MAY 2019

KINGDOM OF ESWATINI

SUSTAINABLE LAND ADMINISTRATION AND MANAGEMENT

SYSTEMATIC LANDHOLDING RECORDING

GUIDELINES

Sustainable Land Administration And Management

SYSTEMATIC LANDHOLDING RECORDING

GUIDELINES

24 May 2019

This manual has been prepared by COWI A/S of Parallelvej 2, Kongens Lyngby, Denmark on behalf of the Kingdom of Eswatini, for a project of Technical Assistance Support to the Government of Eswatini in Sustainable Land Administration and Management, funded by the European Union.

VERSION	DATE OF ISSUE	DESCRIPTION	PREPARED	CHECKED	APPROVED
A	21 May 2019	Draft	SEJN	LS	LBNI
B	24 May 2019	Revised	SEJN	SEJN	LBNI

CONTENTS

APPENDICES

Acronyms and Abbreviations

ESWADE	Eswatini Water and Agriculture Development Enterprise
EU	European Union
FAO	Food and Agriculture Organisation (of the United Nations)
GIS	Geographic Information System
GOE	Government of (the Kingdom of) Eswatini
GPS	Global Positioning System
IT	Information Technology
LIMS	Land Information Management System
LIS	Land Information System
LMB	Land Management Board
MNRE	Ministry of Natural Resources and Energy
ODBC	Open Data Base Connectivity
ODK	Open Data Kit
SGD	Surveyor General's Department
SLAM	Sustainable Land Administration and Management
SLR	Systematic Landholding Recording
SNL	Swazi Nation Land
TA	Technical Assistance
TDL	Title Deed Land
TOR	Terms of Reference

1 Introduction

These Systematic Landholding Recording (SLR) guidelines describe the process and practice of collecting and recording, systematically and on a large-scale, data about homestead landholdings on Swazi Nation land (SNL). The guidelines have been prepared based on the design, implementation, results and lessons learned during the Sustainable Land Administration and Management (SLAM) project between 2016 and 2019 that piloted the recording and registration of land in four areas.

The SLAM pilot areas are:

- Hhohho / Ndzingeni
  - Ludlawini
  - Nkamanzi
  - Ndzingeni
  - Mvuma
- Lubombo / Dvokodvweni
  - Malindza
  - Mdumezulu
- Manzini / Mkhiweni
  - Dvokolwako
  - Mbelebeleni
  - Ekutsimuleni
- Shiselweni / Sandleni
  - Ngololweni
  - Nkhungwini
  - Kanzameya
  - Nkalaneni
  - Gasa
  - Lomfa

1.1 Systematic Landholding Recording Overview

The collection and recording of land information on a large-scale, systematic basis comprises the following steps:

- Preparation – organisation, budgets, staffing, planning, logistics, etc.
- Communications and public awareness
- Field data collection
- Data processing.
- Public display, corrections, objections and results verification.
- Finalising, preparing and printing the landholding records.

…

2 Project Preparation

Prior to the start of any meaningful work on systematic landholding recording, the necessary political support must be secured. Support is essential from:

- The *INgwenyama*
- Regional Administrators
- Chiefs
- Government (Cabinet)
- Line ministries and departments

For political reasons, there may be a requirement in work in all four regions at the same time. This impacts the planning, organisation, staffing, and budget.

2.1 Project area identification

For political reasons the pilot project worked in all four regions, at roughly the same time. Project areas were *tinkhundla* on the basis that these administrative divisions would be actively involved. Although this would not be the case (inkhundla have no role or responsibility over SNL) the tinkhundla are a suitable organisation area for planning and executing the work. Therefore, an *inkhundla* in the region is identified for SLR and all the chiefdoms within that inkhundla will be included.

When work in one *inkhundla* is complete, the project should go to an adjacent *inkhundla.* The same principle applies to chiefdoms; when fieldwork is finished in a chiefdom, it is started in a neighbouring chiefdom, and not a distant one. The reason for this is that awareness of the project spreads by word-of-mouth. People become aware that the project is coming when it is working in a nearby area.

Although *tinkhundla* areas and boundaries are known, chiefdom areas and boundaries are not. Mapping exercises done in the past (e.g. by the Elections and Boundaries Commission in 2017) reveal large overlaps, disputes and uncertainties about chiefdom areas. A definitive chiefdom map does not exist.

Therefore, plan to start work in a chiefdom that is near the centre of the inkhundla, and move in a clockwise, circular direction to the next chiefdom and out toward the edge of the inkhundla. Similarly, when planning the work in a chiefdom, starting near the centre of the chiefdom and work systematically outwards until reaching homesteads in the neighbouring chiefdom.

2.2 Organisation

The organisational structure of SLR, above the operational level, depends largely on the institutional arrangements for land generally. The legislative framework may specify how land administration is organised, but until institutional arrangements are clarified and reformed, the organisation of SLR must accommodate both government and traditional authority requirements.

Systematic landholding recording is a project; it has a beginning, middle and end. Therefore, it may be organised as projects are often organised. There can be a political-level steering committee for providing policy-related direction and guidance to the project. There can be a committee for technical matters providing guidance, direction and oversight for operational matters.

A project manager should be in overall charge of operational execution and performance of the project at national level. There may be 4 regional project managers, and perhaps assistant project managers depending on the scale of implementation.

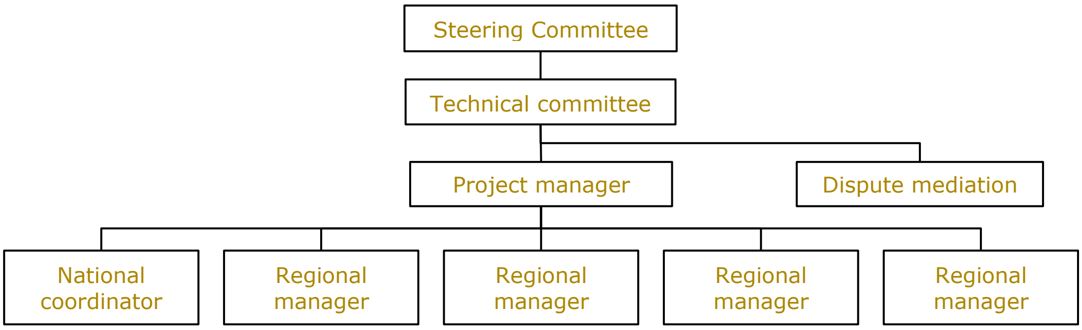


Figure 1: Possible project organogram

A dispute mediation group provides an independent means to resolve disputes between claimants and also problems caused by the project.

