Food, forests and the unfolding crisis in Zambia

In the past, Zambia infrequently made global news. A peaceful country at the heart of southern Africa, renowned primarily for its copper deposits. Some know Zambia for its long geographical boundary on the Zambezi river, its Livingstone's Victoria Falls – or the 'Mosi-oa-Tunya', 'The smoke which thunders' – or its expansive and biodiverse national parks occupying a land area greater than the United Kingdom.

Structural adjustment programmes in the 1990s saw the beginning of economic liberalization and the opening up of Zambia's resources for commercial and private exploitation. National mines were privatised, with significant tax incentives for foreign owners; agriculture marketing boards that supported peasant access to markets were disbanded and state owned companies progressively were sold out to private, and increasingly corporate, holders.

At the same time, the reality of people's lives and the consequences of land dispossession, dwindling and contaminated water sources, increasing malnutrition and rising costs of living, remain hidden from market driven development headlines. Food, education, transport, health care and energy are critically under-resourced and increasingly privatized and financialized. The relentless wave of exploitation places a heavy toll on soil, water, forests, air, minerals - and people.

In the last 5 years, national foreign debt has risen exponentially. Mining lingers as the primary "economic driver", despite the stubborn persistence of token tax returns put in place in the bygone structural adjustment era. A frenetic search for new alternative - and fast - sources of foreign direct investment has become a national priority.

At the time of writing, 16 new mines in national parks and major rivers have been recently approved or are in the application process. A large-scale oil and gas exploration license has been granted to British company Tullow Oil and Gas, in an extensive area that includes Zambia's lake systems and associated catchments and national parks. The country is also exploring a nuclear energy deal with Rosatom, the same Russian company that was taken to court in 2017 in South Africa over lack of transparency and alleged corruption.

The context of Zambia's peaceful history and strategic geographical location, combined with a desperate hunger for foreign direct investment, positions the country in the frontline of the global wave of resources grabbing, the crisis of global capital and the capitalisation of climate change.

Food, forests and climate change

Food and forests are two of the many cross-cutting and turnkey systems affected by the current course of events. The two systems are part of an unfolding crisis in Zambia that is largely going unnoticed. Forests cover more than half of Zambia's territory. Deforestation as well as hunger and malnutrition rates rank in the top 10 of the worst in the region and the world. (1)

Forests are central to the carbon offsetting debate within climate negotiations, as these are being

labelled as "carbon stores" that could, in theory, offset the pollution of others. The main mechanism being pursued is REDD+ (Reducing Emissions from Deforestation and forest Degradation). The idea behind REDD+ is that countries mainly in the global North and international bodies, such as the World Bank, provide funding for measures that claim to halt forest loss in tropical countries. In return, the countries or companies providing the funds can claim carbon credits for the emissions supposedly saved through REDD+ activities, and continue their business as usual. The private sector and local NGOs in Zambia are taking advantage of this carbon offsetting system.

While Zambia's government appears avid to open up further forested lands to mining, oil extraction and large agribusiness expansion, it is at the same time promoting REDD+ policies and projects.

BioCarbon Partners, a local Zambian NGO, in partnership with the US development agency (USAID), has become a REDD+ poster-child actor with its Lower Zambezi REDD+ Project. According to the project website, they claim to protect 39 thousand hectares of forests in the Lower Zambezi National Park. BioCarbon does not mention extractive industries or agribusiness as the main drivers of deforestation at large scale. On the contrary, they narrowly argue that "poor people" are the ones to blame for deforestation, without considering the systemic causes of poverty, deprivation and environmental exploitation.

BioCarbon recently teamed up with private tourist operators, allowing tourists to offset their luxury wilderness safaris by making financial contributions to BioCarbon's forest conservancy (REDD+) projects. While international tourists can enjoy the wilderness, a limited number of local residents are allowed constrained access to the project area for sustainable harvesting of trees for charcoal production. This, in turn, is marketed through BioCarbon Partners to middle class urban consumers and 'green' tourist operators.

The issue remains however that few efforts are prioritised in Zambia for equitable access to water, land and natural resources while respecting customary rights. In consequence, the industrial and extractive-based economy splutters along, inequality rises, and peoples' means for a livelihood and survival become increasingly commercialised and unfeasible. In response, poor households adopt multiple strategies to gain some income for their daily lives. The two most commonly available options for forest-dependant people are charcoal burning or logging, mostly for an illegal hard-wood trade, and for peasant communities, government supported mono-cropping or intensive commodity production. These activities have shown to have multiple negative feedback loops.

Nutrition and agribusiness

The international climate negotiations have separated nutrition in poor countries from the economy of agriculture. In turn, intensive industrial agriculture is exonerated from its contribution to soil degradation, (agro)biodiversity loss and the country's capacity to build human and ecosystem functioning resilience. This is made obvious by the high visibility of corporate agribusiness at UN climate negotiations and in swayed national contributions to mitigation and adaptation measures.

Zambia positions herself as the breadbasket country of the region, with accounts of expansive "unoccupied" land open for foreign bidders, abundant water resources and an export orientated agriculture development and investment model. Slogans of Zambia's new agriculture policy are "private sector led" or "farming as a business". Parallel to this, the country is ranked among the top seven most hungry and malnourished countries in the 2017 Global Hunger Index.

