Regional Development Research
West Pokot  Elgeyo Marakwet
P.O.Box 287,       Kapenguria

TON DIETZ and
ANNE MIEKE van HAASTRECHT

University of Amsterdam,
department of Human Geography and
University of Nairobi, Institute for Development Studies

MIRJAM SCHOMAKER

University of Amsterdam,
department of Physical Geography and
Kerio Valley Development Authority

assisted by
ALBINO KOTOMEI
MICHAEL PTALAM LODIOKILE
ROMANUS PARTANY
and the 'sondeo' group 10-14 Jan. '83

in cooperation with
HUBERT HENDRIX

Programme Coordinator Arid and Semi - Arid Lands,
West Pokot  Elgeyo Marakwet

with permission from the office of the President and the Ministry for Regional Development, Science and Technology and from West Pokot District Commissioner

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INTER INTRODUCTION AND SOURCES

Locational Development Profiles present information on the following topics:
- the area and its administrative history
- physical geographical features
- population development
- economic development and the level and kind of market integration
- the level and kind of market integration
- social and infrastructural development
- a summary of the main development problems

The profiles are written by three researchers, two associated with the Institute for Development Studies and one with the Kerio Valley Development Authority. They worked together with the programme coordinator of the Arid and Semi Arid Lands Development Programme of the Ministry of Economic Planning and Development and with the District Administration. They were assisted by local research assistants.

Alale location is the most remote location of West Pokot District, 140-190 Kms from the District Headquarters in Kapenguria. It is also a neglected area, despite the high development potential. Civil servants used to talk about Alale in myths. Information was very scanty and meagre. As far as we know only one academic book is touching the area: James Barber's 'Imperial Frontier' (especially chapter 13 about 'the expansion of the Suk'), published in Nairobi in 1968. Further there are files with some information in Kacheliba, the Divisional Headquarters and in Kapenguria Ministries. In addition to that there is a 1:250,000 map ('Moroto') and some 1:100,000 maps and there are the results of population censuses.

Faced with the information deadlock we decided to use an experimental method of research in Alale: the 'sondeo' meaning 'to probe' or 'to find out quickly'. In preparation of this exercise we wrote a provisional Locational Development Profile (December 1982) combining all the things we knew and all the questions we had. Also we asked three research assistants, two of them teachers in Alale, to do some fifty interviews in various places within the Location. There were questions about the household and its history, especially about the dramatic period since 1978. There were detailed questions about livestock and agriculture, about income and expenditure and the respondents were asked to give their opinion about the things the government or missions could do to improve life in the area.

We got the idea to carry out a 'sondeo' from Chambers' article 'Rapid
Rural Appraisal: Rationale and Repertoire: a IDS Sussex Discussion Paper (Nr. 155) published in September 1980. It recalls that development planners were fed up with traditional methods of information gathering which were either very thorough but with too long a gap between research and publication or they were very rapid but also very biased and much too expensive: the flying squad of highly paid 'nomadic' research experts. Two citations may give some more background:

About the thorough approach:
"Some are academically excellent but useless: the social anthropologist's fieldwork published ten years later; the detailed soils map which sits on the shelf; the social survey which asked questions which were 'interesting' but of no use to a planner'. Others are never processed: the extensive questionnaire survey with the 30 pages of questionnaire ... which if asked are never coded, or if coded are never punched, or if punched never processed, or if processed and printed out, never analysed or written up, or if analysed and written up, never read, or if read never understood or remembered, or if understood or remembered never actually used to change action." (pp 3-4)

About the rapid approach:
"The most common form of quick-and-dirty appraisal is rural development tourism. The brief rural visit by the urban based professional .... (it) exerts biases against perceiving rural poverty. The anti-poverty biases are: spatial; urban, tarmac and roadside biases. But the poorer people are often out of sight of the roadside ... in the regions remoter from urban centres. Project (bias) ... to those rural places ... where something is happening. Biases of personal contact: those met ... tend to be the less poor and the more powerful, men rather than women, users of services rather than non-users, adopters rather than non-adopters, the active rather than the non-active, those who have not had to migrate and (inevitably) those who have not died. Dry season bias: most professionals travel most in the post-harvest dry season when things (especially for the poor) are better. Biases of politeness and protocol: courtesy and convention may deter rural (development) tourists from enquiring about and meeting the poorer people. The rural development tourist is also usually short of time and the poorer people stand at the end of the line." (pp 2-3)

Chambers advocates for a number of quick but less biased methods of rural appraisal. One of them is the 'sondeo', developed by Peter Hildebrand, who worked with it in Guatemala. Hildebrand formed a team of five agricultural scientists and five social scientists, working in pairs which go out each day and learn what they can from the people, returning in the evening to share experiences, take stock and decide about further priorities. Each day the pairs change. Chambers suggested that the method could be adapted for other purposes, adding more disciplines, adding civil servants and adding local people. "It provides a structure for mutual learning between disciplines, and its time bound form (one week) and the mutual checking in the evening sessions provide a stimulus for speed and accuracy."
A 'sondeo' is a very useful method in a situation where almost nothing is known and/or where individual researchers and civil servants are reluctant to go because of its remoteness or 'danger'.