A national coordinator links the project to national bodies and operations at national level, such as the compilation of local land records from each region into a national repository.

The organisation beneath regional managers depends on the scale of the project. For instance, a large-scale project may justify separate, regionally-based operations for communications and data processing, or on a smaller scale project these could be consolidated under the national coordinator with each regional manager responsible for field operations.

2.3 Personnel

Staff are required, at an operational level in the organisation of SLR for the following:

- Project management and coordination
- Communications and public outreach
- Field data recording (enumeration)
- Data processing (editing)
- Logistics support (drivers)

The number of people depends on the scale of the project. At least one project manager, one project coordinator, and one communications and outreach specialist, are essential.

Each field team must comprise a minimum or two persons. Data recording needs only one person; a second is necessary to assist, especially if measurements are needed, and for security reasons. Enumerators should be educated to a least Form V and be familiar with the use of tablet computers and have good spatial awareness (appreciation of the positions of things in reality and representation on a map and image map/photograph).

Field teams may be composed of project employees or they may be local volunteers, or a combination of both. The use of local volunteers is encouraged; an allowance should be paid that covers food and refreshments.

Data processors are persons trained and skilled in cartography and maps and where computers are used, in the use of geographic information systems software.

Field teams need mobilising, which requires vehicles. Drivers will be necessary if each field team does not have its own vehicle. Field teams do not need a dedicated vehicle; the short distances between adjoining homesteads means that vehicle transportation is not necessary. However, teams may need transporting and dropping off and collecting in more remote parts of an area.

2.4 Financial

A project budget must be prepared that covers, as a minimum the following:

- Project staff salaries and allowances
- Vehicle purchase or hire
- Vehicle fuel and operating costs
- Desktop computers, tablet computers, plotters and printers
- Computer software
- Computer consumables (paper, ink)
- Communications (telephone usage)
- Printing (leaflets, notices, registers)
- Office furniture (desks, chairs, storage cabinets, shelves)
- Office operating costs (electricity, water, security)
- Communications (newspaper notices, radio announcements)

In addition, there may be a need for a budget to cover meeting and workshop costs, but this need not cover local meetings with chiefdoms councils and communities. The custom is that the chiefdom will cover these costs.

3 Communications and public awareness

Awareness of and support for the project are perhaps the biggest factors in the success or otherwise of a systematic landholding recording project. Without people – the beneficiaries of the project – being aware, supporting and participating in the work, data recording would be difficult, unreliable, and useless. Communications at multiple levels and public 'outreach' to make beneficiaries aware of the project, and its benefits, and to motivate their participation, must be conducted prior to the start of work and at various stages throughout.

3.1 Stakeholders

The key stakeholder for SNL is traditional authority. Before any public announcement about the project generally or in any area, the traditional authorities must be consulted, informed and their support secured.

Consulting and communicating with traditional authorities must conform to customary protocols. There is a hierarchy to follow that must be strictly observed, without deviation or shortcuts. The consultation steps are:

1. The *INgwenyama*
2. Regional Administrators
3. Chiefs
4. Chief's inner councils
5. Chiefdom communities

The custodian of all SNL is the *INgwenyama*, and therefore Chiefs will not countenance any work in their area without the consent of the *INgwenyama.*

Although Regional Administration are a recent addition to the traditional authority hierarchy, they are appointed by the *INgwenyama* and delegated powers to summon Chiefs in their region. Therefore, communicating with Chiefs as a group must be done through a Regional Administrator.

Customs vary, and in some areas to approach a Chief it is necessary to first approach the Chief's *Indvuna* (headman), whereas in other areas it is acceptable for the project, which has already communicated with Chiefs as a group through the RA, to approach the Chief directly.

Next, the project will communicate, explain the project, and seek the support of, the Chief's inner council.

The *Indvuna*, and members of the inner council, can then summon community members, to whom the project is also explained.

At the community meeting, the project purpose and results are explained. It is very important to emphasise that for homestead landholdings to be recorded and shown on the maps, lists and in registers, homestead heads or family members must make themselves available during the data collection period. Inform the community members of the following:

- To inform their family members about the project and to be prepared for data collection.

- The dates for the data collection period, and approximates date where enumerators are expected to work in various parts of the chiefdom. Ideally, give specific dates for specific areas, and although this is often not possible, give a rough indication.
- The questions that will be asked, and the information to be collected, so that homesteads can prepare. Give out a leaflet that lists the questions, information need, and how homesteads can prepare.
- If the head or senior family member is unlikely to be present on the day of data collection, then information can be provided to the person who is likely to be the respondent. This can be a written list of answers to the questions that will be asked.

Make information leaflets available during the meeting for community members to take away.

After the community meeting, other meetings for specific needs may then be arranged. These include focus group meetings for women and youth.

3.2 Public outreach

Communicating through traditional authorities is no longer as effective as it once was. Many people are now non- or part-resident in their home communities and reside much of the time in urban areas. Therefore, wider public outreach is necessary, through broadcast media, such as the radio and national newspapers.

Also, use posters and notices displayed in public offices, community facilities and shops in and around the chiefdom. Posters and notices can briefly describe the project, forewarn people about the questions that will be asked and the information needed, and give dates for community meetings or the start and end of fieldwork.

3.3 Targeted communications

To reach often marginalised and vulnerable groups of people, small focus group meetings may be held. Focus groups for women and youth are recommended as oftentimes their voices are not heard during larger community meetings.

3.4 Follow up outreach

Further meetings, especially for women and youth, to monitor and evaluate the outcomes and impacts of the project, should be held.

3.5 Feedback on data collection results

At the end of the data collection period, more chiefdom meetings are held, again with the inner council and then with the community. The purpose of this second round of meetings is to present the results of the data collection exercise back to the chiefdom for their review and scrutiny to make corrections and objections.

