LAND REFORM VERSUS AGRARIAN REFORM IN NORTHERN NAMIBIA: A CASE STUDY FROM THE GCIRIKU DISTRICT OF OKAVANGO

Chris Tapscott

SSD Discussion Paper No. 7

April 1994
LAND REFORM VERSUS AGRARIAN REFORM
IN NORTHERN NAMIBIA:
A CASE STUDY FROM THE GCIIRIKU DISTRICT
OF OKAVANGO

Chris Tapscott

SSD Discussion Paper No. 7

April 1994

Social Sciences Division
Multi-Disciplinary Research Centre
University of Namibia
Private Bag 13301
Windhoek

Tel: (061) 42421
Fax: (061) 307 3636
A PAPER PREPARED UNDER A RESEARCH PROGRAMME ON
"LAND ISSUES IN NAMIBIA"

FUNDED BY THE FORD FOUNDATION
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Methodology</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Historical Background</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>The Present System of Production</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Shortages of Domestic Labour</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>Problems of Demography</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>Inadequate Support Services</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Conclusion</td>
<td>11</td>
</tr>
<tr>
<td>9</td>
<td>Bibliography</td>
<td>13</td>
</tr>
</tbody>
</table>
1. Introduction

As a consequence of the dispossession and land theft of the colonial era and the ensuing extreme inequity in land ownership between settlers and indigens, a shortage of land has generally been viewed as a serious constraint to arable agricultural production in much of the northern communal areas of Namibia (Moorsome; 1982:66; UNIN; 1986:112). This view has been bolstered by the results of recent quantitative research which appears to confirm the perspective. Thus a NEPRU study conducted in 1990 found that 91% of households in the Okavango, 92% in Caprivi and 87% in the Cuvelai delta of the former Ovambo region wanted more land for ploughing (NEPRU; 1991: 194) and Yaron and colleagues, found that between 47% and 60% of farmers in the Okavango believed that a lack of land was a constraint to agricultural production. (Yaron, et al.; 1992:51).

While the accuracy of all these findings is not disputed, it will be argued that they reflect popular perceptions of need rather than a deeper understanding of the problems confronting agricultural production in the region. As such, they tend to confuse a need for agrarian reform with the need for land redistribution. At the same time, because they are based on an incomplete picture of the farming systems operating in these areas, recommendations based on these findings are likely to lead to interventions which fail to address the real constraints to agricultural production, or worse, aggravate existing conditions.

A recent case study of agricultural production systems in the Gciriku district of Okavango is illustrative of the general problem confronting rural households in the north, and of the dangers of uni-dimensional analysis of peasant agricultural systems.

2. Methodology

The research conducted in this case study was undertaken on two field trips to the district in August 1993 and February 1994. These encompassed both fallow and planting seasons in the agricultural cycle. A variety of Rapid Rural Appraisal (RRA) methods were used in the investigation, including interviews with key informants (government officials, traditional and community leaders, business people, extension workers etc.), focus group discussions, as well as in-depth discussions with individual farmers. The latter investigation involved the use of aerial photography and transects of land holdings to determine the size and location of plots as well as prevailing land use patterns, the measurement of storage containers, and other methods of triangulation.

---

1 The NEPRU finding, however, is problematic in that it is based on a leading question. Thus respondents were simply asked "Do you want more land?". This is similar to asking people whether they would like to have more money, and as the NEPRU report itself acknowledges "Predictably, nearly all Namibians claimed to want more land for both grazing livestock and ploughing" (NEPRU, 1991:194).

2 This is in contrast to livestock rearing regions in the south and centre of the country where a shortage of grazing land is unquestionably a constraint to greater productivity. It must also be noted that the enclosure of communal rangelands in both the Okavango and the former Ovamboland is leading to a situation where a shortage of grazing is becoming a serious constraint to those unable to afford fencing.
3. Historical Background

Oral history suggests that the population of the Gciriku district have been resident in the area for the past three hundred years having moved south from East Africa (Gibson et al.; 1981:164). From the earliest times, the majority of households settled along the fertile banks of the Kavango River. Recorded history from the turn of the century suggests that the population was able to sustain itself from the proceeds of arable agriculture, livestock husbandry, hunting and fishing. The predominant mode of agriculture was a slash-and-burn technique, where land was cleared and cultivated and then abandoned after several years - it is not known at what stage a system of rotational agriculture was adopted. Land availability in close proximity to the river, which was the only constant source of water, was not a problem at the time and was available to those who could work it.