Alale seemed to be an excellent area to do our experiment, as far as we know the first time it was organized in Kenya. It happened January 10-14, 1983.

The participants

There were four groups of participants:

1. researchers and research assistants
   a) non-Pokot: Ton Dietz and Annemieke van Haastrecht (social/economic geographers) and Mirjam Schomaker (physical geographer)
   b) Pokot/born in West Pokot: Albino Kotomei and Michael Ptalam Lodickile (teachers at Amakuriat and Alale Primary Schools resp.), Simon Lopeyok and Rachel Andiema (research assistants 1982/1983) and some local research assistants for the time of the sondeo: Leah Chepoghisyo (one of the very few Form IV-girls of Kacheliba Division), John Bosco Mwale (a student), Geldinus Moi (ex-Civil Servant in the Ugandan Upe-county, now a local trader).

2. civil servants
   the acting District Officer of Kacheliba Division, John Milimu; from the Ministry of Agriculture: Nyagah M. Kainga (MoA District Programme Coordinator, Kapenguria) and David C. Cheruiyot (Extension officer, Kacheliba Division; a Fochon) from the Ministry of Livestock Development: John M. Waite (District Range Officer Kapenguria, ex-Divisional Range Officer Kacheliba); from the Ministry of Environment and Natural Resources: James Mfwaya (Forest Assistant, Kapenguria); from the Ministry of Cooperative Development: Oliver Waluvego (ass. Coop. officer for Gold Mining Cooperatives, Kapenguria) from the Ministry of Community Development and Social Services: Samuel P. Kedi (Divisional Community Development Assistant, Kacheliba) and Joseph M. Tomitom (Community Development Assistant, Suam Location, Kacheliba; both Pokot); from the Ministry of Basic Education: Jackson Kakuko (T.A.C.Tutor, Kapenguria, a Fochon) from the Ministry of Health: G.William Kitagwa (Public Health Officer, based at Sigor); from the Ministry of Water Development: Brad Hanson (USA Peacecorps Volunteer) from the Kerio Valley Development Authority (Eldoret): Obadiah N.Kireng (Planning Assistant) the ASAL-Programme Coordinator West Pokot/Elgeyo Marakwet: Hubert Hendrix (based at Kapenguria).

3. local key-informants
   the Chief of Alale Location, Andrew Lochaoon the Assistant Chief of Alale Sublocation, Zakayo Lokitate the Assistant Chief of Kalapata Sublocation, Peter Lorech the Assistant Chief of Lokitanyala Sublocation, Augustino Kasensen, the Councillor for Alale Location, Michael Echakan the Headmaster of Amakuriat Primary School, Gabriel Pumyon the RCA/AIC Missionary and his wife Larry and Linda McAuley based at Lokitelawoyan near Alale the AIC pastor there, Ronald Chumun.

4. practical assistants
   a cook, Zabion N 'Morimori' Metobo assisted by Paul Matheka and three ASAL Clerical Officers, John Wachira, Charles A. Oravo and Wilson Maritim and also by Luuk two drivers: K. Koech and Jacob A. Kunela.
the programme

Monday Jan. 14: a four hour, six cars drive from Kapenguris/Makutano (lunch) to Alale.
building of a tented camp near the missionary compound in the evening a short briefing about the purpose of the week. Each participant got a provisional Locational Development Profile, a list of research questions, a list of participants and a sketch map.

Tuesday Jan. 15: five groups of 3 or 4 members each.
1. to the gold area of Naruoro and the miraa mountain Lerosuk
2. to the gold area of Nasal
3. to Nauyapong and Lokitanyala
4. to the cultivation area of Sasak and Kalapata
5. to the top of the Kachagalau Mountain
The groups should all look into five questions:
where do the people live / what is their main occupation
/ what was the landuse in 1982 and try to estimate the acreage of cultivation / estimate the production volume and income for the area / what are the services.

While those groups were away the D.0. had to attend a baraza about a very hot issue at that moment:
cattle stolen far away in the boundary area between Marakwet and Pokot, by young boys from the nearby Chemosorongit Location. The D.0. came back with some local key informants who were briefed about the sondeo and who were asked about the boundaries.

In the evening first there was a report about the 50 interviews done in December by Albino Kotomei, Michael Ptalam and Romanus Partany. Later all the groups reported, following the five questions.

Wednesday Jan. 16
New groups formed. More specific questions should be answered, partly based upon specific fields of the group members, partly formulated during the morning session. Seven groups this time of three members each.
1. to the water intake of the missionary water supply and to the agricultural surroundings
2. to Nauyapong (especially asking about traditional medicine) and Nasal (gold)
3. Amakurit and Alale Centres (about services)
4. Naruoro (the economics of gold)
5. Kimpur (services) and Kasitet (livestock)
6. Ekwangpakau (agriculture)
7. Sasak (labour calendar)

In the evening only groups 1 and 2 reported. There was a long discussion about the agriculture versus forestry controversy and about (traditional) medicine.