4 Field Data Collection

Landholding data collected in the field is made up of 2 parts:

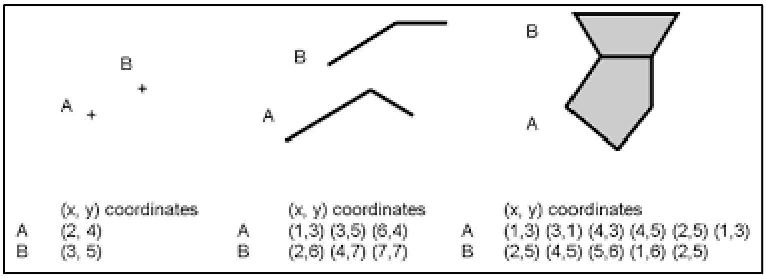
- Spatial data – landholding areas and fields (polygons)
- Attribute data – homestead head name, spouse names, land use, etc. (text)

Both parts are collected at the same time by the same data collection team using the same tool (table computer application software).

4.1 Spatial Data

Consists of three elements located in 2- or 3-dimensional space:

- Points
- Lines
- Polygons



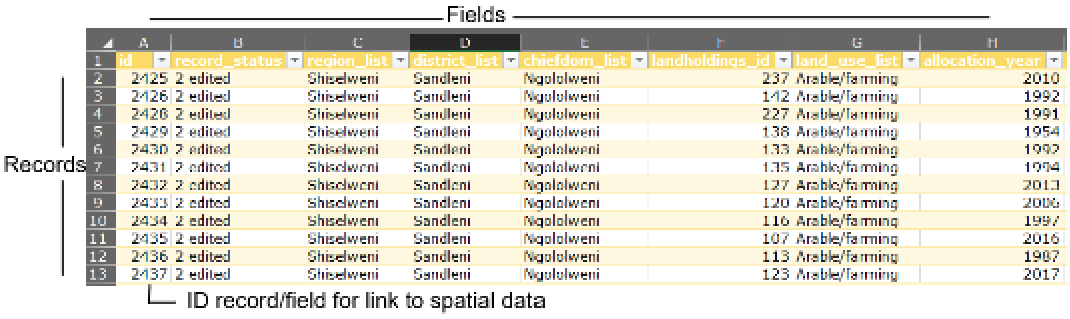
Polygons are constructed by enclosed series of lines, which are constructed by two or more points. Landholding data in SLAM is composed almost wholly of polygons, each of which is given a unique identification number.

Landholding polygons – parcels or fields – are uniquely identified in data collection by a sequential number in the range 1 to n. This range is for the whole country. In data collection this number is known to as the homestead id or homestead number. This number is displayed on the maps and lists produced for public display, correction and validation, before the results of data collection are finalised.

When finalised, a new number if produced, the landholding number. This number is in the range of 1 to n for each chiefdom. If combined with codes or id numbers for chiefdoms, the landholding number can become a unique landholding id for SNL.

4.2 Attribute Data

Attribute or text data is stored in records that comprise numerous fields of data.



	A	B	C	D	E	F	G	H
1	id	record_status	region_list	district_list	chiefdom_list	landholdings_id	land_use_list	allocation_year
2	2425	2 edited	Shiselweni	Sandleni	Ngololweni	237	Arable/farming	2010
3	2426	2 edited	Shiselweni	Sandleni	Ngololweni	142	Arable/farming	1992
4	2428	2 edited	Shiselweni	Sandleni	Ngololweni	227	Arable/farming	1991
5	2429	2 edited	Shiselweni	Sandleni	Ngololweni	138	Arable/farming	1954
6	2430	2 edited	Shiselweni	Sandleni	Ngololweni	133	Arable/farming	1992
7	2431	2 edited	Shiselweni	Sandleni	Ngololweni	135	Arable/farming	1994
8	2432	2 edited	Shiselweni	Sandleni	Ngololweni	127	Arable/farming	2013
9	2433	2 edited	Shiselweni	Sandleni	Ngololweni	120	Arable/farming	2006
10	2434	2 edited	Shiselweni	Sandleni	Ngololweni	116	Arable/farming	1997
11	2435	2 edited	Shiselweni	Sandleni	Ngololweni	107	Arable/farming	2016
12	2436	2 edited	Shiselweni	Sandleni	Ngololweni	113	Arable/farming	1987
13	2437	2 edited	Shiselweni	Sandleni	Ngololweni	123	Arable/farming	2017

Homestead and landholding attribute data are linked to spatial data (polygons) by the homestead number or the landholding number.

4.3 Data collection form

Land records data are collected in the field by a questionnaire form. There are a series of questions, and sub-questions that depend on answers given (Figure 2).

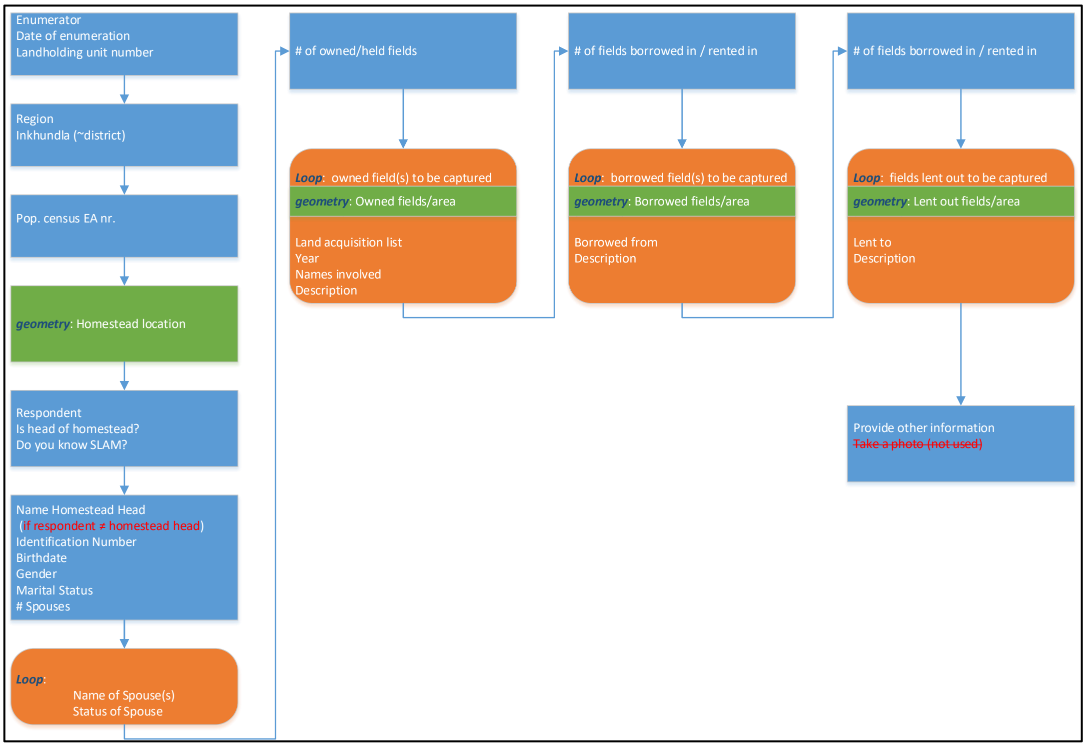


Figure 2: Data questionnaire structure

A copy of the manual version of the data collection form is attached at 7.6Appendix A. The form collects the following attribute data items:

