

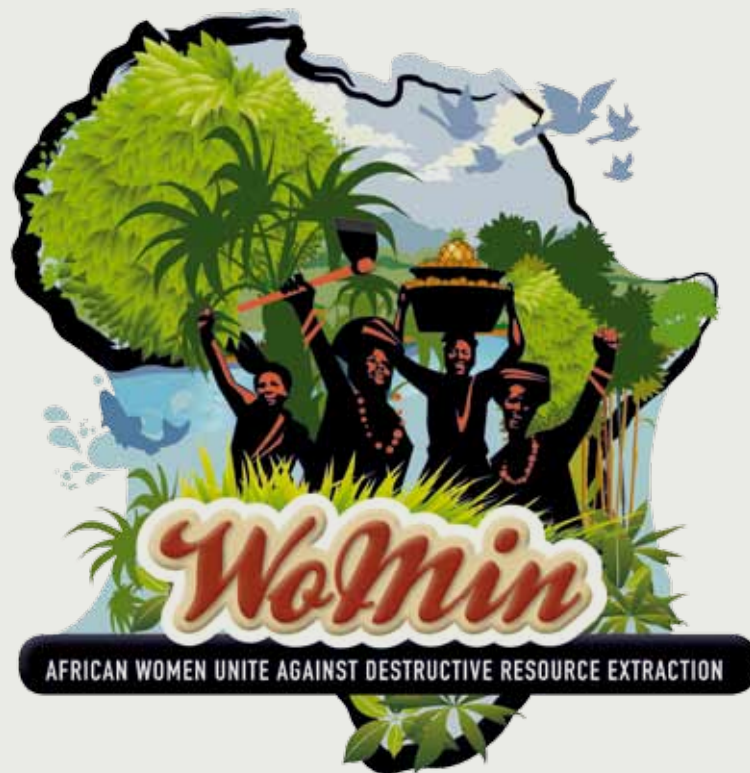
WOMEN, GENDER AND EXTRACTIVISM IN AFRICA
A COLLECTION OF PAPERS

PAPER THREE

LAND AND FOOD SOVEREIGNTY UNDERMINED: IMPACTS ON PEASANT WOMEN



AN  **IANRA** INITIATIVE
International Alliance on Natural Resources in Africa



THE WoMin COLLECTION OF PAPERS ON WOMEN, GENDER AND EXTRACTIVISM: A BRIEF NOTE

In this *starter* collection of six papers, which focuses on Sub-Saharan Africa, WoMin begins to explore some of the themes and questions that are raised by extractivism, and industrial mining¹ in particular, and its impacts upon, and 'relationship to' peasant and working-class women. By 'relationship', WoMin refers to the myriad ways – within the home, in the fields and in the workplace – in which women, in mainly invisible and unremunerated ways, participate in, shape and contribute to the ambitions and profits of the extractivist industries. The papers aim to make a modest contribution to supporting peasant women and their allies to counter the growing social and ecological crisis linked to the extractives industries in the region. Each paper has been written by a different set of authors, supported by various respondents who are specialists in the specific 'question/s' addressed by the paper, or have a general interest in the work of WoMin. WoMin is a programme of activism and research related to women, gender and extractivism in the Africa region and is housed in the International Alliance on Natural Resources in Africa (IANRA), a global alliance of organisations working on natural resource questions.

¹ See Background Note for a fuller discussion of the concept of 'extractivism'. The major focus of this collection of papers is industrial mining, which is one form of extraction.

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A corn field in Ga Molekane with Potgietersrus Platinum Limited (PPL) mine in the background. **Photo:** ActionAid



The fields are now fenced in for the mine. This also means we have no way to go and plough the land. If we do try to grow food or collect firewood, we are told we are trespassing and confronted by a [security] convoy. We have no food, water or electricity; we can't cook, and our houses are cracked ... (Magdalene, mother and former farmer, Mokopane, Limpopo Province, South Africa) (IWMN/RIMM, 2010)

1. INTRODUCTION

Farming is how the majority of rural dwellers in Sub-Saharan Africa subsist, and hunger is one of the greatest threats to the well-being and survival of rural families. Peasant women are central to domestic food provisioning in the region, producing 60% to 80% of food consumed within rural households (FAO, n.d.), and harvesting natural resources, such as fruits and medicinal herbs and plants, which are essential to the reproduction and well-being of household members.

This paper focuses on the multi-layered question: how is extractivism, and industrial-scale mining in particular, impacting on peasant women's land rights; their access to, control over and use of natural resources; their access to labour (including control of their own labour) for food production; and hence their own right to food and the food sovereignty of their families and the communities of which they form a part?

In section 2, the paper touches on the rapid escalation of mining in Sub-Saharan Africa and the factors that are driving this growth. Section 3 addresses the broad theme of land grabs in the region, concluding that land theft linked to extractivism – whether directly through land grabs for mining operations, or indirectly through the land losses arising from pollution, water thefts and finally through the closely related phenomenon of climate change – is significant. The loss of rights to land and natural resources through extractivism undermine food sovereignty, which concept and political vision for an alternative paradigm is explored in section 4. Section 5 address women's land rights under communal tenure systems, arguing that extractivism's disposessions impact in particular ways upon peasant women because of the weakness of these systems more generally, and because of their own existing tenure insecurity in terms of these systems.

Section 6 addresses the very specific ways in which extractivism impacts on women's land and food rights through the theft, pollution and degradation of land and natural resources, including water and air, and through the loss of male labour to the mines as a result of migration, impacting on food production levels, and contributing to other opportunity costs in the labour-sending areas.

This paper inspires with examples of how peasant women in Sub-Saharan Africa and beyond are organising, confronting, resisting and posing alternatives to the devastating impacts of industrial-scale mining on their lives, their communities and the natural resources upon which survival, life and identity rest. And finally, the paper concludes with recommendations for research and action related to the themes of land, food sovereignty and societal support for social reproduction, all read from the perspective of African peasant women.



2. THE GROWTH OF MINING IN SUB-SAHARAN AFRICA

Sub-Saharan Africa is a key player in a global mining boom driven by the energy needs and consumption patterns of the elites and middle classes of the global North and the emerging economies of the global South. Significant reserves of oil and natural gas exist in Nigeria, Angola, Gabon, Sudan, DRC and Equatorial Guinea, with recent discoveries of oil in Ghana's Jubilee Field and Uganda's Lake Albert Rift Basin, and abundant natural gas findings in Mozambique and Tanzania. The region is rich in many other mineral resources – copper, platinum, gold, diamonds and cobalt, to name just a few – with the richest known deposits in Southern Africa and the Congo River Basin, and new reserves identified on an almost daily basis.

This wealth is fuelling major extractives deals: of the 10 biggest mining investments to be completed in 2011, Ernst & Young (2011) reported that seven were in Africa. Mining group Anglo American has earmarked US\$8-billion for new platinum, diamond, iron ore and coal projects on the continent, and Brazil's Vale has committed to spend more than US\$12-billion in Africa over the next five years (The Economist, 2012). In 2011, Chinese mining companies made seven major investments in the mining sector in Africa totalling US\$14.7-billion; the smallest of these was worth more than US\$1-billion (Campbell, 2013).

According to the World Bank in 2012 (World Bank, 2013), Sub-Saharan Africa is the fastest growing region in the world – even surpassing China's growth rate in that same year – with Sierra Leone, Niger and Angola leading the group of highest growth countries. What these three countries have in common is new money from mineral exports. They join a long line of other countries in the region that enjoy enormous mineral wealth, but have seen increased poverty levels and rising inequality accompany their fortunes, often referred to as the “resource curse”. This “curse” results from:

- The neglect of other development sectors – including agriculture, the mainstay of rural communities – which impacts productivity levels and ultimately consumer spending.
- High levels of dependency on a single commodity or a few commodities, which often experience price volatility.
- Weak policy and legal frameworks and regulatory regimes, which have allowed multinational and transnational corporations to extract enormous profits and engage in corrupt practices in collusion with some national elites, at the expense of local populations and national development agendas.

