Policy for agriculture and horticulture in Rwanda

A different political economy?

David Booth and Frederick Golooba-Mutebi*

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Agricultural development policies in sub-Saharan Africa continue to be weak, and the reasons are to be found in the incentives transmitted to policy makers by countries’ domestic political systems. The enfranchisement of rural voters within multi-party political systems does not seem to have altered the fundamental dynamics, raising the question whether—in Africa as in Asia—successful agricultural transformation will happen first in countries whose rulers are driven by concerns to avert rural-based political threats of a more fundamental sort. This paper explores this question with reference to Rwanda. It argues that the political incentives are indeed different from those in comparable African countries, but that this did not immediately lead to the adoption of an appropriate agricultural strategy. Today, thanks to a major shock and some serious rethinking, policy has turned a corner and the results are promising. What this experience has revealed is that the political economy of agricultural policy in Rwanda is distinguished by a capacity for learning from errors as well as a seriousness about implementation that are not widely observed elsewhere in the region.

1. Introduction

Within the panorama of recent economic and social progress in sub-Saharan Africa, neglect of agriculture remains one of the most fundamental weaknesses. A quarter-century after economic liberalisation began removing the most important market distortions holding back Africa’s rural economies, agricultural issues still receive an inadequate level and quality of policy attention. Despite the welcome shift in regional opinion signalled by the Maputo Declaration and CAADP initiative of 2003, investment in the infrastructural and institutional public goods and smart subsidies needed to kick-start productivity growth in smallholder farming falls well short of requirements (Poulton, 2011). It certainly compares unfavourably with the level attained in comparable regions of the world, such as Southeast Asia, at an equivalent stage in their development (van Donge et al., 2012). The central hypothesis of the Political Economy of Agricultural Policy in Africa (PEAPA) project is that the reasons for this state of affairs are to be found in the incentives transmitted to policy makers by the domestic political systems of African countries (Poulton, 2011: 3).

As Colin Poulton (2011) shows, economic liberalisation since the end of the 1980s has made a significantly positive contribution to the conditions for agricultural growth, but political liberalisation has been of more ambiguous benefit. The PEAPA country studies tend to suggest that the new power acquired by rural voters under multi-party political systems does not translate into incentives for politicians to favour agriculture as a sector. Democratisation has given a new form to the clientelist agricultural policies analysed in earlier eras by Bates (1981) and van de Walle (2001); it has not fundamentally altered their content. Bold gestures of support to politically salient sub-sectors are a feature of the politics of agriculture now as they were then, but the quality of policy delivery remains weak, whilst comprehensive, non-discretionary, support to smallholders as a group continues to be rare. Competitive clientelism within a democratic framework appears to induce political incentives that are inimical to the large and sustained investments in public goods that are needed for agricultural transformation.

In some respects, this is an unsurprising finding. As Poulton (2011: 5) points out, processes of agricultural change equivalent to those now on the agenda in Africa have rarely been driven by electoral demand. The policies which induced smallholder-based transformations in several parts of Asia after the Second World War were most often the response of political elites to threats to their survival coming from rural constituencies with Communist sympathies in their own or neighbouring countries. The ‘green revolutions’ that were achieved during and since the 1960s in several parts of Southeast Asia—including countries initially quite similar to those of sub-Saharan Africa— took place under political regimes of quite varied types. However, none of these were conspicuous for their compliance with today’s norms of efficient administration and democratic ‘good governance’ (van Donge et al., 2012). In this context, a crucial issue for the PEAPA project is whether there are countries in Africa where improved agricultural performance is to be expected because the political incentives of the ruling elite have more of an ‘Asian’ quality.

Poulton (2011: 23-26) identifies two current regimes as having at least some of the required features, those presided over by the Rwandan Patriotic Front (RPF) in Rwanda and the EPRDF in Ethiopia. Neither regime qualifies as politically liberal or conventionally democratic, but in both cases the elite in power appears motivated in ways that are untypical in the African context. Relevant explanatory factors include an implied threat to regime survival from a rural majority as well as opponents abroad against the background of a violent past history in which both rural discontent and ethnic exclusion played a significant part. This paper deals with the case of Rwanda.

The paper contributes to the PEAPA project alongside studies of Burkina Faso, Ethiopia, Ghana, Kenya, Malawi, Mozambique and Tanzania. It also draws on research for the Africa Power and Politics Programme (www.institutions-africa.org) which has compared the historical and contemporary political economies of Côte d’Ivoire, Ethiopia, Ghana, Kenya, Malawi, Nigeria, Rwanda, Tanzania and Zimbabwe.

After discussing in Section 2 the extent to which the overall political economy of policy in Rwanda is distinctive, the paper sets out a hypothesis concerning the way political imperatives and incentives might be expected to influence policy processes affecting
agriculture and horticulture under such a regime. Section 3 introduces the particular challenges posed by a) broad-based agricultural transformation and b) the creation of a commercial horticulture sector in Rwanda. Against this background, Section 4 then considers whether sectoral and sub-sectoral (horticultural) performance and the evolution of the relevant policies supports this interpretation. Section 5 sums up and considers the implications of the paper’s findings for the future of agricultural transformation in Rwanda.