- Homestead id
- region; district; chiefdom;
- landholdings id;
- land use;
- allocation year;

- population census number;
- homestead head name; homestead head id; homestead head birthdate;
- homestead head gender;
- homestead head alive/deceased;
- homestead head marital status; number of spouses;
- spouse names;
- chiefdom disputes; other disputes; type land dispute; year dispute start; land dispute status;
- other relevant information;
- enumeration date;
- number parcels; amount land rented in; amount land rented out; area land holdings; area land rented in; area land rented out.

The data are held in a 4 core linked tables.

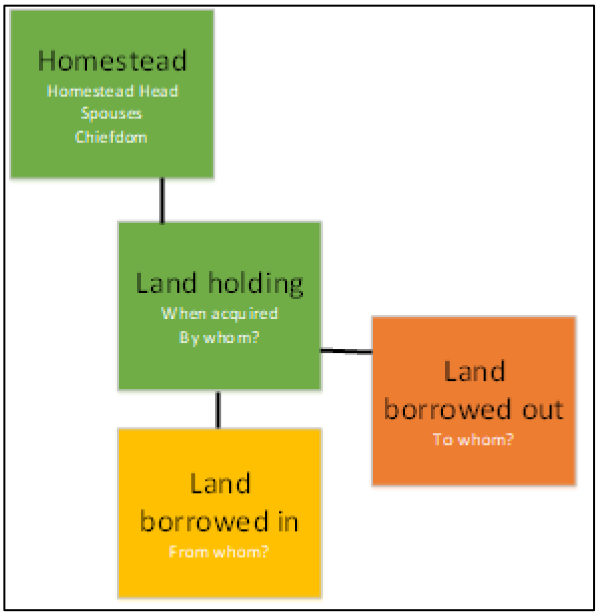


Figure 3: SLAM landholding database structure

4.4 Data collection tool

The tool used for data collection is GeoODK software running on a tablet computer. The GeoODK software combines the collection of both spatial and attribute data into one application and form.

The spatial attributes of a landholding are collected by a combination of an orthophoto map used in GeoODK and the GPS receiver built into the tablet computer.

The accuracy of the tablet's GPS receiver is approximately +/- 3 metres, which is sufficient for the delineation or definition of homestead landholding areas and boundaries that are generally demarcated on the ground (and not by cadastral beacons that required high accuracy cadastral surveys).

The GeoODK app main menu screen shows icons that do the following:

Form to collect data about the landholder etc.

Send collected data from the tablet to the office database.

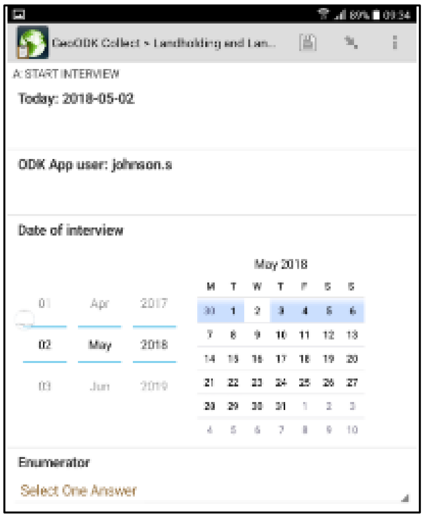
Edit collected data.

Select and show orthophoto maps and collected point and polygon data.

Delete collected data.

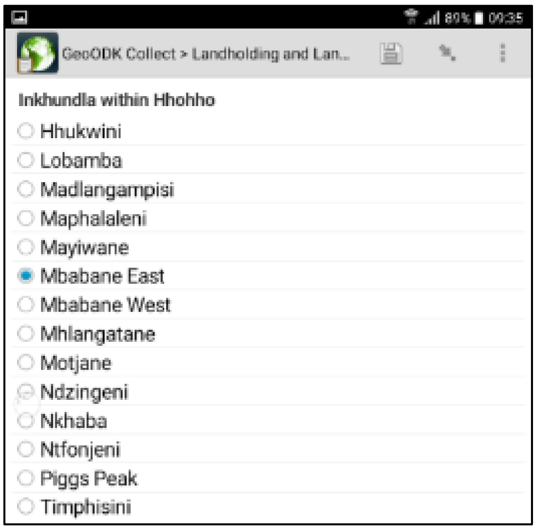
Settings.

The Landholding and Land Use Data Form contains multiple pages. The first page is for the date. The default is today's date.



The form collects the name of the enumerator (person doing the interview to collect data), which, together with the landholding data, is transferred to the database so that the productivity of enumerators can be monitored.

Capturing administrative data – the region, inkhundla and chiefdom names – is controlled by the application (selecting Hhohho region will list the tinkhundla in that region and selecting Ndzingeni inkhundla will list only the chiefdoms in the inkhundla). This enforces quality in the collected data.



There is a page in the form to collect the population census number. This data provides a future link to other socio-economic data set.

Recording the location of the data collection interview uses the tablet GPS and a high-resolution orthophoto map.

4.5 Interview respondent

The form collects data from a respondent. The respondent is the person who is providing information to the enumerator. Details of the respondent, such as name, ID number, contact details are collected so that any questions about the value of the data can be followed up.

Ideally the respondent should be the homestead head – the person most knowledgeable about the homestead, family members and the land. However, a homestead head is not always available, so the next best person would be a senior family member. The form asks about the relationship of the respondent with the homestead head.

For project purposes, a question is asked about awareness of the project, which is used to evaluation the effectiveness of the project's communication strategy.

4.6 Homestead head

If the respondent is the homestead head, the GeoODK app automatically copies the information across. If not, the respondent is asked for the name, ID, gender, marital status, etc. of the homestead head.

If married, the name(s) of the spouse(s) are collected. If divorced, the name(s) are still collected because this information has a bearing on the inheritance rights of children of the marriage.

