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Agricultural development for peace

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Agricultural Development for Peace

Tony Addison

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Abstract

Agricultural development can contribute significantly to peace by raising incomes and employment, thereby reducing the social frustrations that give rise to violence. Agricultural growth also generates revenues for governments, allowing them to redress the grievances of disadvantaged populations. In this way, growth can be made more equitable, an effect that is enhanced if inequalities in access to natural capital, especially to land, are addressed as well. Agriculture is critical for countries rebuilding from war, especially in making recovery work for the poor. And by raising per capita incomes, agricultural development underpins new democracies. Agricultural development thereby supports political strategies for peace-building and democratization.

Keywords: agriculture, conflict, peace, international trade

JEL classification: N40, O13, Q18

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1 Introduction

The importance of agriculture to development has long been recognized. Agriculture is the economic backbone of most low-income countries, a major contributor to economic growth, and a large foreign-exchange earner. And most importantly, many of the world's poorest people depend on agriculture for a living. Overall development success or failure is often an outcome of what happens in agriculture.

The connections between agriculture and social peace are less well-recognized than the development connections, but they are nevertheless as important (UNU-IAS 2004). First, when agriculture fails to meet peoples' expectations for a better life, the resulting frustration can be more readily exploited by demagogues. Poverty is a rich recruiting round for criminals and leaders intent on inflaming religious and ethnic hatred; development failure is therefore a key cause of conflict. Second, access to the productive assets upon which rural livelihoods depend (land, water, forests, and fisheries) may literally be a matter of life and death for rural households. They stand little chance of achieving food security or a higher income without such 'natural capital', which is often the centre of considerable, sometimes violent, competition. High inequality in access to natural capital therefore raises the risk of conflict. Third, participation in world agricultural trade offers both development opportunities but also pitfalls; commodity-price shocks can cause deep recessions and, in the worst cases, the loss of revenues can cause state failure. Finally, drought and flood can undermine agrarian societies and sudden climate change is historically a 'tipping point' in the fall of civilizations.

In summary, social peace is closely connected to successful agricultural development. National strategies for agricultural development must take this imperative into account, and international action must be supportive. This is a demanding set of tasks whose complexity should not be under-estimated; national policies too often fail the goal of social peace, and international action sometimes undermines promising national initiatives. This paper sets out the issues, starting with development failure and its agrarian dimension (section 2), and then goes on to discuss rural inequality and the related competition over natural capital (section 3) as well as agriculture's role in post-conflict recovery (section 4). Poor countries themselves can make improvements in each of these areas, but the rich world must act as well, most importantly in the area of global agriculture trade which has implications for conflict and security (section 5). Section 6 concludes by noting that since democracy tends to follow prosperity, agricultural development supports political strategies for peace-building and democratization. And the paper ends by highlighting the dangers of global climate change for agriculture and food security—and thereby to social stability in poor countries.

2 Development failure as a cause of violent conflict

Violence has many faces, ranging from domestic violence against women, to fights between neighbouring communities, to terrorism, to full-scale warfare involving large numbers of combatants. The latter include civil wars (most recently in Angola, Liberia, and Sierra Leone) and wars between states (the 1998 Eritrea-Ethiopia war, for example). Poor countries account for nearly all of the 58 different armed conflicts that have taken place since the end of the cold war (Eriksson, Sollenberg and Wallensteen 2003). And

violence can continue well after ‘peace’ is declared—many post-conflict countries suffer from very high rates of violent crime—and the chances of major conflict recurring are high; just over one-third of the civil wars occurring over 1945-96 repeated themselves (Walter 2004). This makes it very difficult to apply the label ‘post-conflict’ to countries such as Afghanistan and Liberia (Keating and Knight 2004). And such persistent conflict represents a great danger to global peace since the international effects of long-running wars tend to grow over time; the repercussions of Afghanistan, Colombia, and Israel-Palestine reach well beyond their own borders.

Violent conflict represents a truly catastrophic problem for development. First, there is the enormous human cost: ‘more than 3.6 million civilians died during internal conflicts in the 1990s and over 50 per cent of the battlefield casualties were children ... between 1980 and 2000 no less than a quarter of the total LDC population, that is about 130 million civilians, were affected by conflicts’ (UNCTAD 2004: 163). Second, the typical civil war costs US\$64.2 billion, including the value of the lost output as well as the value of the lost life and health (Collier and Hoeffler 2004). In other words, the cost of *one* civil war exceeds the *total* amount of aid given annually to the developing world (US\$52 billion according to OECD-DAC estimates). Ending war and keeping the peace has, therefore, high economic returns, aside from its humanitarian benefits.