The prevailing system of land tenure was one of communal tenure with usufructuary rights. No payment for land was or ever has been necessary, although the tacit approval of the surrounding community and the headman is sought before land is occupied. Access to land is thus high and is conditioned by an individual or household’s ability to till the soil - plot sizes average 4 hectares. Grazing lands, with some limited qualifications, are open to all, while grazing around individual homesteads is loosely regulated by traditional codes of conduct.

Hard data on the productive output of arable agriculture and of livestock during earlier times, or even during the earlier part of the century is not available, although the latter is perhaps available in archival records. We thus don’t have a real comparative base to work from. Nevertheless, one or two facts are certain: there was never a formal market for the sale of cereal products or agriculture and the generation of a cash income in the rural areas was heavily reliant on funds generated from external sources - generally remittances from migrant workers in South Africa and, in more recent times and to a lesser extent, from wages earned in the army in Namibia.

4. The Present Farming System

Existing evidence indicates that agricultural output in the Okavango region is extremely low and seldom exceeds 400kg per hectare of pearl millet (mahangu) in a good year and can fall to as little as 150kg per hectare in a poor year (Yaron et al., 1992:). This stands in marked contrast to the situation in neighbouring Zambia, where the rainfall patterns and soil regimes are not markedly different and yet where yields of 1000 to 1 500 kg/hectare are by no means uncommon. According to a study conducted in 1992, moreover, 57% of households in the Okavango could be classified as food insecure and a further 13% as generally poor (Yaron et al., 1992:31). Of the total household income of N$ 573 only N$ 499 or 5.8% was found to be derived from crops (either from sales or from imputed consumption costs). In contrast, home production contributed 33% (N$2 863) to rural household incomes and formal sector wages a further 32% (N$2 610). In order to understand why these yields are so low, we need to understand the dynamics of the farming system as a whole, in both its current and historical contexts.
Despite the findings of some recent research (Yaron et al., 1992), there is strong evidence that a shortage of land, per se, is not the determining factor in the present production system but, rather, it is the absence of a range of inputs which leads to pressures on domestic labour and resources and restrains productivity.

As indicated, historically, settlements were on the terraces overlooking the Kavango River. Fields were generally cleared in close proximity to the household, while cattle grazed on the riverine flats and in the surrounding bush. The determining factor in most settlement patterns was the ready availability of water for domestic and livestock consumption.

Over time, and with rapid increases in population (a 140% increase in the twenty year interval from 1970 to 1991 according to the 1991 Census) pressure on land in close proximity to the river has grown progressively. The slash-and-burn method of rotation has had to be abandoned and households are compelled to stay on the same piece of land if they wish to remain close to the river.

Due to administrative neglect over the years and the lack of agricultural training and extension services in particular, however, the farming system in this area has remained largely the same as in was in the last century. This failure to adapt to new circumstances has led to a progressive exhaustion of the land and a progressive decline in productivity.

Historically, ploughing and planting methods were oriented to optimal labour inputs, i.e. the greatest return from the least effort (a fundamental dimension of human rationality). This entailed the broadcasting of seed after ploughing by oxen. Following this, one or several weedings took place, usually by all members of an extended household. No manure or fertiliser was applied, in part due to the added labour input and in part due to the fact that the rotation of slash-and-burn farming obviated this need.

These farming methods still largely persist. The primary crop grown is millet with maize and sorghum as secondary crops. Although a limited amount of inter-cropping takes place (cow peas, pumpkins, groundnuts etc.) the farms are generally mono-cropped, with no rotation and no fertiliser input. This, as might be expected, is a formula for declining yield.

With declining soil fertility and with little or no technological innovation and limited resource input, households are compelled to clear and cultivate new lands in order to sustain existing levels of production. The dearth of virgin land in close proximity to the river, however, obliges households to clear additional lands away from their homesteads in bushveld to the south. While yields in the new lands are significantly higher, their cultivation gives rise to a range of problems including those of labour, equipment (the availability of oxen especially), transport, security etc. This is in part due to the fact that the resettlement of homesteads in closer proximity to new fields is constrained by the availability of water and by the lack of facilities (schools, clinics, shops etc.) all of which are located in the vicinity of the river and, until recently, the principal road which ran parallel.