BELOW: Mining – destroying landscapes and natural resources, Rustenburg, South Africa. **Photo:** Bobby Marie



3. LAND GRABS IN THE REGION

Large-scale land dispossessions, or ‘land grabs’, have involved the forced acquisition of thousands of hectares of land without due respect for local land users’ entitlements to the land, either through proper consultation, informed consent or adequate compensation for the loss of land-based livelihoods (Kachingwe, 2012). The major focus of public attention has been on land grabs resulting from biofuel schemes and industrial-scale agricultural projects, with minimal attention to mining sector activities.

According to a World Bank 2011 report, approximately 56-million hectares worth of large-scale farmland deals was announced even before the end of 2009, and more than 70% of these were in Africa where countries such as Ethiopia, Mozambique, and Sudan have transferred millions of hectares to investors in recent years (Deininger & Byerlee, 2011). Research in the past decade has shown that large-scale land grabbing in Africa has generally been driven by the food and energy (mainly biofuel²) needs of other countries, (Cotula et al, 2009; Kachika, 2010) with the African Union (AU) noting that “... [m]ost of this activity is driven by foreign investors and is geared towards the export rather than local markets” (AU et al, 2009). The Organisation for Economic Cooperation and Development (OECD) and the Food and Agriculture Organisation (FAO) have estimated that over the period 2008 to 2018, biofuel may account for 52% of the increased demand for maize and wheat, and 32% of that for oilseeds (OECD & FAO, 2010). Case studies and anecdotal stories tell us that mining leases or concessions have been granted on communal lands already claimed, occupied and used by local peoples (Cotula et al, 2009; Sulle, 2010) and that peasant communities have been pushed off their lands to make way for mines (Cotula et al, 2009; Sulle, 2010). Agricultural production is often brought to a halt (Agyapong, n.d.). Knowledge and data on exactly how much land has been stolen through different types of corporate activity is not available, but based on the scale of land dispossessions cumulatively read, it is legitimate to “... wonder where all the expelled populations will go” (Moyo & Yeros, 2011).

The immediate impacts of mining, for example water and air pollution and the diversion of waterways to support mining, can ripple hundreds of kilometres beyond the comparatively small area of land used very directly for mining activities, leaving communities without the water they need to produce and with acid rain affecting food crops. The impacts also accumulate over time, as we have seen with the acid mine drainage (AMD) problem in South Africa (discussed further in section 6.3), destroying waterways, killing livestock, and poisoning once productive farmlands. The indirect impacts of mining and oil extraction are felt through climate change, which is projected to result in the loss of 247-million acres of farmland by 2050 in the Africa region due to significant increases in temperature (Seo & Mendelsohn, 2006). Land dispossessions linked to extractivism – whether directly through land grabs for mining operations, or indirectly through the land losses arising from pollution, water thefts and, finally, through the closely related phenomenon of climate change – are significant, compromising the food sovereignty of peasant families across the continent.

2 See the Glossary for a definition of ‘biofuel’.





ABOVE: Women walk through farmland near Massingir, Mozambique. **Photo:** ActionAid

4. FOOD SOVEREIGNTY IN AFRICA

Food sovereignty, a political call by the global movement of peasant farmers, *Via Campesina*, at the 1996 World Food Summit demands that everyone is properly fed, but also that the food system that feeds us operates in ways that are just, equitable and sustainable (WDM, 2011). It addresses some of the limitations associated with the idea of food security, which is concerned with whether people have sufficient food to eat, but does not address questions about how the food is produced, processed, distributed and consumed, and who controls these processes at all levels of the system (Grain, 2012). The UN Special Rapporteur on the Right to Food, Olivier De Schutter, supports a radical transformation of the food system, which has substantially failed leaving at least 870-million people in the world hungry, according to 2012 FAO's conservative calculation (FAO, 2012). His vision of a transformed food paradigm reflects the principles and approaches of a food sovereignty position (De Schutter, 2012).

Food sovereignty is more than an academic concept or a strategy to guide the work of development agencies. It is, above all, a political demand and a radical vision of an alternative that has politicised and galvanised a global movement of peasants, small-scale producers and their allies for the democratisation of food systems and the policies that support these systems.

In 2007, Via Campesina with other leading global social movements, such as the World March of Women, and the World Forum of Fisher Peoples, convened the Forum for Food Sovereignty (Nyéléni Forum)³ in Sélingué, Mali which adopted the Nyéléni Declaration (see extract in **Box 1**) (Vivas, 2011).

³ The Nyéléni Forum was named in honour of the legend of a Malian peasant woman who struggled to assert herself as a woman in a hostile environment.

BOX 1: WHAT WE ARE FIGHTING FOR AN EXTRACT FROM THE NYÉLÉNI DECLARATION

A world where:

- all peoples, nations and states are able to determine their own food-producing systems and policies that provide everyone of us with good quality, adequate, affordable, healthy, and culturally appropriate food;
- recognition and respect of women's roles and rights in food production, and representation of women in all decision-making bodies;
- we value, recognise and respect our diversity of traditional knowledge, food, language and culture, and the way we organise and express ourselves;
- there is genuine and integral agrarian reform that guarantees peasants full rights to land, defends and recovers the territories of indigenous peoples, ensures fishing communities' access and control over their fishing areas and eco-systems, honours access and control over pastoral lands and migratory routes, assures decent jobs with fair remuneration and labour rights for all, and a future for young people in the countryside;
- agrarian reform revitalises interdependence between producers and consumers, ensures community survival, social and economic justice and ecological sustainability, and respect for local autonomy and governance with equal rights for women and men;
- there are guarantees to the right to territory and self-determination for our peoples;
- peoples' power to make decisions about their material, natural and spiritual heritage are defended; and
- all peoples have the right to defend their territories from the actions of transnational corporations.

The Nyéléni Declaration recognises that although women produce most of the food in the global South, their role and knowledge is often ignored, and their rights as workers are often violated. Women subsistence farmers are primarily responsible for domestic food production in Sub-Saharan Africa, and hence efforts towards food sovereignty need to be greatly directed towards securing their rights to land and natural resources, and supporting their labour and other contributions at all points of the food system.

Africa cannot afford to further compromise its food sovereignty at a time when the continent is already prone to rising food prices, lowered agricultural productivity and hunger. In the past decade, the general trend is that Africa has become food-import dependent. Over the period 2000–2005, a few relatively wealthy countries on the continent had the highest net food imports per capita (US\$-185 per year in real terms), paying for their food import bills using revenue from non-agricultural sources. For this same period, the majority of Africa's low-income countries, where two-thirds of the total population of Sub-Saharan Africa lives, became net food importers, but were able to import far less food per capita (US\$-17 per year) and had difficulty meeting their food imports bills (Rakotoarisoa et al., 2012).

In 2012, considerable declines in global grain production prompted new fears of food shortages and an escalation in food prices similar to the 2008 crisis (Heita, 2012). In this same year, the World Food Programme (WFP) deputy regional director for Southern Africa declared that “large numbers of smallholder farmers and their families were in the grip of what is set to be one of the harshest hunger seasons of recent years” (WFP, 2012). According to the Southern African Development Community (SADC)'s Food Security Update, jointly produced by the Food Security and Nutrition Working Group, food security indicators signifying crisis and distress were evident amongst countries that experienced persistent and prolonged dry spells and reduced harvests in the 2011 and 2012 season, including Angola, Malawi, Mozambique, Lesotho, and Zimbabwe (Heita, 2012; WFP, 2012).