The economic benefits of ending war are especially high for rural populations, since the rural areas of war-torn countries typically bear a very large proportion of the economic and humanitarian costs. They are usually less well-defended by governments and in any case rebels and government soldiers often live off the land. In the worst cases, food output can collapse; during Angola’s long-running civil war, agricultural output fell to less than 10 per cent of its pre-war level. As a result, food security deteriorates alarmingly, placing large demands on food aid (Development Initiatives 2003). But the remotest areas may be entirely out of the reach of humanitarian assistance, resulting in major hunger and famine. In Colombia, three million people are internally displaced, most of them from rural villages and towns—the largest humanitarian crisis in the western hemisphere, and exceeded only by the population displacements in the Democratic Republic of Congo (DRC) and Sudan.

2.1 Agricultural development failure and violent conflict

An important cause of conflict is development failure—the failure of an economy to grow and, in the worst cases, a collapse in output and living standards. In an influential empirical study, Collier and Hoeffler (1998) identify a low per capita income and a low (or declining) growth rate as factors that significantly increase the *risk* of civil war. And a UNU-WIDER study (Nafziger, Stewart, and Väyrynen 2000) assembles considerable empirical evidence across a wide range of countries on the consequences of development failure for conflict. The relationship is especially evident in sub-Saharan Africa (SSA); the region’s economic performance is the world’s worst, and it experienced 19 major armed conflicts over 1990-2002 (SIPRI 2003: 111). Since SSA’s economies are predominantly agrarian, overall development failure often amounts to agricultural-development failure.

Some, but certainly not all, of Africa’s poor agricultural performance is rooted in the colonial legacy. Many African countries were already fragile, both politically and economically, at independence. Their economies were based on the extraction of

valuable minerals and export-agriculture by large (European-owned) estates—with Africans supplying the labour (sometimes forced). Colonialism also created a class of African smallholders producing food for the national market and export crops such as cotton for the imperial and global markets. But the needs of African farmers for infrastructure and marketing were given a low priority, and their producer prices were sometimes kept artificially low for the profit of the colonial administration and its imperial power (this was the case in the Belgian Congo, for example: see Nzongola-Ntalaja 2002: 71). The economies of settler colonies such as Angola, Kenya, Mozambique and Zimbabwe were more diversified, but public investment gave overwhelmingly priority to large settler farms over the smallholdings of indigenous populations. Many of the newly-independent African governments continued with the colonial bias against smallholder agriculture, over-taxing the sector for the benefit of politically influential urban groups (and transferring resources from efficient smallholder farmers into ill-conceived industrial projects). Such policy bias, together with terms-of-trade shocks and the macroeconomic mismanagement of the mineral wealth, undermined agricultural output, rural living standards, and government finances.¹

By 1980 many SSA countries had per capita incomes below their independence levels. Governments began to undertake economic reforms with donor-support but reforms frequently broke down, and growth failed to resume; Côte d’Ivoire received no less than 26 IMF and World Bank adjustment loans, while Zambia had 18 in all—and growth was negative in both countries (Easterly 2005). When the public finances were brought under control, it was often at the cost of deepening the recession as the economy passed through an adjustment process that involved major fiscal restraint (often marked by a further fall in already low levels of public spending on rural infrastructure and services). Although economic reform is often seen as representing the retreat of the state—with the dismantling of market-controls and the privatization of state-owned enterprises—effective state institutions are still crucial to achieving reform’s intended results (better economic management is intensive in state capabilities). Effective reform is therefore very difficult to achieve under rapid adjustment because expenditure reductions cut into already weak state-capacities (Kayizzi-Mugerwa 2003). Some success was achieved in restoring agricultural growth to Ghana and Tanzania following an increase in agricultural producer prices and marketing reform, but these economies are yet to achieve sustained diversification in their non-agricultural sectors.

The vulnerability of countries to conflict increased when economic reform failed, as it often did. Successive structural adjustment programmes were unable to pull Sierra Leone out of a deepening economic slump, and some of the reforms had serious social costs. Sierra Leone’s public food-distribution system was, for example, dismantled as part of an ill-conceived liberalization of agricultural markets required by World Bank conditionality (Griffiths 2003). Inept government and increasing poverty contributed to a rising sense of frustration, and the young unemployed were easily recruited by warlords intent on looting the country’s abundant diamond deposits. The frustration of poverty was particularly intense in the rural areas—these had seen hardly any benefit from Sierra Leone’s mineral wealth—and many of the fighters were rural born.