2 A distinctive political economy

Our approach in this section is deliberately comparative. Drawing on the APPP research, we aim to locate the overall political economy of contemporary Rwanda in relation to what we take as the ‘modal pattern’ in sub-Saharan Africa. The APPP work (Cammack and Kelsall, 2011; Kelsall, 2011; forthcoming) makes a case for distinguishing among more developmental and less developmental types of clientelist or ‘neopatrimonial’ political regime. This distinction appears to be necessary in order to make sense of the major long-run performance differences among and between African and Asian states. It cuts across the conventional dichotomy between democratic and non-democratic regime types and appears more consistent with the observed variations in development outcomes than the conventional assumption that performance varies with the extent to which regimes follow international norms of ‘good governance’.

In the APPP analysis, ‘developmental patrimonial’ regimes are those where control of major sources of economic rent – including corruption – have been i) effectively centralised and ii) deployed in ways that correspond to a long-horizon vision, including ways that are objectively developmental. Several historic regimes in Africa, as well as all of the early developmental successes in East and Southeast Asia, appear to share these features.

2.1 Developmental patrimonialism?

As we have argued elsewhere (Booth and Golooba-Mutebi, 2011), the Rwandan regime differs from other exemplars of developmental patrimonialism in that corruption is rigorously suppressed, rather than centralised. And the personal dominance exercised by Kagame (allegations from international opposition quarters notwithstanding) is not the sort of ‘big-man syndrome’ usually taken as definitional of neopatrimonialism. Nonetheless, central management of other kinds of rent in a long-horizon framework is a strong feature, and indeed helps to explain the low level of corruption.

The fundamental drivers of this orientation do bear comparison with Asia. In the African modal pattern, the political leadership maintains itself in power by distributing rent-taking opportunities to its major supporters. At least since 2000, this has not been the pattern in Rwanda. In the terms used by Bruce Bueno de Mesquita and his co-authors (2003) the political system of the country has a moderately large ‘selectorate’ (enfranchised citizens) and a smaller winning coalition (the subset of selectors whose support is decisive to the retention of power by the incumbents). Under these conditions, the theory – which applies equally to regimes which are formally democratic or authoritarian – predicts a leadership preference for providing private goods selectively to members of the coalition, as the cheapest and most reliable means of political survival. Contrary to the theory, the RPF and its allies are gambling on the ‘expensive’ option of building support on a broad base by demonstrating an ability to provide more and better public goods.

In Rwanda since 2000, policy has been driven rather exclusively by the view that economic and social development – underpinned by adequate provision of essential public goods by the state – is the only feasible route to overcoming the ethnic divisions and violent conflicts of the past. Thus, as in the case of most if not all of the East and Southeast Asian developmental regimes, the Rwandan leadership has become convinced that an economic and social transformation is a necessary condition for avoiding in the future a repetition of a recently remembered national disaster.

This is formally articulated in a document called Rwanda Vision 2020. Contrary to what happens with equivalent documents in most countries of the region, this is a real point of reference for ministers and civil servants.

The assumption underlying the vision is that, if economic and social progress occurs fast enough, a new generation will emerge who are capable of fully assuming their national identity as Rwandans rather than privileging what divided them in the past. Many critics of the regime see this as naive and argue that reconciliation needs to be attended to in a more direct fashion (e.g., Reyntjens, 2004; Straus and Waldorf, 2011). But in so doing they also confirm that this is indeed the vision that drives policy.

In the African modal pattern, policy-making is driven away from a public-goods focus by the need to create rents to allocate to supporters and more generally to finance politics. One of the things that enable the Rwandan regime to deviate from this pattern is the role played by a private holding company fully owned by the ruling party, the RPF. Formerly known as Tri-Star Investments, and now trading as Crystal Ventures Ltd., this company played a significant role in kick-starting the Rwandan economy after 1994 and is now moving into something approaching a venture-capital role. We argue that the rental flows associated with Tri-Star/CVL help to meet the funding needs of the political class while also fulfilling the requirements of what is today called an active industrial policy (Booth and Golooba-Mutebi, 2011).
The mechanism provided by Tri-Star/CVL helps to explain how the long-horizon, public goods orientation of policy in Rwanda can be sustained against pressures from within the ruling elite to be more conventionally clientelistic. However, the orientation itself would be hard to understand without the implicit threat to regime survival provided by the events and legacies of the 1994 genocide.

The national disaster in the background explains two other feature of the Rwandan political system under Kagame which is potentially relevant to the way agricultural policies relate to politics. One is the restricted nature of political competition. Because unrestrained political competition under post-genocide circumstances would almost certainly derail the current development efforts by permitting a renewed politicisation of ethnicity, the regime has opted for limiting and regulating party politics. It has kept tight control of a large military and security apparatus, the ultimate guarantor of power. It also bans parties that fail to comply with a strict, and some would say partial, rules on non-ethnic campaigning. In this sense, too, Kagame and the RPF do not need to be creating and distributing rent opportunities to individual business people or middle-rank politicians in order to remain in power.

The other feature of the current political settlement worth mentioning is the extent to which the RPF shares power with those other parties that are legal and obtain a significant share of the vote in parliamentary elections. Critics tend to dismiss this as window-dressing, but it needs to be viewed in the context of the harm done, to the maintenance of peace and to the quality of policy-making by winner-takes-all constitutional arrangements in other countries of the region.