Thursday Jan. 17
in the morning groups 3-7 reported. Afterwards the participants could choose an area of interest, where they had to do one structured household interview and where they had to find out the good and bad years.
Five groups were formed.
1. stayed at the camp to interview all the passing animal herders
2. Alale/Kimpur: services
3. Nasal (gold and agriculture)
4. Naruoro
5. The water intake for a careful observation
in the afternoon everybody had to be back for a
baraza with wazee from all over the location. The
baraza was especially organized to hear the
opinions about the things the government and the
mission should do to improve life and especially
about the possibilities to make a better use of
already existing services. Civil servants addressing
the wazee used the opportunity also to encourage
them to organize themselves. Some of them also
gave them some advice.

In the evening there were more informal discussions

Friday Jan 18
A finishing session. Break up of the camp and
back to Kapenguria.

Map 1 Places visited during the Alale Sondoo
sondeo in retrospect

As can be seen in this Locational Development Profile, especially if we compare it with the Provisional one, the sondeo indeed is a very effective method to gather information for a variety of topics. Most groups reached the most isolated places by walking/climbing, to avoid the roadside bias mentioned before. With the exception of a small settlement east of Kachagalau mountain all the inhabited areas were visited. So the socio-economic coverage was large. Due to the distances and the very difficult terrain, the physical geographical coverage however was not complete: nobody visited the eastern side of the mountain range.

About the socio-economic coverage we have to add a few more remarks. During the interviews the households interviewed were chosen by the three research assistants. Lists of households were non-existent and to make them before interviewing (a so-called 'listing') would cost too much time. So the interviewers were asked to visit a variety of places ('the ecological method') and to take care to interview rich and poor people, old and young, men and women.

From the interviews we can conclude that the area covered was varied: 6 interviews in the south (Kimpur), 13 near Aliale, 5 near Naruoro, 14 near Amakuriat, 12 in the Sasak/Nasal/Kalapata area. It gives an adequate coverage of the settled areas, since most of the lower areas (Kasitet, Lokitanyala, Nauyapong) were almost empty and also east of the mountain range hardly any people were living.

Looking at the possible young/old and male/female bias we found that there were 41 men interviewed and 9 women; a clear male bias although in a number of cases the wife was present when the men was interviewed. All the women except one were young (under 35 years old), while half of the men were above and half below 35 years. We must conclude that especially the older women were left out. Some interview questions however explicitly dealt with the women, but of course the answers could be biased or wrong because they are given by men. It seems to be very difficult to avoid this neglect of older women. The three interviewers were all men and were young. We do not think female (or even elder female) interviewers could solve much of the problem since it is very much against social customs for (older) women to tell strangers/young men about their life.

Looking at the rich/poor bias we have the impression that indeed a broad spectrum of income/expenditure situations was covered.
Partly this was secured by the 'ecological method': poor people are very much concentrated in Kalapata (although it is a poverty in money terms, not so much in consumption terms). Partly it was because the interviewers themselves were trying to avoid the bias and two of them also knew the area and its population thoroughly. We have the idea that the top of the income pyramid maybe is a bit overvalued; e.g. five out of the fifty interviewed people appeared to be (rich) gold buyers (10%; while there are only 50 gold buyers out of ca 2000 households = 2.5%); another example: there are 100 households where a wage is earned (≈ 5%; that same percentage is interviewed). On the poor side of the situation we found that also some manifest problem cases were included, like a disabled beggar. However we have the feeling that widows and abandoned women were neglected (although in this area this does not always mean that they are poor).

During the sondeo many people were interviewed in a variety of places, even more diverse compared to the interviews. Every group going out included a Pochon from the area as a guide and interpreter. In this way not only those people were interviewed who were 'easy' talking (in Kiswahili; obviously the richer and more educated men) and willing to give their opinion about everything (a code of conduct for 'local leaders') but also less educated and more poor people. Also not only men were approached although it seems to be very unusual for civil servants to speak to women about life and policy matters. Also here there will have been a male bias, although we tried to minimise it by including female Pokot interpreters/guides.

It was impossible to avoid one bias, mentioned by Chambers, the dry season bias, because of the research programme in which Alale was one of the final parts. One problem was evident: except for the highest areas most crops were harvested and to estimate acreages could only be done by using second hand local information. Also there were less gold panners compared to the rainy season. On the other hand the cattle herders (although few compared to former times) were present.

Looking back at the organization we must say we were impressed by the serious attempts made by all participants to make it a success. Reporting was excellent and discussions of a high level. Not only the academic side was a success; for most civil servants it was their first time to visit this area, which was supposed to be under their jurisdiction and they were really curious and willing to crush all the myths which existed about this location.
1. THE AREA OF ALALE LOCATION

1.1. Map 2: Alale Location

- Location boundary
- Sublocation ""
- Road
- 1850 m. line
- Approx. 1:250,000
1.2. ADMINISTRATIVE HISTORY

The 'Karapokot'-area, or in Colonial times 'Karasuk', of which Alale forms the most northern part, was administered by Uganda from 1930 until 1970. For this period we lack a lot of information.

For the period before 1930 we found some data in the Kenya National Archives and in Barber.

