THE POVERTY TRAP - THE ECONOMICS OF COMMUNAL LAND USE

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EXECUTIVE SUMMARY

This paper recounts how the blossoming of smallholder agriculture in the mid-1980s began to fade when unsustainable costs began to mount. It tries to show that no amount of donor funds to support state-driven agricultural development will reduce poverty while households are entrapped in the current system of agriculture. At the system's core lie the limited rights to land. Without the right to buy, sell, rent or otherwise transfer land, and when land and other natural resources are free for all, the system becomes beset by market failure, perverse incentives, waste and environmental degradation. The paper explains how, under the pressure of population growth, people's livelihoods and the environment have been systematically decimated. A subsequent paper will show how modifications to the system can, over time, commercialise smallholder agriculture and emancipate rural Zimbabweans from a life of grinding poverty.

THE RISE AND FALL OF SMALLHOLDER AGRICULTURE

Hundreds of thousands of poor rural families struggle to subsist on smallholdings in the communal areas, much of it in semi-arid areas with poor soils. At Independence it was estimated that there were nearly three times as many people living in the communal areas than the land could sustain. The Zimbabwe Government therefore prioritised programmes to decongest the communal areas and reduce poverty. These included intensifying agriculture, resettling families, and encouraging families to migrate and settle in towns and cities.

Vindication for Zimbabwe's agricultural intensification programme seemed to come when national smallholder maize and cotton production surpassed commercial farm production in 1985 and 1986. Rukuni and Eicher (1994) dubbed the country's success 'Zimbabwe's second agricultural revolution'. Yet, by the close of the 1980s the rate of resettlement had slowed to a trickle, the expected migration of households had failed to materialise, and the costs of the smallholder agricultural miracle were being counted.

The problem started when the government offered generous producer prices to support smallholders, which created an oversupply of maize. The Grain Marketing Board (GMB) not only had to pay smallholders above the market price for all their produce, but its maize handling and storage costs soared. Moreover, it had to absorb the heavy costs of expanding its network of maize depots and collection points into areas that were not economically viable. To make matters worse, the government's decision to subsidise urban maize consumption left the GMB with a burgeoning and unsustainable budget deficit.

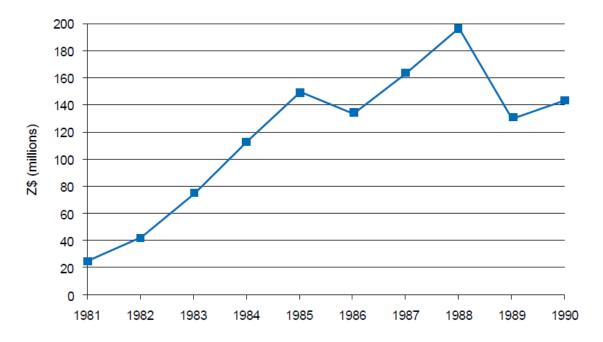


Figure 1: Agricultural marketing losses during the 1980s (Source: Doré (2009))

The government was suddenly forced to back-track, announce more realistic maize prices, and restrict credit to those who had repaid their loans. Inevitably, smallholder production declined. It turned out that the short-lived rise in smallholder production had been unsustainable and only achieved on the back of unpaid AFC loans and producer subsidies, and at the expense of GMB's huge deficit. But there was another disturbing feature of the 'maize miracle': broad-based poverty reduction had proved illusionary. Research showed that three-quarters of smallholder maize sales came from only 10 percent of smallholder farmers who were located in the better farming areas (Rohrbach *et al.*, 1990). Disturbingly, it also "deflected attention from the extensive and consistent reliance of a large proportion of smallholders on public food distribution programmes" (*ibid*:106).

By the mid-1990s, less and less was heard of efforts to address overcrowding and poverty in the communal areas, and the Rukuni Commission's recommendations for communal land tenure reforms had been quietly shelved. As the communal areas stagnated as pools of poverty, resources were poured into the politically expedient resettlement programme. By then, the population in the already overcrowded communal areas had swollen to over one million households.

THE PERPETUATION OF POVERTY

As population growth reduced the availability of good arable land, farming households had two basic choices: families could either subdivide their good land into smaller and less viable plots, or they had to look for more marginal land elsewhere.

The first option entailed established farmers subdividing their good land between their married sons. Often this meant that the new farming family had too little land to both produce enough food to eat and market a surplus to earn cash. Without the surplus production, the new smallholder family would struggle to earn additional income to educate their children, maintain their family's health and, crucially, buy fertilizer for the following year's crop. In the event of poor weather or drought, the family would not even be able to feed itself. Inevitably, it would be added to the growing list of recipients of international food aid.

When rainfall is erratic, as it was during 2002/03, one in every three Zimbabweans – 5.5 million people – needed food assistance. As a result, Zimbabwe had to import 62 percent of its food requirements. Even when weather conditions improved, such as the 2009/10 season, 1.9 million Zimbabweans remained food insecure and 650,000 communal farmers were supported with agricultural inputs by the international community. The UN Office for the Co-ordination of Humanitarian Affairs (OCHA) noted that smallholders were "becoming increasingly dependent on emergency aid, losing self-reliance and the capacity to manage their own development in the future."

Consider a household's second option. Unable to find land locally, a young family decides to look for better opportunities elsewhere. They soon discover that the traditional process of land allocation has been subverted by unscrupulous state and party officials. After paying them for allocating and demarcating marginal land that is unsuitable for cultivation, the family does not have insufficient means to buy fertilizer. Nor is it willing to make risky investments in farm improvements where returns are likely to be limited. A few years after clearing and cultivating the land, the soils are inevitably exhausted. The family then moves on, opening up still more land, setting in motion a debilitating process of deforestation, extensive cultivation and environmental degradation (Lele and Stone, 1989).