Rural women are most likely to be affected by the crisis because about 61% of the SADC population, the majority of which are adult women, still resides in rural areas and relies on agriculture for a significant part of their livelihoods (TCOE & IANRA, 2013). Given their preponderance in the population and the special contribution of women to social reproduction, their agricultural interests therefore demand distinctive protection. Instead, as this paper will demonstrate, the exploitations of industrial mining (and extractive agriculture – not addressed in this paper) combined with existing patriarchy, erode and in many cases destroy peasant production systems, undermining food sovereignty and contributing to a sustained crisis of food rights for the majority of citizens in the Africa region.



5. PATRIARCHY, CAPITALISM AND WOMEN'S LAND RIGHTS IN AFRICAN COMMUNAL PROPERTY SYSTEMS

Before addressing the impact of extractivism on peasant women's land and food rights, the most substantive focus of this paper, it is necessary to first explore women's existing land rights under communal property systems. Our thesis is that extractivism's dispossessions impact in particular ways on peasant women because of the weakness of these systems more generally, and because of their own existing tenure insecurity under common property systems. The focus here is on communal tenure (see brief note in **Box 2**), not because our political position is that private property offers greater security for peasant farmers and women more specifically, but that the majority of communities impacted by extractives-related land dispossessions in the Africa region live under communal tenure regimes.

BOX 2: INDIVIDUAL AND COMMON RIGHTS UNDER COMMUNAL PROPERTY SYSTEMS A BRIEF NOTE

Under communal tenure systems, portions of land are held by individual families, and other portions are held and managed in common by the community/tribe/group. These 'common resources' include grazing lands, forests or woodlots, communal food gardens, and shared water resources. Many of these resources are typically used and managed by peasant women to fulfil their familial and community reproduction responsibilities. Under communal land systems, people do not hold a title deed and rarely have other evidence of their land rights, such as permits or certificates of occupation.

There is a paradox between the significance of land to women peasants in Sub-Saharan Africa, and the state of their land rights. When women in rural Africa speak about land, its value and importance to livelihoods, culture, and humanity as a whole, they assert that:

For us, land is very valuable. It is a source of income, because we grow crops or farm livestock. We can use the land ... to educate our children and to build houses. Land is our 'gold mine' ...

(Women farmers in Eastern Cape, Ndlambe Village) (Kachika, 2009)

Land is our nature – sometimes we have no jobs, but there is always land on which to do something. Even without a fixed salary, we can put food on our families' tables.

(Anonymous woman, Northern Cape, South Africa) (Kachika, 2009)

For us, land is life. It is an expression of our existence and is integral to our ecosystems on which we survive as a species – the water, seeds, plants and animals. Our culture and humanity is deeply rooted in the land and how we use it. For us land is the basis for the future of our children and the restoration of our dignity and hope.

(Extract from the Southern Africa Rural Women's Assembly Declaration, 2009)

In almost all societies on the continent, agricultural production and the preservation of natural resources (such as forests and waterways) is primarily the responsibility of women and, to a lesser extent, older children (AU et al, 2009). Despite women's central role in agricultural production and the contribution of this to the health and well-being of peasant women, their families and their communities, women's land rights under communal tenure systems across the continent are deeply insecure. To appreciate the source of this insecurity, one has to understand some of the distinctive features of the African tenure system. Under this form of tenure, land rights are embedded in a range of social relationships and units, including households, kinship networks and 'communities'



ABOVE: *Smallholder farmer, Mercy Welengani, waters her gardens, Mwanza, Tanzania.*
Photo: ActionAid

(Cousins, 2009). Land rights include strong individual and family rights to residential and arable land and access to common property resources such as grazing, forests, and water. Rights are derived from accepted membership of a social unit, and can be acquired through birth, affiliation or allegiance to a group and its political authority (Cousins, 2009).

To comprehend the precariousness of women's position within African societies, it is necessary to also look back to the colonial period when Western powers codified laws and instituted systems, ostensibly based on tradition, which caricatured aspects of pre-colonial governance and expanded and/or solidified the powers of male chiefs and elders (Mapanduki, 2007). Male authority in land matters is entrenched across African societies, whether patrilineal or matrilineal. Patriliney is far more common in Africa than matriliney, which is limited mainly to parts of Zambia and Malawi (in Southern Africa), and to Ghana and Ivory Coast (in Western Africa) (see Everyculture, n.d.).

Women's land rights in patrilineal societies are extremely fragile because wives reside in their husbands' villages, and farm on land belonging to their husbands and their husband's clans (Koopman & Faye, 2012; Kachika, 2009). Women's access to land is therefore indirect, meaning that it is mediated through a man: their father, brother, husband and even son (Kachika, 2009). It is typical for women in these societies to have limited or no decision-making power over the land, i.e. they would have limited say on what crops to plant, or how to use the proceeds coming from the use of the land (Kachika, 2009). Because women are responsible for provisioning the household with certain foods, they usually will have rights to a small garden, the outputs and incomes of which they may exercise control over (Koopman & Faye, 2012). In the case of matrilineal societies, women remain in their natal villages, with their husbands joining them to farm the matrilineal land, which belongs to the women and her clan (Kachika, 2009). Patriarchy, however, persists within the matrilineal system of ownership, as men are still privileged as decision-makers within their home and the wider community, thereby undermining women's decision rights over family land (Kachika, 2009).

FAO estimates that rural women produce half of the world's food and, in developing countries, produce between 60% and 80% of food crops (FAO, n.d.). FAO further estimates that women represent a substantial share of the total agricultural labour force, as individual food producers or as agricultural workers, and that around two-thirds of the female labour force in developing economies is engaged in agricultural work (FAO, 2003). Given the centrality of women's role in food production on the continent and globally, there is a deep and unsustainable contradiction to be found in women's insecure land rights in both patrilineal and matrilineal societies in the region.

Over centuries, the lands and natural resources of African pastoralists and peasants have been stolen and their forms of governance undermined and distorted by colonialism, by programmes of structural adjustment and enforced privatisation and in this era, by neo-liberal capitalism and its vast mineral and natural resources demands to feed the expanding energy, food and consumption needs of the traditional global North and increasingly the emerging South. These processes of dispossession impact all African peasants, but because of peasant women's structurally marginal position in African traditional societies, they carry the brunt of the impact.



6. THE CONCRETE IMPACTS OF EXTRACTIVES UPON PEASANT WOMEN IN SUB-SAHARAN AFRICA

The sections to follow explore the very specific ways in which extractivism impacts on women's land and food rights through the theft, pollution and degradation of land and natural resources, including water and air, and through the loss of male labour to the mines as a result of migration, impacting on food production levels, and contributing to other opportunity costs in the labour-sending areas.

6.1 Actual loss of land for farming and harvesting of natural resources

We get upset when our children say 'I want something to eat – I'm hungry'. As women, we have always ploughed the land, but now we cannot. The mining company is taking the land we used to plough because they want to build a slimes [tailings] dam here ... (Elizabeth, respected elder in Mokopane, Limpopo, South Africa) (IWMN/RIMM, 2010)

Women are likely to be affected differently to men by large-scale land deals and disproportionately more likely to be negatively affected than men because of the systemic discrimination they face in relation to their access to, ownership of, and control over land (Daley, 2011), as discussed in the section above.

When whole tracts of land are seized by mining companies, peasant women's loss of land for farming and for the harvesting of natural resources impacts negatively on their food rights and that of their families, as is well illustrated in the example of the Anglo Platinum Mine in Mokopane, Limpopo in South Africa:

For generations, local communities have collectively cultivated this land and grown diverse crops sufficient for subsistence, including pumpkin, tomatoes, carrots, spinach, maize, sorghum, beans, sunflower, peanuts, and watermelon. Since 2001, the local Setswana and Sepedi speaking people have become impoverished, malnourished, and sick, dispossessed of their farmlands, and without access to clean local water sources ... The consequences of the loss of food sovereignty and access to water have been indisputably negative for the thousands of villagers, leaving many wondering how they will survive. As the ones responsible for cooking, cleaning, nourishing children, and tending to garden plots, women are experiencing particular distress. (IWMN/RIMM, 2010)

In Sierra Leone, women in the Sierra Rutile mining area have been forced to cultivate upland areas with less productive soils because of mining-linked dispossessions. Two affected districts, Bonthe and Moyamba, are among the five poorest districts in the country, with the loss of livelihoods due to resource theft and environmental degradation caused by rutile and bauxite mining identified as the most significant contributor to chronic poverty and food insecurity (Akiwumi, 2011: 53–70).