The Chemorongit Mountains in Alale seem to be one of the settlement areas for Pokot when they moved from the Elgon area towards the northeast from the 17th century onwards. According to Barber the Pokot were living in the mountains until ca 1894, bordered and threatened by powerful neighbours, the Turkana in the north and east and the Karamojong in the west. The Karamojong controlled the western foothills of Chemorongit Mountains, the Kanyangareng river and the western bank of the Turkwell River. Following the rinderpest disease in the 1890's which decimated the Karamojong herds, the Pokot pushed westward and -between 1894 and 1922-occupied the area shown in map 2. However from the northeast they were pushed also by the expanding Turkana. Barber writes (p. 164):

"Turkana, aided by Ethiopians, launched bloody raids into the Chemorongit Hills, on occasions driving the Suk right out of the mountains. A series of these raids were made in the first months of 1917 when Turkana raiders armed with rifles were reported to have stolen 15,000 head of livestock from the Suk.... As a direct result of these raids large numbers of Suk fled across the Kanyangareng and the Turkwell into southern Karamoja"

But the westward pushing of the Pokot was not only due to Turkana pushing in the east. The Pokot herds increased and the balance of the tribe shifted away from the agriculturists in the hills to the herdsmen on the (Western) plains.

About the administration of the area west of the Turkwell River there was a continuous debate. Although in 1902 the official colonial boundary between Uganda and Kenya was the Turkwell River, Alale being in Uganda, the area was in fact administered from Kakeliba District Headquarters of the 'Suk' area and that belonged to the Kenya Colony. This was the situation until 1930 when the area was brought under the Karamoja-administration, although belonging to Kenya.

British administration in Alale started around 1922 with the appointment of chiefs and the creation of locations and with the
taxation of the population and with labour recruitment.

Around 1925 the northern part of Karapoket was part of two locations, Kubbako'o Location in the west (comprising West-Alale, West Chemorongit, West Kasei and most of Kapchok Locations of today) and Tarakit Location in the east (East Alale, East Chemorongit, Central Kasei and northeast Kapchok of today). The boundary between Kubbako'o and Tarakit most probably was a line connecting the western foothills of Kalapata, Kachúgalau and Lorosuk Mountains, the three most important mountains of the area. The boundary divided the old and established Pokot mountain area in the east and the more recently occupied plains in the west. In 1930 the British officer concerned wrote that in Kubbako'o location two third of the population had Karamojong mothers and that Lokitanyala was a Karamojong place. (Does this mean that from 1900-1930 many Pokot men were marrying Karamojong women? How did they acquire them by force or through existing friendship treaties between Pokot and Karamojong clans?)

Kubbako'o Location was administered from Kiwawa Post where a Police Post and some huts existed. Tarakits centre is unclear to us. There was a policepost at Kateruk river to prevent Turkana settlement in 'Suk' country (in 1925).

Some places which still exist were already there in 1925: 'Lokitanyala' and 'Alale'. Other places are no longer there (e.g. 'Lokiporinet' and 'Tendorquitch').

From 1930 to 1970 the area was administered by Uganda from Noroto. Two Sub-Chief's centres were established: one in Lokitanyala and one in Alale. The Chiefs were always (?) Karamojong. The Chief was in Amudat.
In 1970 the area of Karamoja was brought under Kenyan (West Pokot) administration again and the northern part called Alale Location with three sublocations: Pcholio in the southwest, Alale in the centre and Lokitanyala in the north. See map 4.

Map 4 Alale Location as existing during the 1979 census

Map 5 Alale Location now

In 1979/80 Chemorongit Location was formed, including Pcholio Sub-location. In the remaining part of Alale Location four sublocations were formed: Lokitanyala, Alale, Akoret and Kalapata. The Chiefs centre was changed to Amakuriat. See map 5.

Alale Location is still part of Kacheliba Division but in 1982 plans existed to form a new Alale (or Kubbako-o?) Division: Alale, Chemorongit and Kasei.
1.2. Physical geographical features:

Geology:
The area is mainly occupied by different gneisses of the very old (Precambrium) Basement System. The gneisses are formed during a situation in which existing rocks are changed, because of high temperatures, high pressures and chemically active fluids (a situation which can for instance occur during re-occurred tectonical movements within the earth crust). In this case we speak of high grade regional metamorphism. In the mountains NE of Alale Centre there are some intrusive bodies; bodies of igneous rock (coming from deep in the earth crust) which forced themselves into the preexisting rocks of the Basement System, along faults/joints/etc. In the contact zone between the Basement System Rocks and the intruding rock-bodies, temperature and pressure were high, chemical fluids were active and water was super-heated. Under these circumstances minerals have been changed again, and ores have been deposited from the super-heated (hydrothermal) solutions. The ore-deposits, like gold, filled up veins in the contact-zone. In this case we speak of contact metamorphism (more concentrated to specific zones). During weathering (desintegration) of the rock, single grains are released from the rock and transported by rivers. The ores/gold are/is very heavy (relatively) and will soon be deposited in the riverbeds (very near to the source). The closer you are to the source, the larger the grains you find, because heavier grains can only be transported over shorter distances (the running water doesn’t have enough energy to transport these heavy grains).