¹ A resource boom, such as the expansion of oil production, can reduce agricultural producer incentives through its exchange rate effect; the resulting cheapness of food imports reduces domestic farm income and encourages rural-to-urban migration (an effect that was evident in the contraction of Nigerian agriculture in the 1970s).

Economic crises originating in the agricultural sector were contributory factors in the Rwandan genocide as well as in Côte d'Ivoire's civil war. In Rwanda, the patronage practiced by the Habyarimana regime was undermined by a commodity price shock at the end of the 1980s—a fall in the world price of coffee, Rwanda's principal export. With its revenue base collapsing, the regime increasingly resorted to repression in the lead-up to the 1994 genocide (Verwimp 2003). And economic hardship in the rural areas fanned the flames of already high levels of distrust between the Hutu and Tutsi populations.

Côte d'Ivoire's economy boomed during the 1960s and 1970s when world cocoa prices were high. Houphouët-Boigny, the country's first and long-serving president, successfully redistributed the country's cocoa wealth, via a tax on cocoa exports, to reduce tensions between the rich Christian south—the cocoa-producing area—and the drier, poorer, Muslim north (Azam 1995). However, the collapse of world cocoa prices in the 1980s led to an economic slump, which dragged down public revenues, thereby weakening the country's post-independence social contract. This was compounded by badly-designed adjustment programmes, and nearly a decade of recession resulted.² The economy eventually improved but not before immense social damage had been done. Ethnic demagogues stoked up hatred against northerners as well as against the millions of migrants from Burkina Faso, Mali, and Guinea who had settled in Côte d'Ivoire to work in the booming cocoa economy of the 1970s. As in Sierra Leone, the young unemployed provided ready recruits, and the country spiralled into war.

In summary, SSA provides plenty of evidence that development failure contributes to raising the risk of violent conflict. And we have seen that development failure is often rooted in the agricultural sector. Of course, many other factors contribute to conflict, and no mechanistic relationship between economic performance and social stability exists. Even in poor societies, strong institutions can successfully contain conflict, and channel it into peaceful mechanisms for its expression and eventual resolution (Addison and Murshed 2003). For example, Tanzania suffered a substantial fall in per capita in the 1980s but, with the exception of tensions in Zanzibar, the country has been mostly peaceful.

3 Inequality as a cause of conflict

Although a county's poverty may raise the risk of conflict, civil war and genocide still remain comparatively rare events across the entire spectrum of low-income counties. When we look at conflict countries, the mostly deadly combination seems to be development failure combined with high inequality across groups—what is known as *horizontal inequality* (Nafziger, Stewart, and Väyrynen 2000; Stewart 2001). In his 1999 report to the General Assembly, Kofi Annan, the Secretary-General, presents the argument as follows:

² Instead of devaluing the CFA Franc—the currency of Côte d'Ivoire and other members of the CFA Franc Zone—the government, with the backing of the IMF, the World Bank, and France attempted to resolve the crisis by fiscal restraint (which led to deep cuts in public expenditures). This failed to restore growth, and eventually the CFA Franc was devalued, thereby encouraging an export recovery in the 1990s.

In recent years poor countries have been far more likely to become embroiled in armed conflicts than rich ones. Yet poverty *per se* appears not to be the decisive factor; most poor countries live in peace most of the time. A recent study completed by the United Nations University shows that countries that are afflicted by war typically also suffer from inequality among domestic groups. It is this, rather than poverty, that seems to be the critical factor. The inequality may be based on ethnicity, religion, national identity or economic class, but it tends to be reflected in unequal access to political power that too often forecloses paths to peaceful change (UN 1999: 2).

Thus in Côte d'Ivoire, Sierra Leone, and Rwanda it was development failure interacting with high inequality *between* ethnic groups as well as between regions that proved to be combustible. When development falters, and growth declines, politicians lose the resources for closing the gap between competing groups. But even when the economy does grow, effective systems of public expenditure and taxation are essential to gather the additional resources and to use them for improving services and infrastructure for disadvantaged groups (Addison and Roe 2004). In Côte d'Ivoire, Houphouët-Boigny succeeded in doing this for a long time, but the mechanisms were eventually undermined by macroeconomic weakness, including a commodity-price shock. In Sierra Leone and Rwanda there was little, if any, attempt to construct the appropriate fiscal institutions to achieve redistributive growth (Ndikumana 2004). And when macroeconomic crisis hit these countries, the burdens of adjustment were shared unequally across ethnic groups.