In Ghana, it has been confirmed that the greatest impact of gold mining on Ghanaian society has been relocation, and that 95% of those forced to leave their lands between 1990 and 1998 were subsistence farmers. Agricultural lands were converted into dumps for mine waste, and the compensation deals offered by mining companies, if any, were insufficient to maintain a similar quality of life. Farmers were either given inferior quality land, small cash settlements or nothing at all (Earthworks, 2010). Though this data is not sex aggregated, the majority of smallholder farmers in Ghana are women and their output accounts for 80% of total agricultural production (FAO, 2006).

A study of several coal mining projects in Mozambique, conducted by the food-rights network FIAN International, found that peasant communities were being resettled to sites where agricultural conditions, particularly access to water, were not as favourable as on their current lands (FIAN, Forthcoming). A further impact of eviction was that peasant farmers would only be able to harvest one and not two crops in a year. In Sierra Leone, an investigation into the impact of the operations of Sierra Rutile Limited revealed that 11 villages that had been displaced by the company were resettled on farmlands reported to be grossly inadequate (Mboka, 2003).

Research in Tanzania in 2008 found that the relocation of peasant farmers (while possible because of their weak tenure) also deeply eroded their feeling of security on the relocated land, principally their ability to make decisions related to the use of the land, resulting in reduced agricultural productivity (Lange, 2008). In this case, the mining company had imposed restrictions on the types of crops that could be grown, permitting farmers to grow annual but not perennial crops, which the company wished to avoid paying compensation for if another removal was to occur. The villagers were also not permitted to plant trees or dig more than one foot into the ground (Lange, 2008).

Mining relocations may also impact the availability and accessibility of resources, with women having to spend more time collecting water and firewood over longer distances (Rossi & Lambrou, 2008). In Ghana, women that were displaced by a biofuel project complained that they now had to leave their homes to collect firewood at ten o'clock and returned at two o'clock, spending a total of four hours a day harvesting a key source of household fuel (Rice, 2010). This impacts women's well-being and safety, and has negative impacts upon household agricultural productivity.

Emerging evidence tells us that while the land held and used by individual families in communal tenure systems (see brief descriptive note in **Box 2**) may typically be compensated for (albeit on an inadequate basis), common resources are typically not recognised and not compensated for at all. In Mozambique, the experience of an association of peasant farmers, half of whom were women, is a classic example of the injustice of excluding land that is communal and collectively held from compensation assessments by mining companies (see **Box 3**). Equally ignored was the compensation for natural resources, in this case the maçanica fruits, which women harvest and use for household subsistence and sale in the local markets (FIAN International, forthcoming).

An assessment of mining activities and practices in the Tarkwa region in Ghana has uncovered a disagreement between communities and mining companies over compensation for the loss of the use of land (Human Rights Clinic, 2010). Although the law in Ghana permits compensation for deprivation of the use of the natural surface of the land or part of the land in addition to the loss of crops and immovable property (Minerals and Mining Act, section 74), many communities claim that they are only being compensated for the loss of their crops and not the general loss of land use (Minerals and Mining Act, section 74).



ABOVE: *Smallholder farmer, Ocola Apio Polly, Odom Village, Katakwi District, Uganda. Photo: ActionAid*

BOX 2: NON-COMPENSATION FOR COLLECTIVELY HELD LAND, CAPANGA NZINDA COMMUNITY, MOATIZE, MOZAMBIQUE

In April 2009, Riversdale Moçambique, a subsidiary of Riversdale Mining headquartered in Australia, was granted a mining license by the Mozambican government for 4,560 hectares in the Moatize district. Mining would start in 2010 and run through to 2035, extracting a total of 2.1-billion tonnes of coal. Riversdale Moçambique identified approximately 5,600 persons (1,147 families) living in the vicinity of the Benga mining project. Five communities (Capanga Nzinda, Capanga Gulo, Capanga Luani, Mpala and Nhanganja) were to be resettled.

At the time the research was conducted in 2010, the Peasant Association of Capanga, in the Capanga Nzinda community had 16 members, eight of them women. The association was undertaking a variety of productive activities – crop and vegetable farming, fishing, cattle-raising, bee-keeping and brick-making – for own use and sale to the nearby markets of Moatize, Bele and Matondo. The families of the members of the association had lived on the lands for generations. Since 1997, the association had collectively held a formal land-use grant (Direito de Uso e Aproveitamento da Terra) for 150 hectares. Besides this land, each family had its own plot of about 0.5 to 1 hectares. The association owned three water pumps, three water tanks, 10 carriages to carry products to market, and 11 sowing machines. The association had built five boreholes for community drinking water.

In 2006, the Benga coal mining project started its first exploratory works in Capanga. In January 2009 representatives of the company and local authorities informed the association that they would need to vacate their lands. Soon after this, a consultancy company contracted by Riversdale entered the area to conduct an impact assessment study. The members of the association were deeply concerned about the terms of the resettlement in particular the mining corporation's announcement that assets and resources collectively owned and used would not be compensated for despite their importance to the livelihoods of members. In terms of the agreement, families would receive allotments of a similar size in the resettlement area, but the association would not receive compensation for the collectively held land (150 hectares).

Members were also concerned that the assessment did not include all livelihood losses, such as the second harvest members' would lose due to reduced water supplies at Cateme, the resettlement area. In addition, the resettlement area was distant from local markets, which the association would have difficulty accessing without motorised vehicles. (FIAN International, 2010)

Rio Tinto has recently issued compensation guidelines that consider communal ownership, including the cultural significance of land, waters, plants and animals (Rio Tinto, 2012). It remains to be seen whether other mining companies will follow suit, whether such voluntary commitments will translate beyond paper, and importantly whether governments will legislate and enforce such requirements, as this is the greatest need. *

*We have regrettably not been able to access updated information on the outcome of these negotiations between the Peasant Association and Riversdale.

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6.2 The impact of mining's insatiable thirst for water

Commercial agriculture is the heaviest consumer of fresh water (around 70% of total consumption worldwide), but mining activities are also water intensive.⁴ By way of simple example, the mining, processing and production of a single gold wedding ring is estimated to require 8,000 litres of water (Zorrilla, 2009). Coal mining, one of the greediest water consumers, is assessed to use between 70 and 260-million gallons of water per day in the US (Leavett, 2011). Further, research by the Gaia Foundation calculates the 'embodied water consumption' of various metals (what it takes to mine and process these metals) as follows: gold at 225,000 litres/kg; nickel (hydrometallurgical route) at 377 litres/kg; titanium at 100 litres/kg, nickel (pyro) and steel (from iron) at almost 80 litres/kg, and aluminium (from bauxite) and copper (hydro) close to 40 litres/kg (Sibaund, 2012).

Mining's water demands, combined with its polluting impacts on water supplies, give rise to conflicts with and consequent 'water grabs' from peasant and small-scale producers, and indigenous peoples (IIED & WBCSD, 2002). For example, in 2007, the Atacama communities of San Pedro de Atacama in Chile rose up in protest against the Pampa Colorada Water Provision Project of the copper mining firm, Escondida, a low-cost mine of BHP Billiton and the world's single largest producer of copper. This project proposed to pump out some 648-million cubic meters of water at a rate of 32.4-million litres per year (a flow of 1,027 litres per second) for 20 years from the underground waters of the high Andean watersheds in the region. After a year-long fierce resistance, the Atacama communities were victorious when the Regional Environmental Commission of Antofagasta (COREMA) rejected the Pampa Colorada project. Residents of Coloso Bay to the south of the city of Antofagasta to which the copper concentrate is piped for export have not been as fortunate with repeated spillage of contaminated waste water impacting fishing and the harvesting of other marine resources (Global Response, 2007; BHP Billiton Watch, 2009).