In Alale-location, up till now there are three places where the people are panning gold: Naruoro, Nasal and Akwanga. In the beginning (2nd half of 1981) people found more than they do now (for reasons see p. ). On today’s low level (in January 1983 the traders pay 120/= a gram; people find for about 5/= to 30/= a day) people most probably can continue panning gold for many years (like for instance near Marich Pass/Sigor, where people are panning gold for at least 25 years already). It is most likely that gold will be found at several other places along the streams coming from the mountain-area.
Relief:
The area is dominated by a mountain range ("Chemorongit Range") which is at most places surrounded by a rolling to hilly zone. West of the range an extensive old peneplain stretches out (into Uganda); the topography there is undulating. East of the mountain range and hills a piedmont plain is formed, and large areas of alluvial deposits from the Turkwell-river can be detected. Minor alluvial deposits (like the ones in which the gold is found) and minor footslopes are found scattered over the area.

Soils:
Map 5 is copied from the "Soil Map of Kenya, 19", scale 1:1,000,000 and shows the distribution of the various soils (also giving information on geology and relief). The first symbol in the code stands for: M = Mountains and Major Scarps
H = Hills and Minor Scarps
F = Footslopes
U = Uplands
Y = Piedmont plain
A = Recent Floodplain.
The second stands for: U = Undifferentiated Basement Systém, mainly gneisses
A = Sediments from various sources.
The third symbol gives information on the soils itself (see schedule). Several soil-samples have been taken, which will be analyzed at the Agricultural Laboratories in Nairobi.

Erosion
The erosion is severe at some places, mainly in the hilly- and mountainous areas (and adjoining footslopes). On the footslopes some areas lost the topsoil. In the areas where people have been panning gold intensively, erosion is severe as well. On the upper-hill- and mountain-slopes we found some scattered places where erosion was serious, mainly due to deforestation, cultivation and overgrazing/trampling.
We were told that one generation ago, the rivers used to be carrying water the whole year; now, because of deforestation for agricultural use at Lorosuk- and Kachagalou Mountain, the rivers have become seasonal. Apparently the watercatchment-area is gradually drying up (though this might take at least an other generation).
It is recommended to introduce a combined agro-forestry-system in the upper zone. Trash-lines should be constructed along the contour-lines; by planting hybrid maize and by using fertilizers one could have the same production while less acreage is used. Reafforestation of deforested areas, with commercial trees like Juniperus procera, Prunus africana and Terminalia brownii is necessary.

In 1982 1500 trees were planted by the Forest Department and/or 1000 trees by the RCA/AIC-Missionary (Eucalyptus camaldulensis, Cypressus tustanica, Pinus petula).

Unfortunately the local people destroyed many new planted trees, (only a few Pinus petula could be detected, though according to the missionary 50% to 70% of the newly planted trees survived). Forest-preservation-education seems necessary (for instance through the chiefs/baraza's).

Map 6: Soil-map. (for legend see schedule)
<table>
<thead>
<tr>
<th>CODE</th>
<th>PHYSIOGRAPHY</th>
<th>GEOLOGY</th>
<th>SOME SOIL-CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUbc</td>
<td>Mountains and major Scarps</td>
<td>somewhat excessively drained, shallow to moderately deep, rocky and stony, sandy clay loam. Cambisols; some Lithosols, Regosols and Rock outcrops.</td>
<td></td>
</tr>
<tr>
<td>MUbh</td>
<td>Mountains and major Scarps</td>
<td>well drained, moderately deep, stony, with humic topsoil, sandy clay loam, Cambisols; some Regosols and Rock outcrops.</td>
<td></td>
</tr>
<tr>
<td>HUre</td>
<td>Hills and minor Scarps</td>
<td>somewhat excessively drained, mod. deep, stony, sandy clay loam. Regosols; some Cambisols and Rock outcrops.</td>
<td></td>
</tr>
<tr>
<td>Fulc</td>
<td>Footslopes</td>
<td>well drained, shallow, gravelly (often stonemantle), sandy clay loam. Luvisols; some Ferralsols and Arenosols.</td>
<td></td>
</tr>
<tr>
<td>UUre</td>
<td>Uplands</td>
<td>well drained, shallow, often gravel-mantle, sodic and saline, sandy clay loam. Regosols (saline and sodic phase); some Solonetz.</td>
<td></td>
</tr>
<tr>
<td>UUlc/li</td>
<td>Uplands (Peneplain)</td>
<td>well drained, shallow to deep, in places rocky, sandy clay loam to sandy loam. Luvisols; some Cambisols and Rock outcrops.</td>
<td></td>
</tr>
<tr>
<td>YUxh</td>
<td>Piedmont plain</td>
<td>mod. well drained, very deep, slightly calcareous and -sodic, loamy sand to clay loam Luvisols; some Cambisols &amp; Rock outcrops.</td>
<td></td>
</tr>
<tr>
<td>AAjc</td>
<td>Recent flood-sediments of various stratified and calcareous, loamy sources</td>
<td>well- to imperfectly drained, very deep, Fluvisol.</td>
<td></td>
</tr>
</tbody>
</table>

1) To define suitability-classes we took into consideration soil-characteristics and the agro-climatological situation.
Rainfall:

The amount of rainfall in this location has only been recorded in 1982 (by the RCA/AIC-Missionary). The figures are plotted in the graph below.