If the homestead does not have a family-recognised homestead head – that is the family have not yet agreed who inherits that position and the chiefdom have not been informed – then the name of the former homestead head is collected with the corollary that s/he is deceased. The interviewer must question the respondent about the status of the declared homestead head – 'is the person recognised as such by the family, and is the chiefdom inner council aware that the person is the homestead head?' Because if not, the inner council may later require a correction to the data and the substitution of the name of the person *claiming* to be the head, with the name of the person, now deceased, who the inner council recognises as the homestead head.

A homestead head may be head of more than one homestead. For instance, there are multiple spouses each living in a separate homestead. In such cases, these must be treated as separate homestead landholdings.

Household information is not collected. Households are the internal family divisions of the homestead residence, where sons and daughters are now living in separate houses but within the same family homestead (group). These houses are typically close to the house of the homestead head, but they are not recognised by the family or the chiefdom as separate homesteads. Only where a household has physically moved a distance away from the homestead group, and fields have been allocated by the homestead head for the exclusive use of this household, may the household be possibly considered as a separate homestead, provided that the chiefdom have been informed and recognise the separate homestead.

Similarly, information about divisions of the family land into fields for homestead households, is not collected as separate homestead. These field divisions are not separate landholdings and not recognised as separate homestead landholdings by the chiefdom. However, these family land divisions may be collected, as attribute data and not spatial data (mapped) if requested by the respondent. Therefore, if a household is located within a homestead group of houses, and they claim to have their own fields in another location within the family landholding, this is not treated as a separate homestead. The household must be physically distant and recognised by both the family head and the chiefdom as a new and separate homestead.

4.7 Landholding fields

Traditionally, a homestead is located within its landholding. However, resettlement and pressure for additional land now often mean that the homestead residence group may be separate and distance from the agricultural fields. Therefore, the data collector asks how many separate pieces, parcels or polygons the homestead has. These are then captured as separate polygons but linked to the homestead.

The 'geometry' or 'geo-shape' polygon of the landholding, or landholding parcels, is then captured using the orthophoto map.

There are two ways to identify and map the land:

- Walk around the perimeter of the parcel, collecting data using the tablet computer's GPS, or
- Identify the land on the orthophoto image, marking the approximate boundary corners.

The first method, to walk around the land, is most appropriate where the respondent is unable to clearly identify the landholding on the orthophoto map, or when pointing out the boundaries from a distance, the enumerator is unable to identify the corresponding boundary features on the orthophoto. This method should always be used where the fields are distant from the homestead and arranged as a result of a resettlement scheme (see Figure 6, on page 19).

The second method is more appropriate where the respondent can reliably identify the landholding on the orthophoto map. This method works best in areas that have not been resettled and the homestead falls within the landholding (see Figure 4, below).

If needed, a description of the land area(s) can be added, such as the number of field strips. The current land use, such as agricultural, is also captured.

A question is asked about how the homestead acquired the landholding. The options include allocation by the chiefdom, inheritance, and subdivision of the homestead, which are the most common, but 'other' is included for different cases. If the homestead's lands are split into multiple pieces, the question is asked for each piece. This is because it is becoming common for homesteads to request additional land in a different location at a later time to accommodate a growing family.

Increasingly, homesteads are lending or renting out land, or borrowing or renting in land. This is important land administration information that must be captured to secure the tenure of these 'lease' lands. The form collects data about to who or from who the land is rented, what terms and conditions, if any. The spatial properties (polygon) of each piece of rented land is also captured.

The last question about the land is 'in what chiefdom is the homestead land currently situated?'. This is enquiring about who the homestead head recognises as their chief. It may not be the same chief/chiefdom that allocated the land.

Figure 4: Homestead landholdings

4.8 Disputes

The next set of questions enquire about the existence of any land disputes. This includes not only disputes with neighbours about boundaries but also if the homestead is situated in an area subject to a dispute between two chiefdoms. Family disputes about the land, often due to inheritance issues, may also be collected.

If a dispute is revealed, questions are asked about if and how it is being resolved.

4.9 Catchall

The data collection questionnaire includes the option of adding anything that the respondent thinks relevant. If information is revealed by the respondent that does not fit anywhere else in the form, it can be added here in free text form.

4.10 Photograph

Information evidence can be recorded if necessary in the form of a photograph. If there is a document or letter about the land it can be photographed. However, photographs of the homestead or the responded are not useful and are not taken.

5 Data Processing

Data processing is where the collected field data is:

- Brought back to the office and uploaded to a central database
- Editing of spatial data to:
    - Remove gaps and overlaps with adjoining homestead landholdings
    - Alignment of landholding areas with the orthophoto maps
- Preparation of the data for public display

Landholding field data is collected independently; that is, it is collected separately and in isolation from adjoining landholdings. The advantages of this approach is that it encourages respondents to reveal all facts without being constrained or intimidated by traditional authorities or other community members. The disadvantage is the amount of data editing needed.

Figure 5: Same data - unedited (left), edited (right)

The editing of homestead (text) and landholding (spatial) data is described more fully in SGD SLAM LIMS User Guide. Editing does not result in correct data. There will be cases where landholdings overlap, highlighted in red in the editing software (QGIS), that cannot be resolved in the office by interpreting the collected data and the orthophoto map. In these cases, the overlap is caused by either:

- Misidentification of the land, or
- Claims to the same land (dispute).

Misidentification of the land parcels is most common in resettlement areas, where the fields, often relatively small, are distant from the homestead.

The collected and edited data must go back to the chiefdom to either correctly identify the land or to resolve a dispute and to eliminate as many of the overlapping polygons as possible.

Figure 6: Example of misidentification of land causing overlapping landholding claims.

The requirements for public display are for the maps – one or more depending on the size of the chiefdom – showing the edited landholding polygons with overlapping areas highlighted and a unique identification number, which links to two printed lists, one indexed by the identification number and other indexed by the homestead head's name, showing key attribute text data.

6 Public Display and Validation

When the field data collection is done, and the data edited, the results must go back to the chiefdom for correction and validation. Without doubt, mistakes would have been made during data collection – for instance, wrong land identified, names misspelt or omitted – that can only be corrected by taking the data back to the field and asking homesteads to check it.

The procedure is two staged, observing customary protocol:

- Checks by the inner council
- Checks by the whole community

The inner council may, after initial inspection of the maps and lists, agree that it should go without delay to public display and scrutiny by the whole community. However, the inner council may wish to make their own corrections first, and sufficient time –2 weeks maximum – should be set aside to accommodate this. After corrections are made on the maps and lists by the inner council, they incorporated into the database and new maps and lists printed for public display.