In South Africa, mining (and coal mining in particular) is contributing to a growing national crisis in water, with a projected shortfall of 2.7-billion cubic metres of water by 2030. In the water scarce northern Limpopo province, linked land and water grabbing is depriving local farmers of water needed for local food production and stealing access from domestic water users. The Mupo Foundation, which works alongside the local Venda peoples whose livelihoods and spiritual attachments to land and local ecosystems are being disrupted by coal mining, maintains that the disruption of watersheds and aquifers and the poisoning of water supplies by intensive coal mining in the region are irreparably harming agricultural lands and "permanently reducing the Earth's capacity to store water" (Leavett, 2011).

And in the US, the Native American Navajos continue to battle the Peabody Coal Mining Corporation which has over decades profited greatly (US\$2.14-billion in gross profits in 2012 for a paltry US\$3-million annual lease fee to the Navajos) at the expense of workers' and community members' health, the draining of precious Navajo water aquifers, and the pollution of the environment. A January 2013 letter from the Black Mesa residents to the Peabody Executives laments:

Before Peabody's arrival, natural springs were plentiful. Our animals, both wild and domestic, quenched their thirst effectively without needing to search for waters ... Natural springs are extinct now. Black Mesa residents now face the daily chores of hauling water. They drive as far as 30 to 40 miles round trip to deliver potable water to their homes and livestock, while wild animals are left to fend for themselves. Water is essential for life. However, Peabody has wasted billions of acre feet of irreplaceable water. The pristine Navajo Aquifer is irreversibly damaged ... (RAMPS, 2013)

Significant water grabs also occur through the controversial unconventional extraction of gas, called hydraulic fracturing or fracking. This process entails the environmentally destructive process of injecting, under high pressure, a cocktail mix of one to eight million gallons (4,000 to 35,000 cubic metres) of water, sand, and toxic chemicals into a purposely dug wellbore. This creates 'fractures' in the rock permitting the gas or oil to migrate to the well for onward extraction (Franco et al, 2013; Sibaund, 2012).⁵ The water used in drilling or fracturing

4 Refer to <http://www.worldometers.info/water/> for up-to-the minute information.

5 See http://en.wikipedia.org/wiki/Hydraulic_fracturing and the Glossary for further information.

comes from lakes, rivers, or water wells, often displacing competing users such as farmers, manufacturers and other industrial users (Sibaund, 2012). In China, the Asian ‘pioneer’ of fracking, government has set a target for the industry “to pump 229-billion cubic feet of natural gas from underground shale formations a year by 2015” (Feodoroff & Franco, 2013) with the shale gas eventually contributing 6% of China’s energy needs by 2020. Aside from rising concerns about the role of corporate oil companies in China’s fracking boom and the impacts this will have on the Chinese peoples’ energy and food sovereignty, there are worries about how fracking will exacerbate ‘water grabs’. Researchers estimate that 485-million cubic feet of water will be required to achieve China’s 2015 target of 229-billion cubic feet of shale gas, with most of the fracking projected to take place in areas plagued by water shortages (Feodoroff & Franco, 2013).

And in California, a corporate water grab is underway through the US\$50-billion Bay Delta Conservation Plan to build twin tunnels to divert the Sacramento River to companies in the Central Valley. The powerful fracking industry is set to become the most significant beneficiary of this project, diverting significant public funds away from the more deserving work to rebuild dilapidated infrastructure and expand rainwater and stormwater systems, projects that will create needed local employment, stimulate local economies and provide water security (Bacher, 2013).

While subsistence and small-scale producers are not significant water users, there is still a heavy reliance on borehole water and waterways for agricultural production, and water grabs therefore negatively impact agricultural productivity. Water theft may also impact domestic use. Since women are the most significant users and managers of water supplies for domestic and subsistence use, they may need to walk longer distances to harvest water, and carry the burden of resourcing household food needs when productivity levels drop (Rossi & Lambrou, 2008). These impacts are exacerbated by the pollution of water supplies, an aspect addressed in the following section.

6.3 Water and environmental pollution and its impacts

Environmental deterioration occurs mainly as a result of inappropriate and wasteful working practices on the mines during active operations and the absence of, or inadequate rehabilitation of, the surrounding environs upon the closure of the mines (Kitula, 2006; APWLD, 2009). Mining operations, particularly at the large industrial scale, but also including artisanal and small-scale mining (ASM), are inherently disruptive to the environment, producing enormous quantities of waste that can have deleterious impacts for decades (Kitula, 2006). Open-pit mining is particularly harmful as it generates enormous quantities of waste. These wastes contain toxic elements and minerals, which may interact with water to generate contaminated fluids that can pollute soils. Cyanide and mercury leakage or spillage, and improper disposal of mine wastes, can be deadly to humans and can poison farming lands (Ochieng et al, 2010: 3351–7).

The related impact of AMD has been closely studied in South Africa, and the research shows that the water which decants from coal and base metal mines is highly acidic (containing high levels of sulphuric acid and heavy metals) and is very toxic when released into natural streams and rivers, often used to irrigate crops and water livestock. The entry of mine-originated contaminants into agricultural soils and products may also occur during heavy rainfall events that cause over-bank flooding. The human consumption of agricultural products contaminated by poisons emanating from AMD is accompanied by high health risks (Ochieng et al, 2010). Long-term exposure to AMD-polluted drinking water may lead to increased rates of cancer, decreased cognitive function and the development of skin lesions.⁶

Generally, AMD into waterways and the irresponsible disposal of other mining wastes affect populations well beyond the mined areas in South Africa. For example, in 2010, it was reported that the leakage of more than 36-million cubic metres of AMD a day was devastating the water systems of the Witwatersrand region, the most densely populated metropolitan area in South Africa with a population estimated at 10,267,700 in 2007 (Zeelie, 2010).⁷ It is feared that approximately 80% of South Africa’s water will be undrinkable by 2015 as a result of se-

⁶ Recent studies conducted by the South African Council for Geosciences (CGS) concluded that AMD in some of the areas contains high levels of radioactivity (Coetzee et al, 2005) which may increase the risk for cancer.

⁷ Also see https://en.wikipedia.org/wiki/Greater_Johannesburg for more information.

vere over-pollution (Water Sense, 2010). This water is utilised by both urban and rural populations (Taylor, n.d.).

Fracking (discussed in section 6.2) produces waste called 'produced water', which presents a major risk to people and the environment. As many as 600 chemicals are found in the fracking fluid (Sibaund, 2012). Most of the chemical-laced frack fluid injected down the well will stay below ground, but for every million gallons between 20% and 40% will spew back to the surface. It brings with it chemicals, traces of oil-laced drilling mud, and all the other toxic substances previously trapped in the rock (The Wilderness Society, 2012). Most of the wastewater is produced in the first few months of production and, as it is toxic, must be carefully disposed of through recycling (not commonly applied), through re-injection underground, or via surface treatment through processing at wastewater facilities (Hughes, 2011). At this time, most water treatment facilities are still not designed to handle fracking wastewater, and produced water is often left in large ponds to eventually evaporate. In many cases, the contaminated wastewater ends up in rivers and water streams (Desplaces, 2012).