Under the 2003 Constitution, ministerial posts, which cannot be held by MPs on a separation-of-powers principle, are shared among the legal parties in proportion to their seats in the Chamber of Deputies, with the majority party (the RPF) holding no more than 50% of the portfolios (Rwanda, 2003: Art. 116). By convention, the Prime Minister, the Speaker of parliament, the President of the Senate, and the President of the Supreme Court are also expected to be of a different party or tendency from that of the president. This has the effect of softening the sense of exclusion among losing parties, and of enabling cabinets to work cooperatively with a view to shared long-term interests. There is also no conventional opposition in parliament that needs to be bought off, allowing the proceedings of parliament to be guided by a consensus rather than an adversarial approach. The effect is that, other things being equal, criticism of policies tends to be channelled into policy adjustments rather than political horse-trading.

Two further features of the overall political economy seem potentially relevant to the quality of policy for agriculture. First, implementation incentives, and the detection and correction of implementation failures and abuses, are prominent features of the policy system. This is not just because there is ‘political will’ at the top. There are also institutional arrangements that enforce these features. The Annual National Dialogue is one of a series of mechanisms which combine public shaming with rather proactive follow-up by the president. Ministers, civil servants and local-government officials are regularly called to account and not infrequently dismissed for their performance in relation to policy targets. The imihigo system, a performance contract with neo-traditional overtones, produces quite powerful incentives from the cabinet downwards to deliver on agreed commitments.

The other potentially crucial factor in the delivery of the agreed policies for agriculture and horticulture is local government. As in other countries, in Rwanda the division of labour between line ministries, public agencies and local authorities is now quite complex. Ministries set policies and monitor, and agencies implement at the national level, but districts and lower tiers of local government provide many of the front-line services, including those relevant to productive sectors. It therefore matters how politics interfaces with implementation at local level.

Local authorities in Rwanda have limited autonomy; they are subject to a fairly high degree of control and direction by the centre. Mayors and councillors are elected on an individual merit, not party, basis. Mayors as well as local civil servants sign up to imihigo contracts and targets. In these ways the centre does get local governments to do what it considers most important in terms of designing and implementing priority programmes and activities. None of this guarantees that they are an efficient instrument for delivering programmes. Rwandan government systems continue to have significant weaknesses, some of which are not unrelated to the unremitting pressure for performance. But the centrally driven performance culture ensures, at least, that there are quite strong incentives working against manifestly poor delivery.

2.2 A hypothesis

The PEAP project is interested in the overall hypothesis that policy will be more favourable to broad-based agricultural transformation under regimes that perceive their survival to be bound up with their ability to address the causes of past conflict and mitigate the enduring threats posed by discontented rural majorities. Prima facie, the regime in Rwanda since Kagame’s accession to the presidency in 2000 does qualify as a regime of this type. The details provided in this section have supported the general suggestion that the political economy of policy making and implementation in Rwanda has a number of distinctive features compared with the modal pattern in the sub-Saharan African region.

To summarise, the particular form of ‘developmental patrimonialism’ that has been adopted frees the government from the imperative to make policies that meet the interests of powerful clients or respond in a short-term way to the concerns of voters. Neither political and administrative corruption nor electoral pressures are prominent features of the policy process, in sharp
distinction with the pattern in most of the countries in the PEAPA set. The restrictions on political competition and the use of the power-sharing principle mean that agricultural policy is not bound up with a system of political patronage and clientelism in the way it typically is elsewhere. Not only cabinets and parliaments but also local governments have incentives to work in a collaborative way towards the improvement and implementation of policies. Policy is highly politicised, but not in the sense of being driven by short-term power calculations. As a consequence, strategic policy documents are serious points of reference for government, and not just a matter of token compliance with donor ideas about strategic planning.

Does the evidence also support the second part of the PEAPA hypothesis, namely that this type of regime may be expected to deliver high-quality agricultural policies? This is the subject of the remainder of the paper. The argument is that until recently the evidence on this subject has been inconclusive if not negative, but that policy has turned a corner since the mid-2000s. Results have improved, and this seems to reflect better policy thinking and practice. In the final analysis, the trends suggest that Rwanda may be on its way to becoming an agricultural success story. In default of that, the capacity for learning and readjustment that the regime has displayed in the fields of agricultural and horticultural policy over the last five to seven years differentiates it clearly from the patterns observed other countries in the PEAPA set.

3 The challenge of agricultural transformation

Agricultural transformation in Rwanda poses challenges that might be considered more typical of Asia than of Africa. The second most densely populated country in sub-Saharan Africa after Mauritius (384 persons per km² in 2008), its population of around 10 million was, at the last count, still growing at a vigorous 2.8% per year (World Bank, 2011). The agricultural sector, including food crop and export crop production, livestock, forestry and fisheries, contributes 32% to GDP (NISR, 2011), but much more to employment. Agriculture or livestock provides the main occupation to up to 85% of the economically active population. Household production on micro-holdings has been overwhelmingly predominant, with average holdings of around 0.76 ha in about four separate plots. Productivity is well below potential, and income levels in agriculture remain extremely low (RADA, 2007).

As well as being the key to sustaining and improving livelihoods for the bulk of the population, the sector has strong potential as a source of economic growth and exports. Coffee and tea, and to a lesser extent pyrethrum, have been significant export crops for a long time. Minerals and tourism are increasingly important sources of export earnings (although foreign aid funds are likely to remain a critical source of hard currency for some time yet). However, the country’s most important non-human natural resource is its land and climate, and the biggest national economic challenge is to harness this more effectively.