6.1.1 Display

The draft maps and lists compiled during data collection and data processing are displayed for inspection by the community and all persons interested during the meeting. The maps and lists must also be displayed and available for inspection by any person – community member or not – for one month after the meeting. The continued public display of the records provides an opportunity for persons who could not attend the community meeting to also inspect, correct and submit objections.

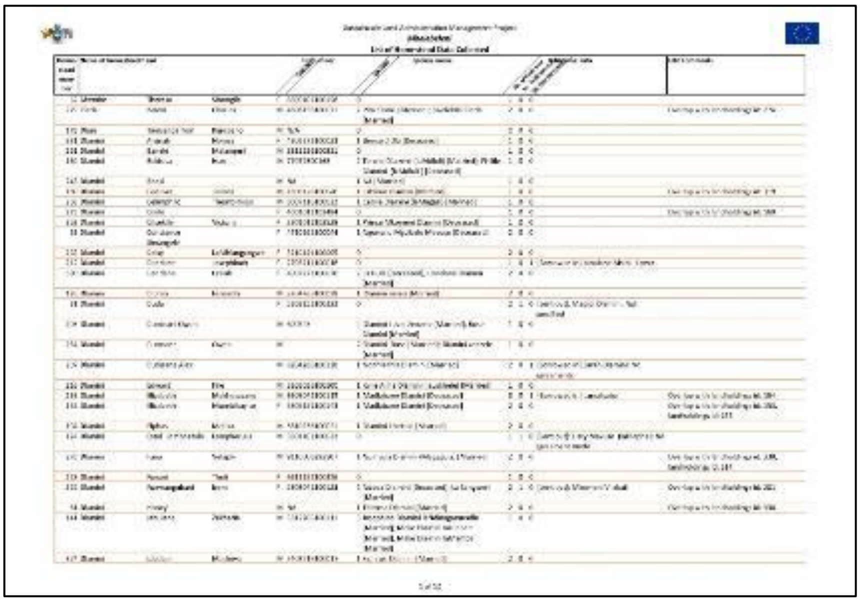


Figure 7: Public display list

The public display lists may be A1 or A3 sized printouts. Provide two lists: one indexed by the homestead ID number, which is also shown on the maps, and the other indexed by homestead head name in alphabetical order.

Figure 8: Public display index map showing the separate sheets numbers

The map(s) must clearly show each landholding polygon and a legible homestead ID number inside the polygon. If the chiefdom is large, more than one map is needed, and therefore an index must be prepared to that shows the coverage of each sheet. The map sheets are usually A0 size and the map scale may vary depending on the size of landholdings. Usually, landholding maps are of scale between 1:4,000 and 1:7,000. Refer to SGD SLAM LIMS User Manual for guidance on how to produce public display lists and maps.

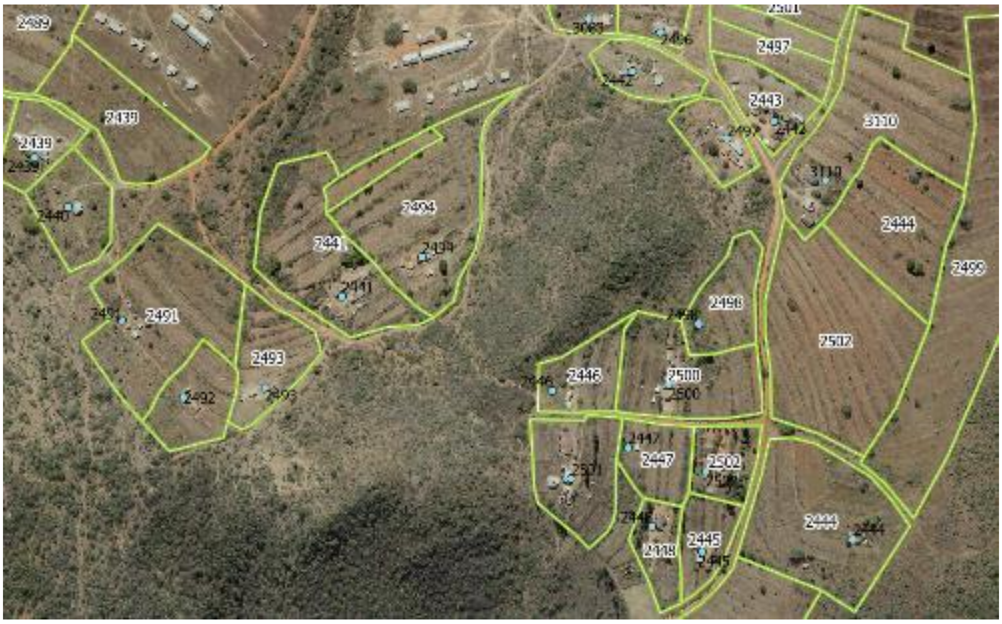


Figure 9: Part of a map that clearly shows landholding polygons and homestead numbers

The location and times when the maps and lists are available for inspection needs to be known to the community. 24 hours, 7 days a week access is not necessary but making the maps and lists available at weekends, when some community members return home from their place of work, is preferable.

No one should be restricted from inspecting the maps and lists at any reasonable time as notified. Making photographic copies of part of a map and part of the list is permissible, but not all the maps and the whole list.

6.1.2 Corrections

The inner council calls a community meeting at which it is explained that the maps and lists:

- Reflect data captured in the field and as told to the project by the respondent (person interviewed) who may not be the homestead head.
- Probably contain some mistakes, in identification of the land, especially of more distant fields, and spelling of names, and some omissions, for instance in the name of a spouse.
- May contain errors and omissions that may be considered as depriving someone of a land right, such as a sibling claiming to be the sole landholder where in fact there are other siblings with rightful claims to the land.

Therefore, it must be stressed to community members that:

- They must check the information collected for their homestead and landholding:
  - On the map, location of their homestead and area of land and number of fields
  - On the lists, that all persons are named, names are spelt correctly, and information is complete and correct.
- They must check the maps and lists for their neighbours' lands, and for other lands that they may be familiar. This guards against people making untrue claims to land.

If an error or omission is seen, the community member must inform the inner council. The correct information should be supplied. The inner council must take a note of the details of the error or omission and forward this to the project team for correction in the database.