Women's exposure to contaminated lands and waters is more frequent and intensive because of their primary role as agriculturalists, and their responsibilities for the day-to-day reproduction of households and communities. As one mining company has itself observed:

the pollution of water by poorly managed mining discharge can also contaminate water, which women typically have to collect and often use more frequently than men for bathing, laundry and food preparation. (Rio Tinto, 2009)

Research undertaken in Tanzania has equally concluded that the pollution of water sources by cyanide and mercury are particularly dangerous to the women and children who collect it for household and livestock use in rural communities (Kitula, 2006). They are also differently impacted because they must deal with the 'after effects' of the pollution: lower agricultural yields and livestock-related losses in herding communities, and health impacts on family members, including their own poor health (AWID, 2011).

Peasant women whose land is exposed to extractives-related pollution have complained of dwindling yields. Two experiences of farmers from Nigeria and India illustrate the gravity of this problem. In reference to liquid mineral exploration and exploitation in Nigeria, Margaret Amos, a woman farmer in Imiringi, where oil-related activities started in the 1960s, complained that:

When Shell came and situated their facilities here and invaded us, our crop yields started depreciating. Of truth, in those days, we experienced higher crop yields than these days. Yes, as one who has been in farming from childhood ... I know what I am talking about. Then, as a young girl, I noticed that our crops – cocoyam, cassava, plantain, and more – grew more luxuriantly. When we harvested them, we got bountiful yields. But all that is now history. What we get these days could be likened to ... [a] skeleton of those days ... We are really convinced that this gas flare is responsible for the decline in crop yield, because it was never so poor before the gas flare. I am approaching 60 years and I mean what I am saying ... [she had started farming in the area in 1972]. (IWMN/RIMM, 2010)

Peasant women farmers in Andhra Pradesh in India, where iron ore mining is taking place, tell a similar story. One female peasant rights activist, Guligamma, recalled that:

We used to grow sunflower seeds, sugar cane, rice and groundnuts, and be self-sufficient. But now we have a problem because the crop yields are less, the leaves of the plants are wilted, and our vegetables have gone bad. The factories and mines use so much water, that our fields are now cracked and dry. This never happened before the factory and mining came here. The water we used to irrigate our fields is mixed now with chemicals from the factory and our vegetables have turned a reddish colour. The factory water also flows into the drinking water. (IWMN/RIMM, 2010)



ABOVE: Oil extractivism's polluting impacts, Niger Delta. **Photo:** Elaine Gilligan, FOEI and Peter Roderick, the Climate Justice Programme. With thanks to ERA, FOEI and the Climate Justice programme for the use of this photo.

The loss of livestock and livestock-related products is another impact connected to mining-induced land degradation and water pollution. Peasant farmers, including women, depend on livestock to power the ploughs and the manure is an important production input. The milk and meat of livestock is an important source of nutrition to peasant households (Kitula, 2006). Resources like manure are particularly important to peasant women farmers since they offer nutrients to often-depleted soils, and empower farmers to maintain traditional agro-ecological farming methods.

For herding communities in Tanzania, mine pits do not only make land unfavourable for agricultural activities following closure, but also adversely impact livestock and wildlife resources which may fall into them (Kitula, 2006). In Mongolia, gold mining has made it increasingly difficult for herders to sustain their way of life. Many female herders have shared their accounts of livestock becoming ill and dying from the effects of mercury and cyanide pollution in the soil and water. And others have recounted tales of animals wandering into mining areas, falling into the manmade holes and craters, and dying (APWLD, 2009).

A combination of air pollution, water pollution and water shortage directly linked to extractives activities results in lower yields, and impacts on peasant food sovereignty. Further, low yields can be caused by reduced rainfall, linked to deforestation caused by extractives industries (Zorrilla, 2009).

6.4 Loss of male agricultural labour and other contributions due to migration

Male migration has a specific gender impact on peasant and small-scale agriculture in what we call labour-sending areas, the communities from which male mineworkers migrate to the mines (our interest here) as well as other sectors, such as commercial agriculture and industry. Many rural communities in Southern Africa continue to send their economically active men to the mines and rely on their remittances for agricultural investment and family survival (IOM, 2010). The states of Southern Africa in this contemporary period can be divided into migrant-sending (Mozambique, Malawi, Lesotho) and migrant-receiving (South Africa, Namibia). Botswana and Swaziland bridge both categories. Countries such as Tanzania and Zambia have experienced major refugee influxes in the last decade but have tended not to send or receive significant numbers of labour migrants (Crush et al, 2005).

Research on Southern African migration patterns undertaken by the Global Commission on International Migration finds that by the 1990s the South African mining industry (the most significant mining employer regionally), with the exception of platinum and gold mines, had shifted to a predominantly local workforce. During a period of significant downsizing and restructuring in the 1990s, the mines laid off local workers at a faster pace than foreign workers with the result that the actual proportion of foreign workers increased from 40% in the late 1980s to close to 60% in 2005. In South Africa there is significant internal migration, with rural communities losing adult male members to work in distant mining areas (Crush et al. 2005).

Many migrants leave wives and family members behind in order to retain access to land and housing in home areas (Crush et al, 2005), a necessity because of the uncertain nature of employment in mines, or because mines (especially in South Africa) do not usually provide the housing and services needed to sustain families. The logic of a single male migrant has been an overriding one for well over a century (IOM, 2010). Most households with intra-national and international migrant members continue to practise agriculture for important supplementary income; to retain a claim on communal lands; and for the retention of cultural and social bonds with community and nature (Jokisch, 2002). In the absence of adult males, all agricultural responsibilities fall to adult women to manage (with many tasks being discharged to children) over and above their own agricultural and domestic work responsibilities (Jokisch, 2002; IIED & WBCSD, 2002).

In what may be reflective of a general effect in Sub-Saharan Africa, in Kenya, one notable impact of male migration has been that women are left to make difficult household decisions, effectively stepping up to become the *de facto* household head, without the needed resources, power and authority to play this role and be respected for it (Macharia, 2003). Women may not always be successful at discharging 'common male farming tasks' like ploughing, care and maintenance of the irrigation system, and land preparation due to labour shortage or lack of skill (Gartaula, 2007). When agricultural labour becomes scarce, women's labour is diverted from the important work to (a) preserve agricultural resources, especially the soil, leading to resource degradation; (b) save seeds and take on agricultural innovation measures and technologies; and (c) contribute labour to other families and

communal tasks, leading to the erosion of cultural and social relations.

While it may be argued that labour shortages in labour-sending areas can be compensated for by hiring labourers with the help of remittances sent by the migrants, not all households receiving remittances enjoy this indulgence. This is because remittances may be earmarked for basic needs, like education, family health and debt repayment, and less to improving agriculture (Crush et al, 2005; Jokisch, 2002). And if additional labour requirements cannot be met during the peak season, production losses can generally not be compensated for by small remittances (Gartaula, 2007). The Global Commission on International Migration's Southern Africa research finds that while remittance levels to Mozambique have been fairly stable, remittances to Lesotho and Swaziland, and within South Africa (to the Eastern Cape specifically) have fallen sharply during the 1990s. This has created a crisis of deepening poverty and domestic tensions for many households that have been reliant on mine remittances, and has triggered the migration of other family members, including women, in search of work to support rural families (Crush et al, 2005; Jokisch, 2002).

ABOVE: Peasant women forever balancing the demands of food production and care-giving, Makuyuni, Tanzania. **Photo:** ActionAid



7. HOW ARE WOMEN RESPONDING TO LAND AND FOOD VIOLATIONS RELATED TO MINING?

Peasant women are using their power, assuming agency, and struggling to defend the basis for life and dignity that is so threatened by extractivism. Several of the stories in this section are drawn from the International Women and Mining Network (IWMN)/Red Internacional Mujeres y Minería (RIMM) publication *Women from Mining affected Communities Speak Out: Defending Land, Life & Dignity* (IWMN/RIMM, 2010).