The country’s highland equatorial climate is suited to a wide range of cultivars. Average rainfall is high (800 to over 1600 mm annually, with two extended rainy seasons, March-May and Sept-Dec). The undulating topography which characterises most of the country produces micro-climates suited to a variety of mixed farming or horticultural activities. Soil erosion and soil exhaustion are serious problems on the hillsides where most production of staples takes place. These are technically soluble problems but call for substantial investments in conservation measures and improved inputs. The marshy valleys offer considerable unexploited potential for irrigation and drainage (Kalibata, 2010). Livestock production accounts for around 5% of the sector gross product and 2% of GDP (NISR, 2011). Until recently, however, there has been rather limited use of livestock or livestock products such as manure in cultivation. Chemical fertiliser use has been far below the developing country average, 4kg/ha compared with 300-400 kg/ha (World Bank, 2010: 127).

Yields for several traditional staples and tea have been well below potential as measured by world averages and in some cases by comparison with African neighbours (Table 1).

Until the early 1990s food-crop production largely covered domestic consumption, although yields for most crops were in decline (GoR, 2002: Annex Table 2.5). Food supply was then seriously compromised until recently by the combination of genocide-related population changes, demographic pressure (intensive low-input farming, settlement of returnees in forest zones, fragmentation of holdings) and frequent droughts (RADA, 2007).

The most important challenge for the country, therefore, is to bring agricultural productivity closer to its potential. While there is much room for improvement in production of staple root crops, bananas and grains, commercial horticulture is also promising as a contribution to this effort. Since the genocide, land has become legally private property, and under recent legislation is held by families rather than individuals, a particularly important development in a country where some 38% of households are headed by a single woman. Although population pressure on the land is severe generally, there is under-utilised marsh land. Unlike the hillsides, marsh land belongs to the state, making it particularly amenable to consolidated production and other transformative initiatives.

Rwanda’s climate and topography are very suited to production of a range of fruits, vegetables and flowers. A broad band of cool and humid terrain in the west is suited to European-style fruits and vegetables, including
beans, peas, cauliflower, mushrooms, citrus and strawberries. The warm and humid central-south is ideal for tropical fruits such as banana, passion fruit and pineapple. The warm and dry north-east is suited to groundnut, sunflower and pulses (RDB/RHODA, 2010).

In summary, Rwanda enjoys the same agro-climatic advantages for horticulture as other East African countries with some additional natural niche advantages due to the diversity of its topography.

Unlike the case of major staples, yields for fruit horticulture in 2009 were already within the regional band – between Kenya and Ethiopia at the top end and Uganda and Tanzania at the bottom (RDB/RHODA, 2010). This was before much investment had yet taken place in improved planting materials or methods. The government considers this as indicative of an extraordinary potential for growth.

In developing commercial horticulture, Rwanda is starting from a very low base, compared with Kenya, Tanzania, Uganda and Ethiopia. Nevertheless, horticulture is now the fastest-growing export sector (MINICOM, 2011). Rwandan horticulture seems well placed to benefit from the current revival in global demand for horticultural products (from China, India and the Gulf more than from Europe) as well as in sub-regional markets (Congo) and domestically.

An important part of the policy challenge in Rwanda is that of getting the right balance between productivity growth and income distribution. Building on a long tradition of fieldwork-based scepticism about official efforts to modernise agriculture in Rwanda, An Ansoms has provided a telling technical analysis of the negative distributional consequences likely to ensue if intensification and commercialisation of Rwandan farming are pursued without deliberate attention to the institutional barriers to adoption by the poorer strata in the peasantry (2006, 2011b). The implementation of the 2005 legislation on land registration poses a further set of opportunities and uncertainties (Pottier, 2006; Daley et al., 2010; Ayalew Ali et al., 2011).

Finally, on the basis of a computable general equilibrium model for the Rwandan economy, Diao et al. (Lambert and MacNeil, 2009; Diao et al., 2010) have shown that Rwanda needs to exceed the 6% CAADP target for agricultural growth if it is to meet its MDG target of halving its 2001 poverty incidence by 2015. On its own, sectoral growth is likely to be accompanied by rising inequality reflecting differences in market and land access. In order to minimise these effects, a strong policy emphasis needs to be placed on increased production of staple crops and livestock, rather than on traditional or new export crops.

### Table 1: Comparative crop yields (t/ha 1999-2003 average)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Rwanda</th>
<th>Burundi</th>
<th>Ethiopia</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Africa average</th>
<th>World average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>0.8</td>
<td>1.1</td>
<td>1.8</td>
<td>1.6</td>
<td>1.8</td>
<td>1.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Sorghum</td>
<td>0.9</td>
<td>1.2</td>
<td>1.3</td>
<td>1.1</td>
<td>1.5</td>
<td>0.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Cassava</td>
<td>6.1</td>
<td>9.0</td>
<td>n.a.</td>
<td>10.2</td>
<td>13.2</td>
<td>8.9</td>
<td>10.6</td>
</tr>
<tr>
<td>S/potatoes</td>
<td>5.8</td>
<td>6.5</td>
<td>9.6</td>
<td>1.9</td>
<td>4.4</td>
<td>4.6</td>
<td>14.9</td>
</tr>
<tr>
<td>Potatoes</td>
<td>8.0</td>
<td>2.6</td>
<td>9.1</td>
<td>6.9</td>
<td>7.0</td>
<td>7.7</td>
<td>16.3</td>
</tr>
<tr>
<td>Plantains</td>
<td>6.5</td>
<td>5.2</td>
<td>16.0</td>
<td>2.2</td>
<td>5.9</td>
<td>5.6</td>
<td>6.3</td>
</tr>
<tr>
<td>Beans</td>
<td>0.7</td>
<td>0.9</td>
<td>0.6</td>
<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Peas</td>
<td>0.5</td>
<td>0.7</td>
<td>0.7</td>
<td>0.4</td>
<td>0.6</td>
<td>0.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Coffee</td>
<td>0.7</td>
<td>0.9</td>
<td>0.9</td>
<td>0.4</td>
<td>0.7</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Tea</td>
<td>1.3</td>
<td>0.8</td>
<td>1.0</td>
<td>1.3</td>
<td>1.9</td>
<td>1.9</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Source: FAO, as reported in Kalibata (2010b).