We can also see these forces at work in low-income Asia. Nepal presents a tragic case-study of underdevelopment combined with high horizontal inequality. The economy has neither grown nor delivered better livelihoods for the poorest areas—which have human development indicators averaging one quarter of Kathmandu (UNDP 2001)—and the resentment has fed support for a Maoist-inspired insurgency. The least privileged ethnic groups, who tend to be classified among the lower castes, are the Maoists' strongest supporters (Bray, Lunde and Murshed 2003). Some 1.2 million households (about 25 per cent of Nepali households) are landless, and about 1 million out of 6 million agricultural labourers are completely landless. Using human development indicators and landlessness as explanatory variables, Murshed and Gates (2005) find that the intensity of conflict across the districts of Nepal (as measured by the number of deaths) is most significantly explained by the degree of inequality.³ Nepal stands little chance of peace until these severe inequalities are addressed.

3.1 Inequality in natural capital: present and future dangers

High income-inequality in agrarian societies is associated with large inequalities in access to the productive assets that are critical to the rural economy: natural capital together with infrastructure and services (Carter 2004; Guivant 2003). Such inequalities are a common source of insurrection in dualistic rural economies where an impoverished peasantry or landless class works for wealthy commercial farmers (Pons-

³ The correlation between the intensity of rebellion and landlessness or marginal (very small) landholdings is 0.43 (on a scale of 0 to 1), indicating that land issues are a significant motivating factor in the support for Nepal's Maoists (Murshed and Gates 2003).

Vignon and Solignac Lecomte 2004). The result is local, but intense, land wars. In Latin America, deep inequality in land as well as in access to related infrastructure, has been a strong motivation behind rural rebellion (on the region's inequalities see De Ferranti *et al.* 2004). In North-East Brazil, the country's poorest region, seizures of land have increased. The leader of the landless movement, João Pedro Stedile, summed it up in this way: 'The peasant struggle includes 23 million people ... On the other side are 27,000 ranchers. That is the dispute. We won't sleep until we do away with them' (*Financial Times*, 30 July 2003).

Inequalities in land and other forms of natural capital are also becoming bigger sources of conflict in Africa (Jayne *et al.* 2003; Mafejie 2003). Conflict and violence in Burundi and Rwanda have in part been motivated by problems in access to land (and thus household food security) in societies with intense population pressure (Diamond 2005). West Africa has seen violence between indigenous farmers and immigrants escaping population pressure and drought in the Sahel (this is another factor in the civil war in Côte d'Ivoire where southern elites have imposed new restrictions prohibiting non-Ivoirians from owning land). In Ethiopia, many people barely survive on tiny plots, and successive and badly-designed attempts at land reform have often compounded problems. The dictatorship of the Derg forced 600,000 people to leave their land in the 1980s, and to settle elsewhere leading to continuing conflict between the settlers and indigenous populations, notably in the Gambella region of southwest Ethiopia. Economic reform in Africa has also raised the value of prime agricultural land and forests by reducing agricultural taxation, resulting in tensions between communities whose access to natural resources is determined by traditional (mostly undocumented) title and commercial interests, who are often adept at working the system to obtain concessions. In post-war Mozambique large concessions have been handed out to commercial farms, mines, and forestry companies to the disadvantage of communities—non-transparent privatization of state farms is one culprit—and this could be socially explosive in the future (Wuyts 2003).

The land issue is particularly acute in southern Africa and Kenya, reflecting injustice against black Africans during colonialism. Kenya has experienced an increasing number of local land disputes leading to violence over the last decade. Most recently, the Masai have trespassed onto land owned by white settlers, claiming it as their own, arguing that the British colonial government misled Masai leaders into signing over their land in the early twentieth century. In Zimbabwe, many rural households barely eke out a living in the environmentally-stressed areas of the south, generating considerable resentment against white-owned farms which dominate the high-potential areas of the country. Land reform is necessary for rural poverty reduction in Zimbabwe, and modest success was achieved in the 1980s. The present government is, however, unlikely to deliver *pro-poor* land redistribution and has indeed perverted the land issue into a means for mobilizing support to suppress the country's democratisation movement (Addison and Laakso 2003). Chaotic and illegal redistributions of land have largely gone to wealthy government members and their supporters, not to the very poor of Zimbabwe, and political leaders have cynically manipulated the black squatters who have moved onto white-owned land. The terror inflicted on Zimbabwe's white farmers and their black farm workers has resulted in economic collapse and an inflation rate of over 400 per cent in 2004, thereby exacerbating the plight of Zimbabwe's poor (many of whom face rapidly rising food prices and a weak employment market).