The state has allocated roughly 1 million hectares of formally customary land for ten agriculture "farm

blocks" throughout the country. Blocks are modelled for export-orientated production, with one single large corporate operation, a number of smaller commercial enterprises and some peasants functioning as out-growers. Yet, there has been slow uptake and "investment" from targeted foreign capital. A recent statement by Zambia's Agriculture Ministry pledged to increase public spending on the infrastructure development of the "farm blocks" in order to incentivise foreign public and private interest. On the ground, the picture is far from rosy. Stories arising from areas where ownership of land has already been transferred involve land dispossession, corruption of local leaderships and minimal or no compensation for affected populations.

The opening up of forested land for the designated "farm blocks" accounts for potentially 1 million hectares of new industrial agriculture fields, which entails a large increase of greenhouse gases pollution. In spite of this, Zambia has identified agriculture as a priority sector to achieve its National Determined Contribution (NDCs) for halting climate change under the UN climate Paris Agreement.

"Conservation agriculture", defined by the principles of minimum tillage, crop rotation and residue retention, has been selected as the means to achieve the NDCs in the agriculture sector. In Zambia, "conservation agriculture" is promoted in combination with agroforestry and use of "green revolution" technologies: hybrid seeds, mineral based fertilisers and agro-chemicals.

Despite years of significant funding for promoting "conservation agriculture" in Zambia, it is widely known that farmers have minimally adopted its principles. Both large and small-scale farmers, however, are increasingly using an extensive range of artificial agro-chemicals. Soil degradation, water contamination, insect loss and the inhibition of plants' capacity to take up essential dietary nutrients are well known consequences. Farmers are also shifting from smallholder diverse farming systems (for food, fodder and fibre production, both on their farms and communal forests/grasslands management) to large-scale monocrop commodity production, in order to maximize an effective application of targeted agro-chemicals.

A small elite minority benefits from the initial phases of industrialising agriculture, acquires more land and mechanises production systems. On the other hand, it is common for farming households to earn as little as 40 to 100 US dollars from their entire annual commodity crop. Previous years have seen cotton prices so low that contract peasants were left with a deficit after the costs of seeds, fertilisers and chemical inputs had been deducted.

In contrast, research is beginning to document the extensive knowledge that supports how cultivated indigenous crops as well as plant products from farms or forests still contribute significantly to household diets in Zambia. De-valued through the colonial, and subsequent neo-colonial imposition of narrow research and western diets, this knowledge and practice has been side-lined and in some cases, deliberately destroyed. (2) Zambia is a nation crippled by rural malnutrition and hidden urban hunger. Serious attention and support needs to be given to the diversity of locally adaptive and climate resilient indigenous fauna and flora.

The effects of de-valuing local diversity as well as the commodification and then centralisation of the agro-food system have seen the same impacts as in other places. Decreased diversity, increased debt and the dispossession and dislocation from the land have resulted in mass urban migration and the burgeoning of a young unskilled urban class. This is accompanied by shifting consumption patterns. Food that is spatially and financially accessible is favoured and consumed. This contains highly processed and refined carbohydrates, with elevated fat, salt and sugar contents. (3) As a result, Zambia is now witnessing a surge in dietary and lifestyle inflicted diseases. In all of this, women and girls are affected the worst.

Connecting the dots in Zambia between a floundering capitalist economy, climate change and climate change policies, exponential natural resource depletion and the changing lives and livelihoods of ordinary citizens, raises serious questions about the lack of investment in public benefit goods and services, particularly by donors. There is instead a concerted and collaborative push for the industrialisation of local food systems, the commodification of production processes, the clearing and enclosure of forests and the expansion of mining and oil concessions. Land grabs are rapidly expanding. These are largely undocumented, unspoken and unchallenged, and critically threaten forest-dependant and peasant communities' livelihoods. There is an urgent need to rethink the model of development that disregards basic human rights and destroys biodiversity and indigenous knowledge. Zambia requires that everyone is able to participate in its own development and to claim his or her human and collective rights.

Zambia Agro-ecology Alliance

(1) Depending on source – Global Hunger Index: <u>http://www.ifpri.org/publication/2017-global-hunger-index-inequalities-hunger</u>. FAO, Republic of Zambia, Forest Department and NEP Facility, Forests and Climate Change, 2011,

http://www.fao.org/forestry/32680-0c227f4c90a3ef146c7f4e1728302c62b.pdf

(2) This happens through the tightening of national and regional restrictions on the sale and exchange of seeds, the concentration of corporate control of seeds and the development of inequitable intellectual property regimes that favour corporate breeders' rights over farmer managed seed systems and farmer breeder rights. Further reading at <u>www.acbio.org.za</u>

(3) Contrary to the popular industry-driven argument that availability is the food security silver-bullet solution, there is an extensively documentation over the production of nutrient poor "empty" calories. Global food wastage is estimated to be anything between 30-70 per cent from farm to fork. Global narratives of the crisis of food insecurity are about political and economic will, documented as early as the 1970s Ethiopian famine by Amartya Sen.