7.1 Mobilising to address the abrupt loss of mine jobs by husbands

In Zambia, thousands of mine jobs have been lost since 2009 as copper mines either shut down or slowed production in response to the global economic crisis. Women have stepped into the breach, forming production cooperatives to increase income to stricken households that can no longer afford schooling, health care and food. The story told here is of the Natwisonge Women's Group in the township of Kankoya in the copper belt province, as narrated by Sabina one of the group's members:

'Our group consists of 10 women,' Sabina said. 'We share ideas, we raise funds for school and we sell sugarcane, chalk wood, cassava, tomatoes. All in small quantities of course. But it's a start. We rely on each other for help.'

By combining their resources and working together, they are able to produce more and improve their situation. They still face challenges though: 'the mine next to our community pollutes the ground water, this is not good for the crops. The mine does not provide us with any help. Our government is absent as well. All of us are feeding families of 10 to 15 people.'

She further explained, 'We don't know what our future will be like. What we do know is that we need fertilizers and tools ... clean water and electricity for our community. We are taking the first steps with starting our own women's group. Now we need to expand our work so we can take care of our families... (Action Aid International, n.d.)'

In this story, the women farmers affirm, through their struggles, that agriculture is the primary livelihood means for peasant women, and a strategy they fall back on for survival even when capital is scarce. Their ability to respond to a crisis of subsistence impacting tens of thousands of people on the copper belt is however compromised by the polluting impacts of the mining industries.

7.2 Organising to hold mining companies accountable

This type of agency – organising to hold corporations and the state accountable for wrongdoing – has been exercised by women across the region for decades, and here we present an example from Ghana. The women, organised under the Concerned Farmers' Association, have mobilised, marched, and pursued legal action for fair compensation for damages against the offending mining company, AngloGold Ashanti. The experience is told by sharing the experience of one bold and determined woman, Emelia:

In Ghana, where there are few women visibly leading political struggles, men are normally perceived as the voices of the community. Nevertheless, Emelia has become a strong community advocate, struggling to demand that AngloGold Ashanti respect the rights of local residents. Emelia has been at the forefront of the coordination of the Concerned Farmers' Association's legal case against the AngloGold Ashanti Iduapriem

Mine to demand compensation for the destruction of their properties. In addition, Emelia has led a community initiative to hold the company accountable for the pollution of local watersheds, and had successfully traced sources of chemical seepage into their streams from the tailings produced by the Iduapriem Mine.

She has led people from her community in a march through the district capital of Tarkwa to present a petition about the problems of her community to the District Chief Executive and has also spoken extensively to media outlets about the impacts of AngloGold's mine on her community. Emelia, now 31 years old and the mother of two young children, explains her dedication to the people of her community: 'Because of the sensitisation from WACAM [a leading NGO that supports communities impacted by mining], I now know where to go and who to contact in case of any problem in the community ... The 1992 Constitution and the Minerals and Mining Act are my closest friends now. I don't want the mining company to cheat my community. And I know my rights as a citizen living in a mining community ... [I] feel very powerful in the sight of both the mining company, and the men in my community'. (IWMN/RIMM, 2010)

This case powerfully demonstrates that with access to information and awareness, and support from an allied civil society organisation (CSO), women can collectively become powerful advocates against harmful mining activities. The story also dispels the myth that local communities stand little chance when confronting the much more powerful mining companies. Rather, when women and their communities are organised, empowered to monitor mining activities, and expose the negative impacts of mining activities in their own localities, it is more likely that offending mining companies can be held accountable.

BELOW: Members of the Rustenburg Environmental Coalition protest, South Africa. **Photo:** ActionAid





ABOVE: March of women against hunger and for food sovereignty on the island of Bugala, Lake Victoria, Uganda.
Photo: ActionAid

7.3 Leading community campaigns and reclaiming land

In South Africa's Limpopo province, women have asserted "naga ke ya rona!" ("the land is ours!") and emerged as leaders in confronting the Anglo Platinum mining company, which has since 2001, forcibly relocated many thousands of Mapela residents to compensatory lands of inferior quality and incomparable extent, usually located many kilometres from their place of residence. The following is their documented experience:

Faced by a company that has refused to consult – let alone agree to negotiate – with communities, and government officials aligned with the mining industry, Mapela residents of the northern Limpopo province felt they had no choice but to launch a public campaign to defend their rights and demand compensation for their losses. Despite death threats, mass arrests, police shootings and heavy surveillance, women have come forward as leaders of these community campaigns against [the mine]. Many perceive this struggle as a fight for life; a stance for the rights of future generations.

Principled statements of resistance emanate from sites where families continue to live on their original homesteads, after refusing Anglo's removal orders. While some have organised road blockades, others have attempted to return to ploughing by reclaiming their ancestral lands and disregarding Anglo Platinum's fences.

Coordinated actions have taken place to stop Anglo's bulldozers from entering gravesites. Girls as young as 11 years old have been arrested on trumped up charges of 'malicious damage to property', while women of all ages have been wounded by rubber bullets shot by police during non-violent marches and vigils. (IWMN/RIMM, 2010)

The fearlessness of the Mapela peasant women, facing off the mining company, its threats to their community, and the actual violence and repression meted out by mine security and state police, is inspiring, and is repeated in the struggles of women, their men, and their families across the region and the globe. Women are motivated to play a central role in these protests because large-scale and widespread land grabs and land devastation threaten women and the well-being of their entire households.

Women farmers have the least to gain and the most to lose from mining – their access to family and personal fields is placed under threat, as is access to safe water supplies, woodlots, and other common resources that they use to construct their contributions to household reproduction. And it is this level of threat and risk to self and family that motivates and inspires the formidable resistance of peasant women.

8. CONCLUSIONS AND RECOMMENDATIONS FOR RESEARCH AND ACTION

This review of the available literature on industrial-scale extraction, mining specifically, and its impacts on peasant women's land and natural resource rights has shown that mining-induced relocations, usually forced in nature, deprive women of access to the land and natural resources they need for subsistence production and household provisioning of food, water, energy, diverse and nutritious foods and medicines. The literature has also informed us about other impacts, such as the degradation of farming land (including through water pollution) resulting in reduced levels of productivity, the diversion and destruction of water resources, and the loss of male labour due to migration. That compensation for relocation usually ignores collectively-held and managed resources (like water, woodlots and grazing areas) in communal areas further undermines food sovereignty and has particular impacts on peasant women who manage and lean heavily on these common resources for social reproduction.

These are just some of the key gendered impacts of industrial-scale mining upon women peasant farmers that governments in Sub-Saharan Africa must acknowledge and respond to if they are to guarantee, at the very minimum, the food security of their rural farming populations. Peasant women, whom we have established to be the main food producers in Sub-Saharan Africa, if recognised and adequately supported in their existing productive and reproductive roles, could contribute greatly to food security (and ideally food sovereignty) goals of governments and help to mitigate the worst impacts of humanitarian disasters, such as droughts or food price hikes.

On the basis of this initial review, WoMin's overarching recommendation is that states, multi-lateral agencies and CSOs should focus their attention on supporting peasant women along four main axes:

- 1) strengthening communal property systems and safeguarding women's land rights within these;
- 2) supporting and building upon agro-ecological farming methods predominant amongst peasant farmers, which are typically low input, nurturing of soil fertility, and safe to nature and the planet; and
- 3) identifying and addressing women's labour needs both in the fields and in the family.

A fourth area of attention - applicable to grassroots movements and their support organisations – is a focus to alternative forms and ways of reproducing life through collectives or communities of producers “reclaiming sharing, and pooling resources of various types, driven by values fundamentally opposed to those embedded in the capital circuits: solidarity, mutual aid, cooperation, respect for human being and the environment, horizontalism and direct democracy” (de Angelis, 2012: xii). These are the terms upon which much social reproduction in the rural Sub-Saharan African context has been traditionally managed, albeit in ways that perpetuated inequalities on the basis of age, status and gender. These practices have been eroded by market intrusions, by land and other natural resource dispossessions, by environmental disasters (and by mounting climate change), and deepening poverty. Support for reclaiming, reimagining and rebuilding ‘the commons’ in Sub-Saharan Africa in ways that address societal inequalities and circumvents market and state is a critical dimension of the alternative needed.