Land reform remains an urgent issue in South Africa, reflecting the gross inequality and discrimination of the apartheid years that left 87 per cent of land in the hands of whites who comprise less than 10 per cent of the population. This is especially the case in KwaZulu-Natal where large commercial farmlands sit alongside the old KwaZulu homeland (of apartheid years), with intense land pressure among rural households, and conflicts over grazing rights between households and commercial farmers, sometimes leading to violence. The government has undertaken a substantial land reform programme without alienating large-scale farmers as in Zimbabwe, and has made most progress in settling restitution claims (for land seized during the apartheid years). Some 3 per cent of land has been transferred to blacks, with the goal of transferring 30 per cent by 2015, a process that will have to be accelerated if South Africa is to avoid turning land into a wider political issue—which it will become if the black populations becomes dissatisfied with the rate of progress to date (International Crisis Group 2004: xxi). In the meantime, the economy needs to achieve very fast growth if it is to create non-farm employment (alongside increased public spending to redress the racial imbalance in human development indicators). This can provide an alternative livelihood for rural households, and contribute to reducing the very high rates of rural crime and violence which are exacerbated by high levels of male unemployment.

4 Agriculture's role in post-conflict recovery

In moving from conflict at least two objectives exist. First there is *peace*: the end of mass violence. Second, there is *broad-based recovery*: improvement in the well-being of the majority of people, especially the poorest (where we measure well-being by a range of indicators including household income and expenditure as well as non-monetary indicators such as health and literacy). Crucially, achievement of the second objective does not inevitably follow from the first. A peace that follows the decisive victory of one warlord over all others, or of a rapacious government over a rebel movement, offers little promise that the victors will help the majority of the population to recover. Instead, the country's elite may reap the gains and, indeed, the well-being of the majority may grow worse over time if the wealthy use the opportunities of peace to grab valuable assets for themselves. The very poor, who have the least secure assets and the least political power (especially when they live in remote rural areas), are particularly vulnerable.

Moreover, the chances of the poor in peace depend in part on what has been done to help them during war. It is hardly necessary to spell out the human impact of war which fractures communities, destroying human and social capital (Addison and Baliaoune-Lutz 2004). But unless the state disintegrates completely—the case of Somalia in the early 1990s—it is still possible to manage the wartime economy to contain further impoverishment and to try and preserve human capital and livelihoods (if not enhance them, for the eventual peace). For example, with the assistance of donors Mozambique initiated rural development in safe areas during the country's civil war. However, the necessary political commitment is often missing. During Angola's long civil war, the government achieved far less for the poor than Mozambique's wartime government despite Angola's far greater resources from oil and other minerals. International humanitarian efforts that go beyond food aid to transfer skills and education to refugees can improve their prospects once post-conflict reconstruction begins; Mozambican refugees who received such assistance had higher living standards two years after their

resettlement than those that did not (de Sousa 2003). This should be a priority in redesigning refugee policy responses (Helton 2002).

Aid donors must increase the resources available to meet the post-war needs of poor communities: the recent acceleration in debt relief under the Heavily Indebted Poor Countries (HIPC) Initiative is intended to raise public spending on the key social sectors, see, for example (Addison, Hansen and Tarp 2004). But for aid and debt relief to fulfil their promise it is essential to build effective public expenditure management and service delivery so that the additional external resources reach their intended, pro-poor, uses (livelihood projects, basic health care and primary education, etc.). Regional and ethnic grievances over the allocation of public money often contribute to conflict when the disadvantaged become frustrated over their lack of access to infrastructure and services. In Central America, rural and indigenous populations have for long expressed their resentment at discrimination in spending which typically favours urban groups and large landowners. Guatemala's civil war was fed by such grievance. Peace agreements may promise to redress the situation, but effective public expenditure management and service delivery are essential to match actions to words, and this will often entail considerable reform.