4 The policy regime: results and learning

Given this background, post-genocide Rwanda might have been expected to embrace from the outset an ‘Asian’ approach to agricultural transformation; that is, place a heavy emphasis on the delivery of the public goods required to revolutionise smallholder productivity, especially in food staples. It has not done so, or at least not yet. In terms of the systematic differences documented by the Leiden-based Tracking Development project between the rural development policies of Southeast Asian and equivalent African countries (van Donge et al., 2012), Rwanda has remained on the African side of the divide. That is, transforming smallholder agriculture has not been given effective priority, for reasons including...
those that apply elsewhere: competing social investments; political ideologies and professional prejudices which under-rate the importance of agriculture, and inconsistency on the part of major aid donors (Henley et al., 2012). On the other hand, the evidence to be presented in this section suggests that in some important respects sectoral policy has turned a corner in recent years.

4.1 Results

Post-genocide Rwanda has not always been a good agricultural performer. In the mid-2000s, especially the drought year of 2003, several parts of the country experienced crises of food shortage which delivered a substantial shock to the national economy as well as causing localised hunger (Evans et al., 2006: 50). Largely as a consequence, real GDP growth, having maintained rates of over 8% in the first years of the millennium, dropped to 2% in 2003, resuming rates of 7% and above only in 2004 (Table 2).

Following two difficult years, 2003 and 2004, in which food crop output declined by 4% and registered 0% growth, there was a bounce-back in food production in 2005. Healthy growth was restored in 2008 and 2009. Improved rainfall was no doubt a major factor, but the more recent improvements also seem likely to be a reflection of the adoption and implementation of a new agricultural strategy. Agriculture was a negative factor in overall economic growth for some years. However, since 2008 the relationship has been reversed, with agriculture helping to push the overall GDP rate into double digits in 2008 and steady agricultural performance supporting more modest total growth since then (IMF, 2009: Figure 1; AfDB et al., 2011).

Agricultural output growth has been based on a combination of yield increases and bringing new land into cultivation. But according to (World Bank, 2007: Ch. 5), it has been clear for some time that future growth will need to be largely of the former kind, meaning greater investments and organisational effort to generate further increases in output. For different crop types, the priorities for investment include raising input use from a very low current level (maize, wheat, rice), soil conservation and storage improvements (banana, cassava and sweet potato), and value addition (for all of the above plus soya and Irish potatoes).

According to government sources, there have been some spectacular successes of this type: maize output was raised from 167,000 MT to 287,000 MT in 2009, and major gains were also registered for wheat and Irish potatoes. Rice, another crop that has been actively promoted since the years of food crisis, was by 2007-9 showing yields significantly above those of all other East African countries, including Kenya (RDB/RHODA, 2010: 15). Even though an estimated 28% of the population

Figure 1: Poverty headcount changes for Rwanda

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP Growth</th>
<th>Agriculture Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>8.4</td>
<td>8</td>
</tr>
<tr>
<td>2001</td>
<td>8.5</td>
<td>9</td>
</tr>
<tr>
<td>2002</td>
<td>13.2</td>
<td>17</td>
</tr>
<tr>
<td>2003</td>
<td>2.2</td>
<td>-3</td>
</tr>
<tr>
<td>2004</td>
<td>7.4</td>
<td>2</td>
</tr>
<tr>
<td>2005</td>
<td>9.4</td>
<td>6</td>
</tr>
<tr>
<td>2006</td>
<td>9.2</td>
<td>3</td>
</tr>
<tr>
<td>2007</td>
<td>7.7</td>
<td>3</td>
</tr>
<tr>
<td>2008</td>
<td>11.5</td>
<td>6</td>
</tr>
<tr>
<td>2009</td>
<td>6.1</td>
<td>8</td>
</tr>
<tr>
<td>2010</td>
<td>7.5</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: NISR (2011: Table 2A).
remain food-insecure (AFDB et al., 2010), the hunger map of the country has apparently changed substantially. Based on annual crop assessments, the 13 districts falling in the worst two categories for food availability in 2006 were reduced to two by 2008 (Kalibata, n.d.).

Not only is hunger coming under control, but poverty rates are falling, and so is inequality. This is in contrast with trends in the first half of the 2000s, when poverty rates remained stubbornly high despite healthy GDP growth and inequality increased (Figures 1 and 2). This is a turnaround that calls for explanation. Improved policy, reflecting significant policy learning seems to provide at least a part of the explanation.