WoMin's specific recommendations for research and action on the questions and issues raised in this paper are:

- Through action and other forms of research, document the impact of the extractives industries on the land and food rights of peasant women in various Sub-Saharan Africa communities. This research should seek to quantify land losses through forced relocation, encroachment and land degradation, as well as the productivity and livelihood impacts of extractivist activities. This work will require collaborations with universities across the region to baseline specific communities prior to the inception of extractives operations, and monitor their impacts over time.
- Specific effort should be focused on thoroughly documenting and quantifying the increased demands upon women's unpaid labour, of labour migrancy, polluted water supplies, the health impacts of environmental degradation, and forced relocations with a view to taking legal and political action against mining companies for compensation.
- Through IANRA, in alliance with other organisations working in the extractives sector in Sub-Saharan Africa, build a watchtower or observatory to track transnational mining and other extractives corporations to inform advocacy and campaigns, and support movement building.

- Build land and food-focused regional and international campaigns, in alliance with peasant federations and movements, against specific mining corporations to highlight to governments, to the wider public, and to shareholders of such companies the impacts of specific extractivist operations on food security (and sovereignty) and to advocate for alternative forms of extraction, which privilege rights to food, health and human well-being over short-term profit.
- Conduct an audit of land policies and legal frameworks at regional and national levels with a view to identifying how they currently support, or fail to support, women's legitimate rights to land and natural resources.
- Advocate and campaign for just laws, policies and the necessary regulatory systems and authorities to (a) protect and strengthen communal tenure systems, and transform women's land rights within these; (b) safeguard the land based lives and livelihoods of rural communities and provide for just and fair compensation for any losses related to land rights, livelihoods and land use when relocation has been agreed and is the option of last resort; and (c) empower communities, and women in particular, with the legal authority and knowledge to participate in and freely influence decision-making about mines and other mega projects affecting their lands and natural resources.
- Support peasant women's organising, knowledge formation and skills development within mixed and separate movements at local, national and regional levels. And work alongside the Southern African Regional Rural Women's Assembly to build a regional activist formation school for peasant women.

And most importantly, building upon research; peasant women's practices of and struggles related to farming, natural resource and eco-system management; and women's needs and experiences connected to their reproductive role, **build an alternative paradigm for extractivism and for development** more generally around which to build alliances, movements and campaign for change. This work should be undertaken with the Regional Rural Women's Assembly and other progressive women's formations and movements across the region.

These efforts should specifically address the cross-cutting urban/rural and class question of the state's responsibilities for supporting the social reproduction of citizens through public services, such as education, health care, water and energy. Our efforts should be focused on the one hand on contesting and pushing back the encroachments of the market upon public assets and services, and on the other to building alternatives outside of the market and the state – these alternatives, 'the commons', refer to new ways of organising the social reproduction of life through collectives of producers "reclaiming, sharing, and pooling resources of various types, driven by values fundamentally opposed to those embedded in the capital circuits: solidarity, mutual aid, cooperation, respect for human being and the environment, horizontalism and direct democracy" (The Commoner, 2012: xiii).



A woman smallholder who successfully regained land taken by her brothers, Democratic Republic of the Congo. Photo: ActionAid



ACRONYMS

AfDB	African Development Bank
AMD	acid mine drainage
ASM	artisanal and small-scale mining
AU	African Union
CSO	civil society organisation
FAO	Food and Agriculture Organization
IANRA	International Alliance on Natural Resources in Africa
IIED	International Institute for Environment and Development
IOM	International Organisation for Migration
NGO	non-governmental organisation
OECD	Organisation for Economic Cooperation and Development
SADC	Southern African Development Community
UN	United Nations
WFP	World Food Programme
WBCSD	World Business Council for Sustainable Development

GLOSSARY

Acid mine drainage (AMD)

“Acid mine drainage is the flow, or seepage, of polluted water from old mining areas. Depending on the area, the water may contain toxic heavy metals and radioactive particles. These are dangerous for people’s health, as well as plants and animals” (Earthlife Africa, n.d.). See http://www.earthlife.org.za/?page_id=584 for more information.

Biofuel

A type of energy derived from renewable plant and animal materials. The most common examples are ethanol (made from corn or sugarcane), and biodiesel (usually from vegetable oil and animal fat). See <http://www.investopedia.com/terms/b/biofuel.asp> for more information.

Extractivism

The term ‘extractivism’ refers to the extraction of minerals, oil and gas, and in the understanding of the writers, water, forest products, new forms of energy such as solar and hydro, and industrial forms of agriculture, which grab land and extract vast quantities of water in the production process.⁸ But extractivism also importantly refers to the conditions under which these resources are extracted and whose interests they serve, speaking to a dominant and highly unequal model of development which “organizes – on the basis of the exploitation and marketing of resources for export – the political, socio-economic and cultural relations within the respective country or region: the economy and class structures, gender relations, the state and public discourse.”⁹

Food sovereignty

A term, first used by La Via Campesina (the global movement of peasants) in 1996, which asserts the right of peoples to define and control their own food systems. The Declaration of Nyeleni adopted at the Forum for Food Sovereignty in 2007 asserts that: “Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and

8 The value of natural resources, such as water and land and mineral resources are ‘embedded’ in the agricultural outputs, but are not valued and acknowledged in the setting of market prices. We refer to this as ‘embedded value’.

9 Ulrich Brand, Austria & Germany: Energy policy and resource extractivism: resistances and alternatives, RLF reader for WSF, Tunis

agriculture systems. It puts those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations. It defends the interests and inclusion of the next generation. It offers a strategy to resist and dismantle the current corporate trade and food regime, and directions for food, farming, pastoral and fisheries systems determined by local producers. Food sovereignty prioritises local and national economies and markets and empowers peasant and family farmer-driven agriculture, artisanal fishing, pastoralist-led grazing, and food production, distribution and consumption based on environmental, social and economic sustainability. Food sovereignty promotes transparent trade that guarantees just income to all peoples and the rights of consumers to control their food and nutrition. It ensures that the rights to use and manage our lands, territories, waters, seeds, livestock and biodiversity are in the hands of those of us who produce food. Food sovereignty implies new social relations free of oppression and inequality between men and women, peoples, racial groups, social classes and generations” (Nyeleni Declaration 2007, para. 3).

Hydraulic fracturing (fracking)

Hydraulic fracturing, commonly known as fracking, is a new method for extracting natural gas from shale rocks. This process entails the injection, under high pressure, of a cocktail mix of one to eight million gallons (4,000 to 35,000 cubic metres) of water, sand, and toxic chemicals into a purposely dug wellbore. This creates ‘fractures’ in the rock permitting the gas or oil to migrate to the well for onward extraction (Franco et al, 2013; Sibaund, 2012).¹⁰

Matriliny

The practice of tracing descent through the woman’s line to establish ancestry or inheritance. Matrilineal systems cannot be equated with matriarchy, which can broadly be defined as a system in which women and mothers in particular carry political leadership and moral authority, and control property. Even where inheritance may pass along the woman’s line, male authority in land matters and decision-making remains entrenched in matrilineal societies.

Patriarchy

“Systemic societal structures that institutionalise male physical, social and economic power over women” (Reeves et al, 2000:3).

Patriliney

The practice of tracing descent through the male line for the purpose of establishing relationship, ancestry or inheritance. This practice is an important element of the system of patriarchy.

10 See http://en.wikipedia.org/wiki/Hydraulic_fracturing and the Glossary for further information.

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