This migration into the more marginal, semi-arid communal areas, especially Gokwe, became apparent after the 1982 population census (Zinyama and Whitlow, 1986). Bruce (1990) later showed that the opening up of new areas for cultivation, rather than higher per hectare yields, accounted for almost all increased crop production in the communal areas. During my own

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¹ FAO/WFP Crop and Food Supply Assessment Mission to Zimbabwe, 19 June 2003.

² The Zimbabwean, 'UN halves Zim Humanitarian Appeal', 30 November 2009.

research in the 1990s, the same patterns of movement into marginal areas were plainly evident in Uzumba and the Matabeleland forests, as well as Nyaminyami, where the communities own game fences proved no barrier to extensive cultivation. Today, driven by the current political and economic crisis, fragile wildlife habitat in the Cheredzi Conversancy and elsewhere is unlikely to survive the latest wave of land invasions.

THE TRAGEDY OF THE COMMONS

The problem goes much deeper however. As more and more land is used for growing crops, cattle have to survive on ever-dwindling communal pastures. It was estimated, for example, that over a 10-year period the grazing areas had shrunk by 700,000 hectares (World Bank, 1985).

To make matters worse, grazing areas are a communally shared resource where the grazing of livestock is free. This means that each household has an incentive to maximise their own benefit by grazing as many of their livestock as possible. And, conversely, households try to minimize their costs by 'externalising' the environmental costs of overgrazing and erosion. Built into the system, therefore, are perverse incentives and processes that quicken the pace towards environmental decline, and which undermines the very resource base on which the livelihoods of families depend (Hardin, 1968).

All this results in what Drinkwater called the cattle paradox: far too many cattle for the available grazing areas, but all too few cattle to meet the households' requirements for draft power. He observed, for example, that one area was 300 percent *over*-stocked in terms of its environmental carrying capacity; yet in terms of draught power needs, it was 53 percent *under*-stocked (Cliffe, 1986). The end result is that cattle – the smallholders most valuable form of capital – are gradually squeezed out of the agricultural system. About 45 percent of households own no cattle at all, and they are reduced to toiling with inefficient hand-held implements.

THE INEFFICIENT ALLOCATION OF PRODUCTIVE RESOURCES

The defining feature of the system is that land cannot be officially bought, sold, rented or transferred. It cannot be owned. Rather, it is an intrinsically 'free good' that is acquired by the household for agricultural use. Basic economics tells us that as the price of a good goes down, its demand goes up. Thus, if land is a free good, then demand will be almost limitless and insatiable. Almost everyone will want it. Indeed, custom dictates that every married man is entitled to a free plot of land. But since land – especially good quality land – is in limited supply, the system of traditional land allocation eventually breaks down as households scramble to access whatever land is available.

This situation is bad enough, but the absence of a land market is made even worse by its knock-on effects on the labour and capital markets (collectively known as factor markets).

Consider this. When the population grows, a relative scarcity of land develops. The expectation, therefore, is that agricultural production will be intensified by substituting land for labour. However, in the absence of price signals from a land market (which would show the price of land increasing relative to labour) households will continue to demand more land – even in the face of dire land shortages. Moreover, since labour itself becomes relatively cheap (due to the growing population) compared to capital (e.g. farm investments such as equipment and fertiliser), households will have an incentive to apply more labour to land rather than capital. Over time, these factor market distortions gradually squeeze vital capital requirements – especially the use of fertiliser – out of the agricultural system.

But the problem does not stop there. As it is relatively expensive for households to maintain the fertility of their soils, they would rather apply their relatively cheaper labour to clear woodland and open up more marginal land for cultivation. It is this process that sets in motion a system that perpetuates extensive cultivation, leaving in its wake exhausted soils, overgrazed pasture, erosion and silted dams.

Two further points deserve attention. The first is that the infusion of capital into an agricultural system is usually made possible by using land as collateral for loans for pay for farm investments. But, because the communal area farming system does not ascribe any underlying transferable value to land, even this opportunity is denied to the smallholder. The second point is that because land cannot be transferred or rented, the system offers no mechanism through which more efficient farmers can acquire more land. Better farmers are thus unable to consolidate their holdings into larger, more viable units to realise economies of scale and improve their farm income.

CONCLUSION

In analysing Zimbabwe's smallholder agricultural system one is reminded of Myrdal's concept of 'circular and cumulative causation'. He described this as a process "continuously pressing levels downwards, in which one negative factor is, at the same time, both cause and effect of other negative factors" (1957:11). More recently, this concept was poignantly echoed by Leared: "Both the people and the environment", he said, "suffer in an incessant spiral of despair" (2009:2).

Campbell and his team concluded "that the current processes of intensification and diversification are not leading people out of the poverty trap in semi-arid regions" where the majority of communal households live (2002:125). By almost any measure, most communal families remain chronically poor and trapped in an inefficient and Malthusian agricultural system. They survive only by the largesse of the international community and at the expense of the taxpayer and the environment.

The challenge is to start formulating a long term strategy of empowering smallholders by land reform programmes that create opportunities, incentives and pathways out of poverty.

Land tenure reform that grants farmers stronger, more secure and tradable property rights will the lynch-pin for increased factor productivity, and the commercialisation and transformation of smallholder agriculture. How this can be achieved will be the subject of a subsequent paper.

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