4.2 What has been the policy for agriculture?

As in many countries of sub-Saharan Africa, the official vision and development strategy documents accord a central place to agricultural transformation. The Vision 2020 document produced in 2000 (GoR, 2000) was a little ambiguous, emphasising the importance of agricultural intensification and commercialisation, but also holding out the prospect of a decline in agriculture’s share in GDP as a result of structural change as early as the decade 2010-20. On the other hand, the first Poverty Reduction Strategy (GoR, 2002) placed rural development and agricultural transformation at the top of a list of six ‘broad priority areas’. The second PRS, the Economic Development and Poverty Reduction Strategy 2008-2012 (GoR, 2007) had ‘releasing the productive capacity of the poor in rural areas’ as one of three Flagship Programmes along with investments in ‘hard infrastructure’ and ‘soft infrastructure’.

As elsewhere, of course, formal ‘priority’ does not automatically translate into corresponding public spending allocations. However, for reasons explained above Vision 2020 and its implementation frameworks are more genuine reference points for government officials than the equivalent documents in other countries. Moreover, Rwandan policy for agriculture is evolving fast. Successes in transformation are as yet tentative and fragile. Nevertheless, an appropriate policy approach has taken shape, funding to the sector is going up and there are grounds for optimism about implementation.

To begin with, a good deal has been done since the first PRS to flesh out the idea of prioritising agriculture. Following the food crises of the mid-2000s, a new agricultural strategy was developed (MINAGRI, 2004). At its core is a Crop Intensification Programme overseen by a government agency, the Rwanda Agriculture Development Authority (RADA). This has donor support through an Agriculture Sector Investment Programme coordinated by the World Bank and associated projects. Agricultural policy now has a definite sense of direction, thanks in part to the food shocks, but also to a learning process in which donors as well as the government have corrected their earlier assessments.

In Rwanda, there is a tendency for both donors and government to claim the credit for poverty-oriented shifts in policy (Hayman, 2009; Putzel and Golooba-Mutebi, 2009). In this instance, it seems clear that both government and donors were unpleasantly surprised by the failure of the first PRS to reduce income-poverty substantially, and revised their positions on agriculture accordingly. Some donors and the independent evaluation of the first PRSP were critical of the lack of a broad-based approach to agricultural transformation (Evans et al., 2006: 26-27; Putzel and Golooba-Mutebi, 2009: 12, 22). On the other hand, the minister in charge of the agriculture portfolio during 1999-2004 recalls that getting the generality of donors interested in anything other than ‘social issues’ was hard throughout the period. There was a World Bank loan for rehabilitation of...
marshlands, but both the Bank and USAID were slow to support a fertiliser programme despite the strong case made out by veteran green-revolutionist John Mellor (2001). Two sets of donor-funded consultants warned the government off investing in horticulture.\(^7\)

Since then, attitudes have changed on both sides. Not only is there a worked out policy, but it appears to be genuinely shared between the government and sector donors (not something that can always be said). Crucially, implementation appears relatively serious, with plenty of signs that words are being translated into actions and results (Kalibata, 2010a; MINAGRI, 2011).

The main elements of the current approach are:

- A focus on general distribution of improved seed and fertiliser at subsidised prices through local governments. Under this policy, national average fertiliser use was raised from 6 kg/ha per annum in 2006 to 30 kg/ha in 2010 (MINECOFIN, 2011: 15). In order to combat the re-sale of subsidised inputs by beneficiaries, there has been some experimentation with the use of vouchers. Importantly, this input distribution system does not appear to involve the gross political clientelism that is associated with input subsidies elsewhere in sub-Saharan Africa.

- Land consolidation; that is, the promotion of synchronised planting and harvesting by smallholders in (service) cooperatives. This initiative, which was pioneered with maize and rice, is designed to gain benefits of scale in conservation measures, input utilisation and harvesting without undermining the principles of family land ownership and individual cultivation.\(^8\) It is accompanied by a policy of relocating rural dwellings whose purposes include freeing up cultivable land and permitting more efficient shared services (imidugudu).

- Medium-scale irrigation of under-utilised marshlands, especially for rice.

- Promotion of sound intensification principles by district extension staffs, including enforcement of the legal ban on further fragmentation of holdings, and advocacy of mulching, small-scale irrigation and renewal of terraces. The scale of this activity is limited by the fact that Agricultural Officers are few in number – one per district, serving perhaps 200,000 people. They, however, are supported by a more junior extension officer in each of a district’s ‘sectors’, with a reported 436 Agro-dealers operating at sector level by 2010 (MINECOFIN, 2011: 16). According to the retrospective report on the EDPRS, the proportion of agricultural land protected from soil erosion was 87% by 2010/11, up from 40% in 2006 (MINECOFIN, 2012: 13).

- National promotion of ‘one cow per family’, a policy similar to the heifer schemes supported by donor projects in other countries, where animals are distributed free on the understanding that their first-born calves are returned to the scheme. The programme has multiple objectives, including improving family nutrition, providing a source of cash income and generating manure for soil improvement. Early abuses in which local leaders or better-off farmers diverted the animals to their own benefit were brought to the attention of the Annual National Dialogue in 2009, after which active presidential oversight became a factor in better-targeted implementation.