From interviews, done in the location in December 1982, we could reconstruct a rough graph, indicating the relatively good and bad years. See next page.

One thing which can certainly be concluded from this (very inaccurate) reconstruction is, that both the amount of rainfall per year and the distribution within one year can vary considerably. In other words: the rainfall-reliability is very low.
<table>
<thead>
<tr>
<th>ACTUAL PROCESSES</th>
<th>LANDUSE</th>
<th>AGRO. ZONE</th>
<th>SUITABILITY FOR CULTIVATION 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>scattered gully-erosion and sheetwash</td>
<td>Forest; some cultivation (maize, beans),</td>
<td>III-5/IV-4</td>
<td>moderately suitable</td>
</tr>
<tr>
<td>scattered gully- and sheetwash-erosion</td>
<td>some rangeland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>scattered gully- and sheetwash-erosion</td>
<td>Forest and cultivation of maize &amp; beans and rangeland</td>
<td>III-5/IV-4</td>
<td>moderately suitable</td>
</tr>
<tr>
<td>scattered sheetwash-erosion and surface sealing</td>
<td>Bushland; some cultivation of sorghum and some rangeland</td>
<td>V-2/V-3</td>
<td>marginally suitable</td>
</tr>
<tr>
<td>little erosion</td>
<td>Bushland</td>
<td>VI-2</td>
<td>not suitable</td>
</tr>
<tr>
<td>some sheetwash-erosion and some surface sealing</td>
<td>Bushland; some cultivation (sorghum) and some rangeland</td>
<td>IV-4</td>
<td>marginally suitable</td>
</tr>
<tr>
<td>little erosion</td>
<td>Bushland</td>
<td>VI-1</td>
<td>not suitable</td>
</tr>
<tr>
<td>accumulation during floods</td>
<td>Bushland</td>
<td>VI-1</td>
<td>not suitable</td>
</tr>
</tbody>
</table>
Map 7: Agro-climatic-zone-map
(for legend see tables)
Table A. MOISTURE AVAILABILITY ZONES with an indication of rainfall, evaporation, vegetation, potential for plant growth and risk of crop failure

<table>
<thead>
<tr>
<th>Zone</th>
<th>r/Eso (%)</th>
<th>Classification</th>
<th>Average Annual Rainfall (mm)</th>
<th>Average Annual Potential Evapo. (mm)</th>
<th>Vegetation</th>
<th>Potential for Plant Growth</th>
<th>Risk of Failure of an Adapted Maize Crop</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>50-65</td>
<td>semi-humid</td>
<td>800-1400</td>
<td>1450-2200</td>
<td>dry forest and moist woodland</td>
<td>high to medium</td>
<td>fairly low (5-10%)</td>
</tr>
<tr>
<td>IV</td>
<td>40-50</td>
<td>semi-humid to semi-arid</td>
<td>500-1100</td>
<td>1550-2200</td>
<td>dry woodland and bushland</td>
<td>medium</td>
<td>low (10-25%)</td>
</tr>
<tr>
<td>V</td>
<td>25-40</td>
<td>semi-arid</td>
<td>450-900</td>
<td>1650-2300</td>
<td>bushland</td>
<td>marginal</td>
<td>high (25-75%)</td>
</tr>
<tr>
<td>VI</td>
<td>15-25</td>
<td>arid</td>
<td>300-550</td>
<td>1900-2400</td>
<td>bushland and scrubland</td>
<td>low</td>
<td>very high (75-95%)</td>
</tr>
</tbody>
</table>

Table B. TEMPERATURE ZONES with an indication of mean maximum, mean minimum and absolute minimum temperatures, night frost, altitude and range of various crops

<table>
<thead>
<tr>
<th>Zone</th>
<th>Mean Annual Temperature (°C)</th>
<th>Classification</th>
<th>Mean Maximum Temperature (°C)</th>
<th>Mean Minimum Temperature (°C)</th>
<th>Absolute Minimum Temperature (°C)</th>
<th>Night Frost</th>
<th>Altitude (feet)</th>
<th>Altitude (meters)</th>
<th>General Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>18-20</td>
<td>cool temperate</td>
<td>22-24</td>
<td>10-12</td>
<td>2-4</td>
<td>very rare</td>
<td>6000-7000</td>
<td>1800-2150</td>
<td>rift valleys</td>
</tr>
<tr>
<td>4</td>
<td>20-22 **</td>
<td>fairly warm</td>
<td>26-28</td>
<td>14-16</td>
<td>6-8</td>
<td>none</td>
<td>5000-6000</td>
<td>1500-1850</td>
<td>midlands</td>
</tr>
<tr>
<td>3</td>
<td>22-24 **</td>
<td>warm</td>
<td>28-30</td>
<td>16-18</td>
<td>8-10</td>
<td>none</td>
<td>4000-5000</td>
<td>1200-1500</td>
<td>lowlands</td>
</tr>
<tr>
<td>2</td>
<td>24-30 **</td>
<td>fairly hot</td>
<td>30-36</td>
<td>18-24</td>
<td>10-16</td>
<td>none</td>
<td>3000-4000</td>
<td>900-1200</td>
<td>lowlands</td>
</tr>
</tbody>
</table>

** These are averages for the whole country; for areas in and west of the Rift Valley the temperature range is one degree warmer and for areas east of the Rift Valley one degree colder than indicated.