The increasing labour and input shortages, in particular, present a critical constraint to agricultural output. Due to the variability of seasonal rain and the often short growing season, the timing of ploughing and harvesting is crucial to the success of a harvest. Rural households in Gciriku, as elsewhere in Okavango, comprise a combination of nucleated families loosely
connected in an extended family structure (usually a father, his sons and their families). While production and consumption of produce takes places at the level of each nuclear household, there is a sharing of resources, such as oxen, ploughs, sleds etc., as well as of some inputs (seeds in particular). With the increase in the number of fields households now have to plough to meet their needs, certain household members have to wait their turn to gain access to ploughs, oxen etc. and in some instances are unable to plough at all within the critical phases of the growing season.

A general shortage of draught animals represents one of the major constraints to agricultural production throughout the Okavango region. Oxen, which are the primary draught animals, are used for ploughing, hauling water and wood and various other forms of transport. The shortage of draught animals, which includes those animals too weak to plough after the dry season, combined with the relatively short growing season, serves further to limit the amount of land which many households can cultivate.

With the absence of a systematised breeding programme in the region, the excessive demand for draught animals is itself aggravating the overall shortage of oxen. This is because most male animals are neutered and insufficient bulls remain for breeding purposes. Many households own only oxen and, under such circumstances, they trust to luck that their cows will be covered by their neighbours’ bulls while in the communal grazing areas. However, it was reported that cows are often not covered and fail to calve during a breeding season due to a general shortage of bulls.

With more fields and increased acreage, the possibilities for effective weeding also decrease dramatically. Since people continue to broadcast their seed, there is no prospect for mechanised weeding (an ox drawn cultivator for example) and all weeding continues to be done by hand. One weeding at most is usually achieved and then again, this is often only partial.

The problems associated with weeding act as a further disincentive to the use of fertiliser, since it is believed to stimulate the growth of weeds. Long distances from homesteads to new fields (up to 5km or more in certain instances) also present transportational problems for hauling manure, bringing in the harvest etc. Thus, despite the greater fertility of the new lands their full potential is seldom utilised. Instead, exhausted fields closer to the homesteads continue to be worked, with ever declining yields.

5. **Shortages of Domestic Labour**

The problems of labour shortage can probably be best understood in demographic terms. The population of the area as a whole, is extremely youthful. An estimated 48% of the population is less than 14 years of age. The dependency ratios (the proportion of people potentially economically active compared to those classified as economically inactive - children younger than 15 and those older than 60 years of age) likewise is high. When all children of potential

---

3 One farmer interviewed had been mono-cropping his two plots for more than twenty years without the application of any fertiliser and without systematic weeding. His yields, not unexpectedly, were extremely low.
school going age and younger (0 to 19 years) are taken into account together with those of pensionable age, the dependency ratio is even higher at 65%. These statistics imply that less than 40% of the total rural population are potentially available for work. At the same time, the statistics also provide clues to an understanding of the prevailing labour shortages.

Further evidence of the extent of labour shortage is to be found in the sex ratio of the population (the number of men to women). While there is relative gender parity across the younger age cohorts, there are marked gender imbalances in the primary working age cohorts (20 to 44 years of age) with 74 men to every 100 women. This pattern is further reflected in the fact that 35% of rural households in the Okavango are headed by women. In part (but not exclusively) as a consequence of this, women have become the primary farmers in this area as elsewhere. However, over and above their productive functions, women have also to assume responsibility for a wide range of domestic duties including that of child rearing. These responsibilities inevitably limit the amount of their time that is available for agricultural activities. Thus, paradoxically, despite a rapid increase in population and growing levels of unemployment, most rural households in the north suffer labour shortages at key times of the productive cycle.

Weeding and harvesting are activities which are traditionally undertaken by all members of a household, but have also increasingly become the responsibility of children and women. However, as ministry officials encourage households to send their children to school, their labour is, to a considerable extent, withdrawn from agricultural activity. The change from a four to three term system, for example, has been especially problematic in that it has meant the loss of the June holidays which coincide with the annual harvest. This state of affairs presents a dilemma to many households: whether to keep their children in school or to suffer a shortfall in farm labour. Evidence from the 1991 Census suggests that up to a quarter of children of school going age (6 to 19 years of age) are not attending school.