6.1.3 Objections

Community members may object to more serious mistakes. Serious mistakes, errors or omissions may be due to someone claiming land that is not rightfully theirs. Everyone has a right to object to the person being recognised as the rightful landholder on the basis of an untrue claim. An objection may also be about an omission, such as the name of a spouse.

If anyone has an objection to anything appearing in or on the draft/provisional map and list, it should be submitted to the inner council, together with the grounds or details for the objection. The inner council must take a note of the details of the objection and assess whether:

- It is a less serious mistake or omission that can be easily rectified;
- It is a frivolous objection and has no merit; or,

- It is a serious case of person(s) untruthfully claim land that is not rightly theirs.

In all three cases above, the inner council must inform the project team, providing details of the objection, including their findings or opinion on the matter. Where it is a mistake or omission, it is rectified by the project team. If the case is a serious one, and has not been resolved quickly by the inner council, the project team marks the record in the database as disputed, pending resolution by the inner council.

6.1.4 Additions

New claims or additions to the record should **not** be accepted during the public display period. All claims and information about existing landholdings should be submitted during the data collection period. It is important that the community knows and understands this when the project is introduced to them during the communications and public outreach phase of work.

The reason for not accepting new claims and additions during the public display period is that these new claims and additions will not be subject to the same scrutiny as the claims and information provided during the data collection period. People may take advantage of this to submit untrue claims and false information. An example would be where someone sees land not claimed and decides to try and claim it for themselves.

If information or a claim could not be submitted during the data collection period and does not appear on the draft maps and lists, the information and claim can be accepted by the inner council, but it should not be part of the final maps, lists and registers produced by the project. After the project has finished, the inner council must review the information and claim, consult with community elders about its validity, and if accepted, the inner council may add it to the maps and register manually. Records and information collected after the systematic data collection by the project will be periodically included and updated in the computer database.

6.1.5 Validation

At the end of the public display period, after the inner council and community has had unfettered opportunity to inspect, scrutinize, correct and/or object to the information shown on the maps and lists, for at least a one-month period, then the landholding data can be considered correct and valid.

7 Data Delivery

Systematic Landholding Recording data delivery includes the collected data in the form of:

- Landholding map
- Landholding register
- Landholding list
- Index lists

This data is provided in two formats:

- Digital on a laptop computer
- Hardcopy in printed maps, books and sheets.

7.1 Homestead Landholding Map(s)

The final maps are almost the same as the public display maps. They are A0 in size, of scales between 1:4,000 and 1:7,000 depending on the size of landholdings, and show ID numbers, polygons, highlighted overlapping polygons (disputed claims), community areas and points (grazing land, schools, *umphakatsi*), a north point and legend.

The main difference between the final map and the public display map is the identification number. The final maps show a landholding number, whereas the public display maps show a homestead number. The landholding number starts at '1' in the chiefdom; the homestead number is temporary ID for use only in data collection and processing in a central database.

7.2 Landholding register

A register is prepared showing the most pertinent information related to landholding rights. It shows:

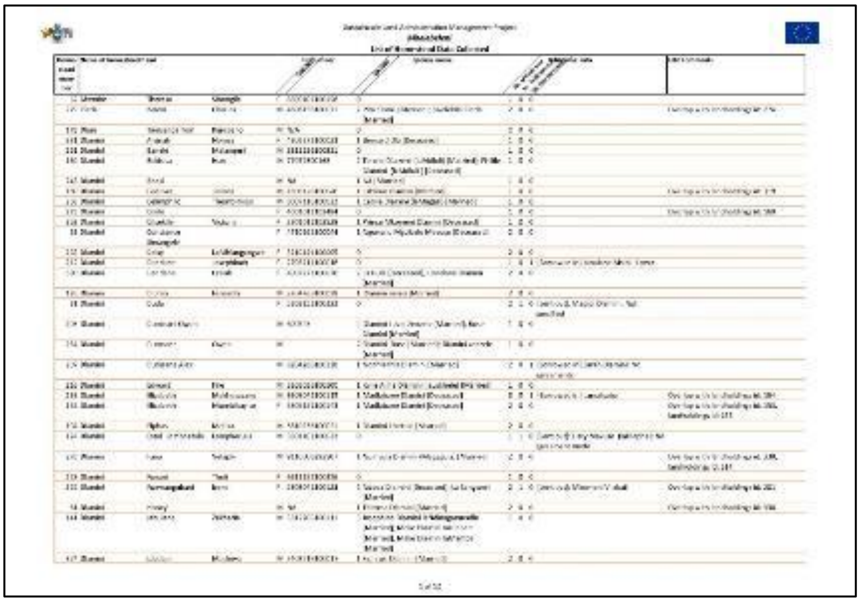
- Identification of the land (region, inkhundla, chiefdom, landholding number)
- Land attributes (year of allocation, area, number of parcels, land use)
- Person attributes (name and details of homestead head and spouse(s).
- Rights attributes (third party of intra-family rights over the land, land rented in or out, disputes, other notes, etc.)

The register is organised in such a way and contains sufficient space for recording changes or adding new information, which is added manually, by hand. The register also contains some blank pages at the back of the book for new land allocations.

Figure 10: Register page and book

7.3 Landholding list

The list is almost the same as the list for public display, but uses the new landholding number instead of the homestead ID.



7.4 Index lists

Index lists provide a convenient way to cross reference the landholding number and the homestead head name. There is also a cross refence to the old homestead number if people had taken a note of it.

7.5 Manuals

Printed copies of the following manuals are also provided as part of data delivery:

- Chiefdom LIS User Guide
- Chiefdom Land Records Maintenance

7.6 Computer data

The register and the lists are copied to a laptop computer provided to each chiefdom. The lists are in PDF file format.

The computer also has a customised version of QGIS for displaying the homestead landholding spatial and attribute data.