* At altitudes below 2000 ft. 28-31 and 29-23 respectively.
2 POPULATION DEVELOPMENT

In the first half of the 20th Century the population of the Alale-area probably not exceeded 2000 people. The only population count we know is from 1923, 24 and 25, for the two locations of Kubbako'o and Tarakit, including Alale, Chemorongit, Kapchok and most of Kasei. Table 1 is giving some idea

Table 1 Population of Kubbako'o and Tarakit, 1923-1925

<table>
<thead>
<tr>
<th></th>
<th>min.</th>
<th>max.</th>
<th>min.</th>
<th>max.</th>
<th>min.</th>
<th>max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>huts</td>
<td></td>
<td></td>
<td>taxing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kubbako'o</td>
<td>549</td>
<td>597</td>
<td>409</td>
<td>494</td>
<td>1951</td>
<td>2162</td>
</tr>
<tr>
<td>Tarakit</td>
<td>520</td>
<td>606</td>
<td>354</td>
<td>444</td>
<td>1739</td>
<td>1976</td>
</tr>
</tbody>
</table>

These population counts were done to assess the number of potential taxpayers and the number of potential labourers. In 1924 labour recruitment started: in Kubbako'o 68 men were recruited (≈ 13% of all 'men' and 'polls'), in Tarakit 33 (≈ 8%). It could be that the actual population has been a bit higher, since it was not difficult for the very mobile population to avoid being counted.

From the archives we also know that the area was predominantly a grazing area around 1925: per household an average of some 40 head of cattle were counted and some 25 sheep and goats. This means that almost all the household consumption needs must have been supplied by their own livestock production. But one year might have differed greatly with the next year. E.g. in 1923 the average number of cattle per 'hut' was 26 resp. 21 in west resp. east. In 1924 it was more than doubled: 56 resp. 54. In bad years starvation must have been widespread.
In 1963 the population of Alale must have been between 3,000 and 4,000 people; in 1969 it was around 4,000 people (D.O. estimates ca 1977, file Kacheliba). But the situation was very unstable. During the rainy season men used to herd their cattle in Uganda. When the situation in Uganda was attractive for Pokot—as seems to have been the case from 1970-ca 1977—complete families moved to areas around Loroo, Amudat and Karita or even beyond, e.g. to Moroto. As far as children went to school they did it in Uganda.

But the population of 1979 shows a very dramatic increase for the location as it existed at that time (see map 4). The Census time was August 24, 1979. In April 1979 the Amin government of Uganda was toppled and many Amin soldiers fled to the north. The Moroto army barracks were opened and rifles and ammunition spread freely. The soldiers—together with Karamojong warriors who suddenly saw an opportunity to sweep the 'Pokot invaders' out of Upe—raided Pokot and a real war was fought. Although some Pokot warriors were killed, surprisingly they won and in their turn raided far into Karamoja and Sebei-areas. Prepared for revenge most Uganda Pokot fled to Alale and to other locations in Kacheliba Division. Many men were guarding in the area west of Lokitanyala, north of Nuyapong (also in Turkana District) and west of Alale. The Census figures clearly indicate this.

In total 13,542 people were counted in August 1979, more than three times the estimate for 1969. 45% of the population was between 15 and 45 years old; 46% younger than 15 years. Above 45 and below 15 years there were more men than women counted. But between 15 and 45 there were considerably more women than men in Alale and Pcholic Sublocations and the same number of men and women in Lokitanyala SL. Using the Census figures we can also conclude that the number of children per adult woman was rather low: 1.60 (compare West Pokot 1.78; Kenya: 1.84; Trans Nzoia: 2.17). Red Cross observations during 1980 suggested a child mortality rate of 80% before the children reach the age of five. (File Famine Relief Kacheliba).

Population details for Alale Location are given in Table 2 and Figure 1.

Let us look into the population distribution within Alale. Map 8 gives the estimated situation in 1973, using the Moroto 1:250,000 map. There were three population clusters by that time: Angoromut in the northwest, the west side of the mountains from Kalapata to Kimpur and the extreme northeast.
Table 2 Alale population 1979

<table>
<thead>
<tr>
<th>SL</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pcholio</td>
<td>1880</td>
<td>2000</td>
<td>3880</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>Alale</td>
<td>2522</td>
<td>3005</td>
<td>4828</td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>Lokitunnya</td>
<td>2522</td>
<td>2308</td>
<td>4830</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td>Total Loc.</td>
<td>6725</td>
<td>6817</td>
<td>13542</td>
<td>0.85</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1 Population pyramid Alale Location 1979