6. Problems of Demography

The demography of the areas also suggests a further range of problems. At 3.0% the population of the area is one of the fast growing in Namibia. At this rate of growth the population will double in 23 years. The impact of such a rapid population increase on the existing resource base and on the current farming system will need to be born in mind in assessing the future carrying capacity of the land.

The extended family network that exists in the area, usually comprising three generations, provides social and economic support and serves as a mechanism for child rearing. The mean rural household size is 6.3 but these statistics disguise the fact that many households are considerably larger. Some 50% of households in the Okavango have more than 8 members, and 32% have more than 10 members. Although large households hold the potential for generating household labour, large numbers of very young and very old people, as consumers rather than producers, inevitably represent a drain on domestic resources.

The fertility of the population of Okavango is still at the high level of communities in the initial phases of demographic transition. Fertility preferences remain high and among rural women surveyed in 1992 the optimal number of children desired was consistently lower than
the actual number given birth to, 5.8 as opposed to 3.8 (Republic of Namibia; 1992:63). This trend is exacerbated by low incomes, poor living standards and low levels of education, all of which are known to correlate inversely with population growth. It is also evident that women enter the reproductive process at a youthful age, adding reproductive responsibilities to their existing productive chores. Educational levels are extremely low with many adults never having attended school. Levels of functional literacy (defined as having attained standard 4/grade 6 or higher) are in the vicinity of 17%. Few school children complete their schooling and drop out rates are high.

7. Inadequate Support Services

As indicated, the Gciriku district has historically suffered from administrative neglect and local farmers have received little assistance in their efforts to maintain or improve their farming methods. Regrettably, this state of affairs has not improved markedly since independence. Extension services in the area continue to be extremely limited and many households reported that they never receive any form of agricultural advice or support from government officials.

Credit facilities in the district are, in general, extremely limited. The universal problems of collateral apply with respect to commercial sources of credit, and while seasonal credit is theoretically available through the Ministry of Agriculture, Water and Rural Development as an "advance", this is seldom utilised, in part because the disbursement mechanisms are too cumbersome. Credit unions and savings clubs have been established only to a limited extent. The ready availability of credit for purchase of such key inputs as ploughing, seed and labour, nevertheless, remains problematic for most farmers.

Under these circumstances, the farmers of the Gciriku district remain trapped in a farming system which is highly unsuited to their present environment. Existing farming methods, moreover, are leading to a downward spiral of degradation since soils are being used beyond their long term levels of sustainability.

8. Conclusion

The findings of this survey would suggest that an immediate precondition for improved yields in the Gciriku district is not access to more land per se, but rather access to improved inputs to existing land cultivation. Evidence from the Northern Communal Areas Study (Masdar; 1993), suggests that over and above the need for better credit, marketing and extension services, significant improvements to farming methods and agricultural productivity in the Okavango region could be achieved through a number of relatively straightforward and low cost innovations. Among the innovations proposed were the following:

i) Improvements in ploughing and planting techniques:
It was suggested that the simple expedient of ploughing and planting in straight lines (as opposed to the current broadcast method) would facilitate the use of ox drawn cultivators.

ii) The use of ox drawn cultivators:
The use of mechanised cultivators, as opposed to manual methods, would allow weeding over much larger areas of land and in much shorter periods of time.

ii) The application of manure through hand drawn applicators:

Although land that is thoroughly exhausted will require extensive inputs to rebuild the soil, some amelioration can be achieved through the application of manure through hand or ox drawn applicators. Farmers, however, need to be convinced of the value of manure fertiliser through on-farm trials.

iv) Ox fattening schemes:

A recurring problem throughout the survey area was the fact that oxen, having survived the dry season, are frequently too weak to plough at the onset of the first rains, a key stage in the agricultural cycle. It was thus proposed that oxen be kept close to the homestead and fattened on stored crop residues prior to the planting season.

It axiomatic that access to land as well as the efficient management of land are key to the success of agricultural production. The evidence of this case study, however, points to the fact that a fuller understanding of the social-economy of arable farming systems in northern Namibia is necessary if interventions are to be effective. It also points to the fact that access to arable land alone can not resolve the problems of many communities, and this will need to be accompanied by a range of other interventions including improved agricultural extension, improved marketing and credit facilities, improved off-farm employment opportunities, improved education delivery and more effective family planning methods.
9. Bibliography


Republic of Namibia, *Demographic and Health Survey*, (Ministry of Health and Social Services, Windhoek, 1992)