The policy just described has been given a somewhat rough ride in the academic literature on Rwanda. As noted earlier, Ansoms’ careful study of stratification within the peasant sector in Rwanda gives rise to legitimate concerns based on international experience about the likely distributional impacts of commercial monocropping. Together with the IFPRI modelling work, this raises the question of whether enough is being done to ensure that the poorer, food insecure groups are being included. However, these queries need to be addressed to an accurate representation of what the policy now is. In other work, Ansoms has used discourse analysis to make inferences about the ‘ambitions of the Rwandan elite’ (2009: 299-301, 309; 2011a: 244-245). There she presents land consolidation as equivalent to collective ownership, and commercialisation as tantamount to marginalising smallholders. This does not seem a fair representation of the policy. In particular, it downplays, or fails to anticipate, the way current policy rests on promoting service cooperatives to take advantage of economies of scale in input provision and marketing while retaining family land rights and production incentives.

Similarly, the most widely read treatments of the *imidugudu* performance-contract approach in local government (Ingelaere, 2010; 2011) and of Rwanda-variant ‘villagisation’ (*imidugudu*) (Newbury, 2011) also place the accent on showing how these policy elements reflect what is taken to be the RPF’s ideology. The possibility that, ideology apart, they may help to ensure that government services reach the peasantry at large – the key to an outcome which is pro-poor, as exemplified by rural intensification in East and Southeast Asia – therefore gets short shift.

A serious issue, less emphasised by the ‘discourse’ approach, is whether the agricultural strategy is getting the resources it needs. If the policy means what it says, the scale of the task is huge. The question arises whether the material and particularly the skilled human resources being devoted to implementation are sufficient.

Until now, public spending on agriculture has been both low and erratic in relation to the scale of investment needed to restore and increase land productivity. The share of the national budget allocated to the Ministry of Agriculture reached nearly 7% in 2001 but declined
thereafter. A sectoral Public Expenditure Review carried out in 2007 gave quite a damning account of the failure of public spending patterns to comply with the priority accorded in theory to agriculture. MINAGRI’s share of the national budget was as low as 3.5% in 2007, and the proportion was only slightly higher after including other ministries’ spending in the sector. At that time, earmarked agriculture spending by districts raised the sector share by only a further four percentage points. Budget execution rates for agriculture over the period to 2007 fluctuated above and below the allocations, mainly on account of large projects. Agriculture did particularly badly in terms of the trends in real budget allocations compared with health and education, which recorded growth over the three years 2004-7 of 95% and 44% respectively (World Bank, 2010: 112-117).

It is not the case, therefore, that Rwanda has been a good performer in terms of consistent focus on agricultural development. The Ministry has been pressing the government to reach the target set under the CAADP by raising spending to 10% of the national budget. However, there is a great deal of catching up to be done (OTF Group, 2009). As a proportion of agricultural GDP, the 2007 Ministry spend was even worse in comparative terms than the headline proportion of the budget. Although Rwanda’s rate of 3% was comparable with Uganda’s, a study by Fan and Rao (2003) found an average for 17 sub-Saharan African countries of 6.7%. For all 44 developing countries included in the study, it was 10.3%. Research is also under-funded in comparative terms and extension services in 2007 were ‘limited’. The position of agriculture is improved if off-budget donor spending is taken into account (off-budget development funds were 78% of total on-budget development expenditure in 2007) (World Bank, 2010: xxii, 117-125).

Recently, public expenditure has been rising, the MINAGRI share returning to nearly 7% in 2010/11. This level of spending is expected to be maintained in 2011/12, and according to the government, the CAADP target will now be met. This is understood to refer to a total for agriculture-related spending, including relevant activities of the Rwanda Development Board, the Rwanda Development Bank and some other public bodies (FAO, 2010; Majyambere, 2011; MINAGRI, n.d.).

It needs to be borne in mind that the CAADP target applies equally to large countries with major infrastructure needs as well as to compact countries with reasonably good road networks like Rwanda. The agriculture budget figures for Rwanda do not include general infrastructure, nor – as noted above – do they include agricultural expenditures by districts (although this is a much smaller figure; if included, it raises the MINAGRI allocation in 2010/11 to 7.2%). 10% may therefore be an appropriate proportion for Rwanda.

It is both a comment on the RPF government’s ability to prioritise effectively during its first decade in power, and a reason for being hopeful about the future, that so much has been done so recently to overcome barriers to agricultural development. The Strategic Plan for Agricultural Transformation (PSTA) was completed in 2004 and adopted as the basis of a SWAp in 2005. It was also in 2005 that the current land policy and land law were adopted, guaranteeing security of tenure and the possibility of a land market. The implementing agencies RADA and RARDA were established and the agriculture research institute was restructured in 2006. And earmarked transfers for agriculture to districts also started in 2006 (World Bank, 2010: 126-127). PSTA Phase II, dated 2009, incorporates even more recent learning, including with respect to the speed of changeover to higher-value crops, demand-side obstacles to fertiliser use and extension services, closer attention to quality standards and marketing, and development of entrepreneurial capacities in farmer organisations – all ingredients for a more inclusive practice (MINAGRI, 2009: Ch I, II). PSTA II is considered by supporters to be a detailed and action-oriented plan for implementing the main pillars of CAADP (OTF Group, 2009: 4).

It is too early to expect dramatic pay-offs from these improvements in the policy and institutional environment, particularly in view of the fact that the uplift in spending is even more recent. Indications of the major barriers that need to be overcome include the following:

- When fertiliser imports were liberalised under a mid-2000s strategy for increasing utilisation, private importation responded well, but peaked at 7,349 tons in 2005, far below the target of 63,000 tons, because of low demand among farmers. Big commercial farmers were the principal beneficiaries. There are now strong indications that commodity-based cooperatives, where bulk purchases of inputs are combined with credit guarantees and associated extension services, can be an effective means of addressing the micro-level constraints (World Bank, 2010: 127). But this is slow and organisationally challenging work.