Map 8 Estimated population distribution 1973

Map 9 1979 Census Enumeration Areas

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the figure gives the number of 'villages' or 'huts' on Moroto 1:250,000 map 1973

population density is probably high
In 1979 the distribution was not very different; a very high population west of the Kimpur-Alale-Lokitanyala-Navyapong road and a population concentration on the western side of the mountains. However about the strong population concentration in the northeast we do not know anything: for two enumeration areas the data are 'missing'. Probably the area had a very low population in 1979 since the heavy Turkana raids in 1977-79. Using the EA-figures we estimate the 1979 population for the new Alale location at 8,500. West of the road (the EA's 01) was men's area, herding cattle and guarding. Only in the hills of Nasuret (in 01) women were cultivating. East of the road was women's area: the cultivating areas and the homesteads of Alale, Amakuriat but especially Sasaak and Kalapata and Nasal.

After August 1979: the calamities of 1979-1981

The period between March 1979 and April 1981 was a period of disasters, which threatened the dramatically increased population in its mere existence and which had very far going consequences. We will present a chronological history of calamities.

April 1979: The grazing area within Alale was much drier as in the years before. Cattle and many warriors moved to Uganda and South Turkana in the months before in search of water and grass. The rest of the people were abandoned in the old manyatta's without food. It was also impossible to buy food: a Foot and Mouth Quarantine prevented auctions so no money could be earned. Village Famine Committees were formed in Alale and Navyapong. People affected by famine were estimated at 2,400 already. Most of the actual Alale population however was still living in Uganda.

June-July '79: A goats disease, in Pokot known as "Simprion"/"Simbirion" and two other ones known as "Nausin" and "Loukoi" (C.E.P.P.) started in Uganda in May 1979, reached Alale in June-July and was most severe in August. Almost all the goats died.

November 1979: Cattle inoculations near Alale

March 1980: Cattle inoculations near Navyapong, Amakuriat and Alale However many cattle owners refused to send their animals: in the dry season the death risk was thought to be too big. Less than 7,000 animals were inoculated. Tenthousands must have been left out.

April 1980: Many people went to Amudat because Famine Relief started there. Food was finished and the rains, although started were very meagre. On top of that a terrible rinderpest was developing: it reached its peak in March-April around Navyapong and in May-June around Alale. Not many animals died because of the drought; they died from rinderpest. Hungry families were uprooting themselves from their homesteads and were flocking around Famine Relief Centres: first Amudat, later Amakuriat-Alale. The D.O. issued maize in Alale without return of service. The Catholic World Council gave rice for people willing
to work for food (e.g. school buildings for Alale Primary School). In the old Alale there were more than 3,000 people affected by famine. (In the new Alale 2,000) One quarter of the population, especially the Sasak-Kalapata area was terribly hit.

April/May '80: Cholera reached the area, on top of all the disasters, the Red Cross moved in with an anti-cholera campaign and to organize the famine relief. Their centre was Amakuriat.

May '80: From this time onwards Karamojong raids started to be severe, with a peak in June-July 1980 but continuing up to April 1981. Unless former raids a combined force of hundreds of Karamojong and Turkana attacked. A real war developed, both sides heavily armed.

June 1980: the Kongorok-Nakonyen area on the Uganda side west of Alale was devastated by thousands of warriors. 127 Pokot and many raiders killed; more than 1,000 people homeless. People fled eastwards towards the foothills. According to Alale informants 11,000 head of cattle were stolen that time.

November '80: The harvest is bad again; more people rely heavily on the famine relief given

April 1981: The Red Cross feeds 5,000 people in the Alale/Amakuriat/Nauyapong area. Also food was transported to Kalapata using donkeys. People were encouraged to prepare land for sorghum and maize cultivation; settlement in shamba areas becomes permanent for the whole family since hardly any cattle were owned anymore.

October 1981: Red Cross leaves the area. There is a very good harvest. A miraa trade is developing. In June gold was discovered in Naruoro; in October a real gold fever spread through the location. This attracted many people to the mountains; there the best cultivation possibilities were combined with miraa collection and gold panning. Serious plans were launched to improve the water supply.

The population pattern of Jan 1983 is completely different from that during the 1979 census. In 1979 most people lived west of the road.

In 1983 Kasitet was almost empty, the inhabitants were living near Kimpur. The border area near Kongorok was regarded as very dangerous and also nobody lived near Nasuret anymore. Lokitanyala —once a centre— was completely empty. Only some gold panners were to be found there in the dry season collecting water to bring that to Nasal.

In Nauyapong only a few homes were to be found and the settlement of the Police and the Dispensary. Those with cattle herd them on the mountain side in the dry season and reluctantly herd them around Nauyapong and between Amudat and Kibowa in the rainy season.

Most people are to be found east of the road: lower settlements from Kimpur, via Alale and Amakuriat to Nasal; higher settlements at the Lorosuk slopes, around Naruoro (for the temporary gold panners from far away also in caves), in the Sasak area in the valley of the foothills of Kalapata and in Kalapata itself. On the eastern side of the Kachagalau mountain only some 200 people are living. East of Kalapata some more. Kalapata people herd their animals near Lodwar.

Maps 10 and 11 present an estimated comparison of the distribution.