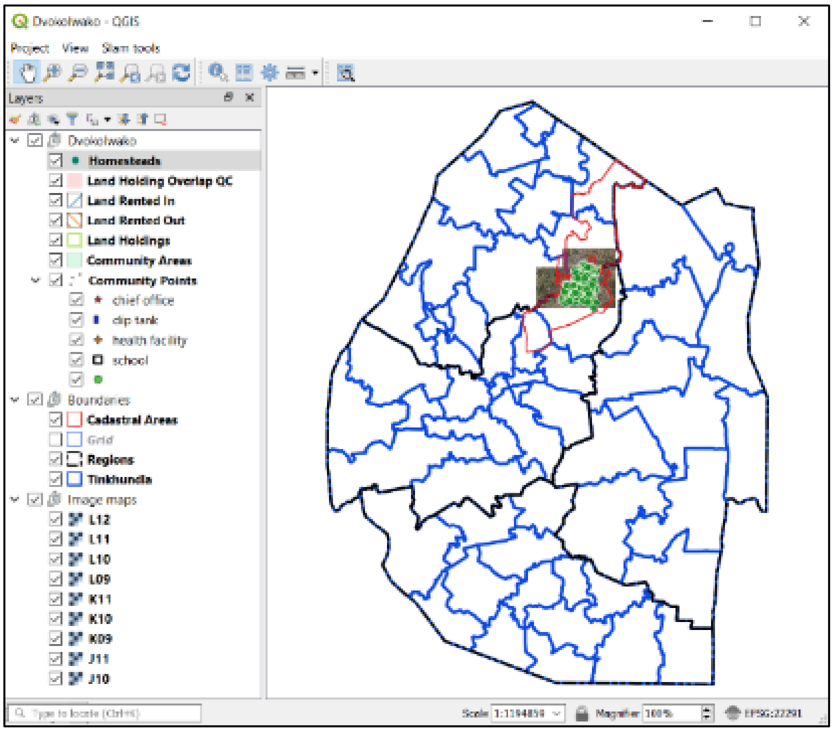


Figure 11: QGIS application for Chiefdom LIS

The QGIS software also allows for viewing homestead attribute text data.

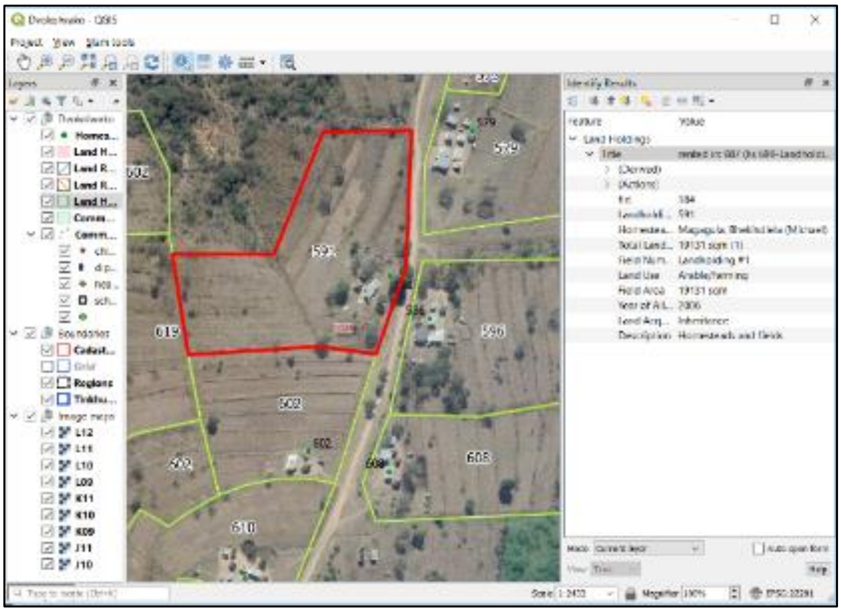


Figure 12: QGIS query and identify results

The Chiefdom user guidelines manual in PDF format is also copied to the laptop computer.

Appendix A Data collection form

LANDHOLDING & LAND USE DATA FORM	
Version E (20 February 2018)	(LUR Data Form manual(E).docx)
INTERVIEW INFORMATION	
Name of enumerator (person completing this form)	
Date of interview	
Landholding unit number (last number +1)	
HOMESTEAD LOCATION	
Region name	
Inkhundla name	
Population census enumeration area nr. (if available; can be found on the homestead house e.g. 112411040-007-001)	
Homestead location (mark on map)	
RESPONDENT (person providing information – does not need to be homestead head)	
Person interviewed: Family name	
Given name	
Other names	
Id Number (Personal Identification Number)	
Birthdate (Only required if Id Number would not be available)	
Gender (M or F)	
Contact information (e.g. telephone, cell phone)	
Is the respondent the head of the homestead? (Y or N)	
If not homestead head, what is the relation to homestead head? (Either ***spouse / sibling / dependent / other.)***	
Are you aware of the SLAM project? (Y or N)	
If so, how did you know? (Either: ***community meeting / family member / community member / poster or brochure / other.)***	
HOMESTEAD HOLDER (person who is recognised as head of the homestead)	
Homestead head: (Given name as in the passport (or official documents), other names may be used for alternative names).	
Family name	
Given name	
Other names	
Id Number (copy from respondent if homestead head).	
Birthdate (Only required if Id Number would not be available)	

Gender (M or F):	
Marital status (Either: ***Married / Multiple / Single / Widowed / .Divorced*** (If multiple spouses select Multiple).	
Number of spouses of homestead head:	
ouse name:	
Spouse status (either ***Married***, or else ***Deceased*** or ***Divorced***.)	
HOMESTEAD LANDHOLDING	
Land held by or allocated to the homestead (identify on the map)	
Landholding acquired by: (Either: *Allocated by umphakatsi / Allocated by homestead / Inherited / Other (specify))*	
Year of allocation or inheritance:	
If inherited, name of person inherited from:	
Number of parcels or fields borrowed, or rented from other homesteads or persons (identify on the map by dashed line).	
Name of person from who the land is borrowed, lent or rented.	
Any additional information about the land borrowed or the person (e.g. number of years agreed)	
Number of parcels or fields lent out or rented out to other, non-family members (On the map identify the fields with a dashed line) the *geometry* of each parcel or field lent out.	
Name of person to who the land is lent.	
Any additional information about the land lent or the person	
In what umphakatsi is the homestead land currently situated? (chief / chiefdom name r*ecognised by respondent)*	
DISPUTES	
Is the landholding situated in an area with a chiefdom dispute or overlapping chiefdoms? (Either Y or N)	
Is the landholding subject to any current land disputes (not chieftaincy disputes)? (Either Y or N)	
If "Y", is the dispute related to: (Either: inheritance / family matter / umphakatsi / other (specify)	
Year when dispute first arose	
What is the status of the dispute? (Either: nothing happening / being resolved)	
If being resolved, how? (Either: by family / by umphakatsi / by others (specify)	
OTHER RELEVANT INFORMATION	

Provide other relevant information that the respondent may volunteer.	