But even so, there will be many demands on domestic and external resources and therefore we need to avoid 'wish lists'—long lists of everyone's favourite projects (which simply distort and overwhelm national capacities). Instead, there needs to be a focus on core priorities—those that give the most return to broad-based recovery—and considerable investment in the collection of information on the needs of communities and poor people. Moreover, since different measures of well-being do not necessarily move in the same direction, nor by the same amount, it is important to capture these different dimensions in data collection; for example households' sense of empowerment, their economic well-being, and their human development indicators do not move in lock-step, and indeed some may show improvement, and some deterioration, pre- and post-conflict (see Richter 2004 on Timor Leste, for example). Timely information on well-being should then be embedded in the institutional processes that formulate policies—especially in allocating public expenditures—as well as in the arena of political debate (in regular briefings of parliamentarians and the media, for example). Otherwise, democratization will not be fully beneficial for the poor.

'Community' is a useful shorthand term for discussing common problems, nevertheless there is significant stratification (and conflict) within and between communities, especially over natural capital (the Rwandan genocide is the most tragic example).⁴ War also accentuates local inequalities. In Mozambique, for example, households with access to the wartime shadow economy (such as the black-market in food aid) and connections to local-level elites gained and accumulated assets which facilitated their post-war recovery (Wuyts 2003). In contrast, poorer households often fell further behind (losing land and livestock, for instance), thereby weakening their ability to participate effectively in reconstruction projects and to adapt to economic reforms.

Moreover, women are often at a significant disadvantage within communities in earning a living. In Eritrea, women suffered discrimination in the post-conflict job market and

⁴ Bijlsma (2005) discusses conflict over natural capital and the environmental dimensions of post-conflict development.

discrimination in access to land despite formal legal equality with men (and despite playing a major role in the military forces that fought for independence). In Mozambique, the incidence of poverty in households headed by women is often much higher than in male-headed households; in the Manica region, one of the poorest rural areas, 47.1 per cent or so of female-headed households are poor, compared with 38.9 per cent of male-headed households (de Sousa 2003). Human development indicators for women are much worse than those for men in Afghanistan, Angola, and the DRC—to name just three conflict-affected countries. This lack of human capital makes it difficult for women to participate fully in reconstruction and to take advantage of the new livelihood opportunities resulting from economic reform (especially in export agriculture which offers considerable potential for higher incomes).

A rapid rebound from war requires strong and sustained private investment, both domestic and foreign. Investment by large private wholesalers in recreating grain markets was crucial to improving food security in post-war Mozambique, for example (Tschirley and Santos 1999). This activity has improved the efficiency of the national grain market and reduced consumer price margins, a benefit particularly for food-deficit and poor households. Foreign direct investment in the agricultural sector has also contributed to Mozambique's strong post-war economic growth.

The state can encourage private investment by providing macroeconomic stability; Ethiopia has had considerable success in this regard, and Mozambique managed to significantly reduce the very high inflation that prevailed at the end of the war. In contrast, Angola and the DRC have experienced prolonged periods of hyperinflation, particularly in the prices of basic commodities, that have worsened poverty. Well-designed public investment can also do much to encourage ('crowd-in') private investment. Better telecommunications and road infrastructure for remote areas make them more attractive to potential investors, and strengthen community livelihoods, for example. Remoter areas often have deep poverty, and they must be given priority in public investment decisions.

It is also critical to quickly strengthen property rights through tenure reform, otherwise the poor lose out to the wealthy and powerful in the land-grab that can occur in the immediate years of peace. Land was an important factor in Sudan's civil war, and the January 2005 peace agreement with the secessionist rebels of southern Sudan is unlikely to hold unless the land issue is vigorously addressed. Thus one close observer of the country, Alex De Waal (2005), concludes that:

One way the commercial elite makes money is through mechanised agriculture, which is as socially disruptive as it is ecologically damaging. It was the southward march of tractors, ploughing up smallholders' farms, that drove many Sudanese peasants to join the rebels. Will the opening up of the country's most fertile plains, closed by war for 20 years, simply mean the carpetbaggers resume their expropriations? Without equitable rural development, the seeds of conflict will again be sown.

Finally, the domestic and aid resources used in rebuilding infrastructure and services will have low returns if policies that hold back the livelihoods of smallholders and micro-entrepreneurs are retained. A thorough and early reconsideration of sector policies—especially towards agriculture which is the main livelihood of many of the poor—is therefore needed. Similarly, macroeconomic policy exerts powerful effects on

the relative incentive to invest in agriculture versus other sectors of the economy. Bad sector and macroeconomic policy can more than offset the good work of local livelihood-projects; for example, overvaluation of the currency cheapens food imports and thereby reduces the incomes of domestic food producers, and also decreases the incentive to produce agricultural exportables. Projects to build better livelihoods for communities will fail without macroeconomic reform.

