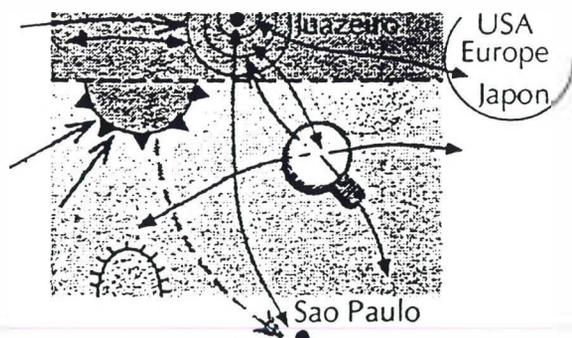
- 2 Entretien et identification d'Unités de développement



- 3 Agrégation des résultats des différents entretiens et identification des Unités de Développement.
* : de nouveaux entretiens sont conduits si nécessaire



- 4 Confrontation des données des entretiens et des informations bibliographiques et cartographiques



- 5 Analyse et caractérisation du fonctionnement et des tendances d'évolution spatiale et sociale



- 6 Restitution et planification au sein d'instances de concertation

ADDEMDUM 3

**Open framework questionnaire
(interview matrix)**

DEVELOPMENT UNIT N°

Productive activities Agricultural and non-agricultural			
Sources and level of income <ul style="list-style-type: none">■ agriculture■ salaries and wages■ self-employment■ welfare■ remittances			
Types of farming <ul style="list-style-type: none">■ size■ products■ non-agricultural activities■ land tenure			
Land tenure <ul style="list-style-type: none">■ types■ conflicts■ land reform projects			

<p>Land use</p> <ul style="list-style-type: none"> ■ fencing ■ grazing conditions and history ■ management ■ conflicts 			
<p>Natural resources</p> <ul style="list-style-type: none"> ■ topography ■ soils ■ climate ■ vegetation cover ■ natural water resources ■ problems (erosion...) 			
<p>Demographic patterns</p> <ul style="list-style-type: none"> ■ population density and distribution ■ settlement patterns ■ settlement history ■ age and gender ■ immigration (when, who, where from, why, evolution) ■ emigration (when, who, where from, why, evolution) 			
<p>Main employers (local and non-local)</p>			

<p>Rural-urban linkages</p> <ul style="list-style-type: none"> ■ accesibility of urban centers (time, services, roads) ■ localisation in relation to minor/major/cities ■ access to markets (buy and sell) :food, inputs... 			
<p>Local services</p> <ul style="list-style-type: none"> ■ processing and marketing facilities ■ extension ■ credit ■ health ■ education ■ shops... 			
<p>Infrastructure</p> <p>management and maintenance</p> <ul style="list-style-type: none"> ■ irrigation ■ roads ■ electricity ■ water supply ■ communications ■ agricultural facilities (dipping tanks...) 			

<p>Marketing system</p> <ul style="list-style-type: none"> ■ middlemen ■ end users 			
<p>Political system</p> <ul style="list-style-type: none"> ■ local administration and conflicts ■ farmers and community organisation (trading, unions, savings...) ■ political networks 			
<p>External interventions</p> <ul style="list-style-type: none"> ■ planning exercises ■ projects, human inputs ■ infrastructure ■ financial support 			
<p>Main problems</p>			
<p>Perspectives</p>			
<p>Projects</p>			

ADDENDUM 4

List of stakeholders

KEISKAMMAHOEK MAGISTERIAL DISTRICT (16/04/98)

1. Mr. BARNEY (TRC councillor), Mr. MAWANDE (farmer)
2. Mrs. DORIS (housewife + TRC councillor)
3. Mr. GOUTSHO (residential committee secretary), Mr. ADOMSI (army force member)
4. Mr. LUPHUMLO MANGCUNYANA (church representative), Mrs. PORTIA MGATI (church representative)

MIDDLEDRIFT MAGISTERIAL DISTRICT (17/04/98)

5. Mr. DWANDILE MGENGO (ANC representative) and Mrs. DORIS NCOYO (ANC representative)
6. Mr. NDLEBE (trader) and Mr. NTSHEBE (extension officer)
7. Mrs. MIRRIAM NYENGANE (village health worker) and Mrs. FLORENCE NDEVU (councillor)

KOMGA MAGISTERIAL DISTRICT (20/04/98)

8. Mr. KAKA (steering committee) and Mr. CRONJE (church representative)
9. Mr. SYD MILES (dairy farmer, representative of farmers association steering committee)
10. Mr. DLEPHU (councillor) and Mrs. QHOLANI (councillor)
11. Mr. STANFORD ZAMANI (steering committee of TRC) and Mr. DANIEL RHUMPU (steering committee of TRC)

KING WILLIAM'S TOWN MAGISTERIAL DISTRICT (21/04/98)

12. Mr. VICTOR MOYENI (TRC councillor) and Mr. NOJAHOLO and Mrs. NOMGA MFEKETHO (TRC councillor)
13. Mrs. STOMLE (librarian) and Mr. DEYI (extension officer, head of Zwelitsha district) and Mr. NTSHOTA (councillor, administration head)
14. Mr. SIYO (community representative) and Mrs. MOOI (TRC committee representative) and Mrs. DIANTYISI (TRC committee representative)

EAST LONDON MAGISTERIAL DISTRICT (22/04/98)

15. Mr. HAIG M. NDABANI (EDAFU representative) (18/04/98)
16. Mr. NGOJO (TRC representative) and Mr. MATIKINCA (boarder rural committee, NGO)
17. Mr. MATABESE (boarder rural committee, NGO) and Mrs. MATI (TRC officer) and Mr. LUBISI (extension officer)
18. Mr. JEBE (extension officer of Mdantsane) and Mr. MBANI (extension officer)

PEDDIE MAGISTERIAL DISTRICT (23/04/98)

19. Mrs. NOSINTU (cleaner) and Mrs. TEMBIE WOJIE (fieldworker, Peddie advice centre) and Mr. PUMZILE MAGIUNDANE (TRC representative) and Mr. NOLUTANDO MBUZWANA (TRC representative) and Mr. MAZWI JAKO (chairperson TRC) and Mr. REV. MARASHULA (anglican church)
20. Mrs. DIANI (TRC representative) and Mrs. KUTA (traders representative) and Mr. CEDAWI (TRC representative)
21. Mr. STOFIE (youth representative) and Mr. BUWA (farmers representative) and Mr. VANDA (Peddie TRC representative)

XXII. Mr. ANDREW AINSLIE (researcher) (21/04/98)

List of maps

Map 1. The nine provinces of South Africa (in Zariroh and Laurent, 1997)

Map 2. The Eastern cape Province by council and magisterial districts.

Map 3. Kambashe area and neighbouring districts.

Map 4. Former Ciskei (according to De Wet, 1995)