5 The implications of global agriculture trade for conflict and security

Much more needs to be done to improve the benefits of agricultural growth for poor people by means of land reform, micro-credit, and pro-poor investments in infrastructure and research—to cite just three key areas of intervention (de Janvry *et al.* 2001; World Bank 2003). And while the last decade has seen considerable effort in moving forward on the gender dimensions of agricultural development, it is still early days in improving the access of women to key productive assets and in reducing the discrimination that impedes their livelihoods. National initiatives in these areas can yield large benefits, but that yield is much affected by how the global economy operates, particularly in the area of international trade (Addison 2005).

It is indisputable that a well-functioning system of world agricultural trade is vital to the achievement of post-conflict recovery as well as to the Millennium Development Goals more generally. For post-conflict countries which do not have abundant mineral resources, agriculture is the mainstay of their economies and the chief motor for revival. Indeed, given the difficulties that are encountered in utilizing mineral revenues for broad-based development in resource-rich countries (Angola, DRC, and Republic of the Congo, for example) agriculture is often the best prospect for pro-poor recovery in these countries as well. However, world trade in agriculture is heavily distorted by tariffs, quotas, and export subsidies to domestic producers and there is considerable concern that protectionism by rich countries retards the growth of a key sector for poor countries—and may indeed offset much of the benefit of foreign aid as well. Moreover, protectionism in agriculture by developing countries themselves can impede the development of south-south trade (see Anderson 2004: 551). Since economic growth tends to reduce the risk of civil war, and trade can be an engine of growth, it follows that efforts to reform the world agricultural trade may contribute to conflict reduction in a broad way.

However, two points of caution must immediately be made. First, major structural constraints hold back the agricultural exports of poor countries, and substantial private and public investment in infrastructure, services, and marketing are essential to realize the gains from trade (UNCTAD 2004). These are especially severe for post-conflict countries; hence the need for prioritizing agriculture in budgetary and aid allocations (see the preceding section of this paper). Second, liberalization of world agricultural trade has some serious costs for developing countries, which must be set alongside the benefits. The elimination of rich-country subsidies to domestic food producers will raise world prices, and this is a serious concern for food-importing nations—45 of the 49 least-developed countries import more food than they export (Panagariya 2003: 22). The cost of food is a politically explosive issue given the severe impact that sharp and sudden food prices have on the welfare of both the urban poor as well as the substantial numbers of the poorest rural households who are food-deficit as well. And some

developing countries benefit from preferential access to rich world markets, notably those enjoying privileges under the EU trade policy, and a reduction in EU protectionism will adversely affect their export earnings. This will entail major economic adjustments by them, with potentially severe strains on their social fabric.

The case of cotton most clearly illustrates the impact of rich-country protectionism. Developing-country cotton producers face a world price which is depressed by the large subsidies that the EU and the US pay to their domestic farmers. In an average year, the EU spends €900 million (US\$1.07 billion) on cotton subsidies, while 25,000 American cotton farmers enjoy a subsidy that can be as high as US\$3.7 billion in a peak production year such as 2001-2002. These subsidies depress the world price, especially the US subsidy since the US is the single largest cotton-exporting nation (accounting for 40 per cent of world trade). Without the US subsidy, world cotton prices would have been at least 12.6 per cent higher between 1999 and 2002 (Alden 2004). Hence, the US subsidy lowers farm income in the developing world, as does the EU subsidy.⁵

Cotton also illustrates the link between trade and peace. In the West African states of Burkina Faso, Chad, and Mali, the elimination of rich-country cotton subsidies would raise growth, since cotton is one of the few crops in which the Sahel region has a comparative advantage. This would strengthen the region's political stability by lowering the frustration of the young unemployed—thereby also reducing the attractions of militant Islam which is actively recruiting among the Sahel's predominantly Muslim population. And it would contribute to reducing tensions in West Africa's coastal nations which have seen large immigrations of people from the Sahel who are desperate for a livelihood (particularly to Côte d'Ivoire where resentment against immigrants contributed to the country's civil war).

Restoring Afghanistan's production of output of cotton, which collapsed during the war and turmoil of the last two decades, is essential not only for rural reconstruction but also for encouraging farmers away from cultivating poppies for the country's thriving opium economy. This is a major challenge given that for farmers the per acre revenue from wheat—the main alternative crop at present—is one-twentieth of that from poppy. The Taliban cracked down on opium production, but following their downfall, production has resumed; over 324,000 acres were sown with poppy in 2004, up from 198,000 acres in 2003. The IMF puts the value of Afghanistan's opium trade at US\$2.6 billion a year (equivalent to 60 per cent of the country's GDP). This, together with the revenues provided by traditional smuggling, provides the country's warlords with revenues to match those of the government (for comparison, the 2003-04 development budget is US\$1.8 billion).

The world sugar market is equally distorted to the disadvantage of the developing world as a whole. The EU provides a subsidy of €3.30 for every Euro of sugar that Europe exports (Oxfam 2004). The total cost of the subsidy, the value of which varies depending on how you add up the indirect subsidies, is between €1.3 billion and €1.5 billion. Without the subsidy, the world price would be significantly higher and the cost to three African producers—Ethiopia and Mozambique (both post-conflict countries)

⁵ Brazil has taken the US cotton subsidy to the WTO. In April 2004 the WTO made a preliminary ruling that the US cotton subsidy was excessive, boosted US exports and depressed prices at the expense of Brazilian and other producers, and therefore breached US obligations to the WTO. In June 2004, a WTO dispute panel upheld the preliminary ruling, against which the US will now appeal.

and Malawi (at peace but very poor)—has amounted to US\$238 million since 2001 (Oxfam 2004). However, sugar also illustrates the point that some individual developing countries will lose heavily from world trade liberalization since they presently enjoy preferences giving them access to the high prices of the protected EU market. Under liberalization Mauritius and Swaziland will lose out to more efficient producers, notably to Brazil (see Gibb 2004).

In summary, world agricultural trade liberalization has the potential to raise growth in many developing countries, but there are also significant costs to some individual countries. If the loss of export earnings slows their economic growth, then it will raise their risk of conflict. From the perspective of agriculture's role in conflict reduction, it is therefore important for the international community to assist their adjustment process. But here we run up against the stagnation of aid flows over the last decade. The annual flow of official development assistance, which presently averages US\$52 billion, could be more than doubled out of the savings available by reducing the US\$300 billion a year spent by rich countries on farm subsidies (of which the EU spends US\$57 billion). And there are new and innovative ways of mobilizing additional public and private financial flows which need to be explored further (see Atkinson 2004 for proposals). Priorities for using the additional aid must include agricultural research for small farmers, especially in environmentally-stressed areas which receive too little help at present, and for women farmers whose livelihoods are often especially fragile. Their futures depend on the larger global task of mobilizing more development finance.

6 Conclusions

This paper has explored the links between agricultural development and peace. Agricultural development can contribute significantly to peace by raising incomes and employment, thereby reducing the social frustrations that give rise to violence. Agricultural growth also generates revenues for governments which, if they build effective revenue collection and public expenditure systems, will help them to redress the grievances of disadvantaged populations. In this way, growth can be made more equitable, an effect that is enhanced if inequalities in access to natural capital, especially to land, are addressed as well. Agriculture is critical for countries rebuilding from war, especially in making recovery work for the poor. And by raising per capita incomes, agricultural development is an important foundation stone for new democracies, since the survival chances of a democracy rise as its income grows (Addison 2003). Agricultural development thereby supports political strategies for peace-building and democratization.

Unfortunately, too little attention is presently given to the role of agricultural development in creating peaceful livelihoods, especially for the world's poor. Too many poor-country governments continue to under-invest in smallholder agriculture and rural micro-enterprises; their public spending budgets do not reflect the needs of rural people for better economic and social infrastructure and services. And foreign aid from the rich world has stagnated—as a percentage of their GDP it is now below the level of the 1960s—and the effectiveness of this aid is undercut by rich-country protectionism in agricultural markets. Such short-sighted trade policy not only hinders development and poverty reduction in the poor world, it also undermines their peace and security. And

since conflicts in poor countries have global effects, rich countries undermine their own security by neglecting the lives and livelihoods of the poor.

The rich and the poor worlds also have a common interest in addressing global climate change. Unless rapid action is taken, global warming resulting from increased concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere will most likely inflict great damage on the world's agricultural systems by reducing cultivable land (through flood and drought) and crop yields. Plant and animal species will be lost with uncertain, but almost certainly severe, effects on agricultural systems (Root *et al.* 2003). Recent estimates suggest that 15-37 per cent of land plants and animals could eventually become extinct as a result of climate changes expected by 2050 unless there is a rapid move to carbon sequestration and the adoption of technologies that do not produce greenhouse gases (Pounds and Puschendorf 2004). Otherwise food security will be undermined resulting in large-scale population displacement which is bound to be detrimental to peace and stability in the world at large.

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