- The government has for some time been making efforts to stimulate private-sector as well as smallholder investment in agriculture, including establishing an Agriculture Guarantee Fund in 2005 to encourage bank lending to the sector (which was only 4% of the total lending in 2005). However, private investment has remained weaker than in other sectors. According to the World Bank (ibid: 129), this reflects primarily two constraints that may be difficult to address even in the medium term, high perceived risk and lack of access to external markets, issues we discuss with more specific reference to horticulture below.

In important respects the RPF-led government is still learning how to manage its agricultural sector 17 years after the genocide. Yet the discussion in this section seems to suggest that ‘learning’ is an entirely appropriate word to be using in connection with the Rwandan policy process. In contrast to the situation in neighbouring countries with superficially similar histories and political
constitutions, policy making and implementation seem to respond to powerful incentives to demonstrate success in the main fields of social and economic development. This did not immediately produce high-quality policy making or good results, but the signs are now relatively encouraging, because lessons have been learned. The horticultural sub-sector presents a somewhat different picture which is consistent with this broad conclusion.

4.3 How has horticulture been supported?

There has been little previous development of commercial horticulture in Rwanda, even though a large variety of fruits and vegetables have always been available in local markets (G&N Consultants, 2008). This seems likely to change in a big way over the coming years. Since 2007, a specialised agency for horticultural development (RHODA) has been running alongside the agency for agriculture. Through RHODA and the one-stop-shop for investment promotion (RDB), the government is making a strong play to make Rwanda the place where international and regional investors will go after exhausting the horticultural potential of Kenya and Uganda. For the reasons given earlier, this is a reasonable ambition; for a number of horticultural crops Rwanda is already competitive in terms of yields without yet having made large investments (RDB/RHODA, 2010).

Until now, the Rwanda government’s approach to horticulture promotion has followed a relatively orthodox, light-touch approach to investment facilitation. That is, in this field it has made only limited use of the active industrial policy or venture-capital approach, using either the mechanism of the party holding company Tri-Star/Crystal Ventures or the public-private partnership modality that has been preferred in some other fields (Booth and Golooba-Mutebi, 2011). In other words, the philosophy is that it is the role of government and government agencies to create the basic conditions, including major infrastructure, appropriate legislation, conducive economic and social policies, and some modest subsidisation of learning costs for local entrepreneurs and small growers. Major investments are left to the expected foreign direct investment. An important issue for analysis of the sub-sector is whether this approach is appropriate and will be sufficient.

RHODA is joined in its transformative ambitions by a small number of medium-scale investors in horticultural contract farming, including young returnees with relevant business or professional experience from Uganda and elsewhere. Other players include three fruit processing businesses with contract-farming interests (Gérard Sina’s Urwibuto Enterprises, Shakina Enterprises and Inyange Industries). Inyange is one of the subsidiaries of Crystal Ventures Ltd whereas the other two enterprises are family firms. RHODA itself is supported by a technical assistance project of Belgian Technical Cooperation, and pilot initiatives for particular crops are supported by USAID and DFID as well as by the national crop research organisation ISAR. The horticulture policy extracts maximum benefit from Rwanda’s general selling points as an investment destination. Those include its low corruption indicators, high level of public security and recent star rating under the World Bank’s Ease of Doing Business survey (World Bank and IFC, 2010). The government took a while to grasp why it continued to get an indifferent rating from the Bank despite the general attractions of the environment for business, but having understood, it turned things around with remarkable speed. Most observers attribute this to the forceful and persistent attention to the implementation of policy commitments that President Kagame impresses on his subordinates, and they in turn on theirs.

The same leadership style has made its mark on RHODA and the implementation of the horticulture plans. In late 2009 or early 2010, the then head of RHODA was removed from his post by the president on grounds of proving insufficiently dynamic and replaced by a younger man. Kagame makes quite regular and well publicised visits to projects under RHODA’s remit such as the apple banana pilot scheme in Kibungo.12 Horticulural development in Rwanda is not expected to be a re-run of Kenya’s spectacular capture of market share in European supermarkets. Indeed, there is some awareness in Kigali of the discrepancy between the image and the reality of the Kenyan story, including the fact that as little as 4% of Kenyan produce finds its way into exports.13 Although the government’s interest in horticulture was originally prompted by its potential for export diversification, there is now significant interest in import-substitution and new consumption habits in the domestic market.14 Outside the country, the rapidly growing sub-regional (EAC and COMESA) markets are the main targets. Further afield, the Gulf and south Asia are seen as the most promising fields for global trading. Global market penetration is expected only for niche products, including Japanese plums, passion fruit, pineapples, apple bananas and the Hass and Fuerte varieties of avocado.15

The standard formula for private company investment in Rwandan horticulture requires the investor to establish production agreements with smallholders organised in cooperatives. The bulk of production is done by the individual cooperative members, with the cooperative serving as the channel for input supply, sensitisation on quality issues and commitments on volume. The investor is generally allocated a home farm on former grazing land where demonstration plots can be established and some direct production can be done. Large, centrally managed farms are out of the question, given the general land shortage.16

The government has supplied some of the infrastructural conditions for Rwanda to become a global player in horticulture, and has generally played an active facilitating role. It has constructed a cold storage facility at Kigali airport and a flower park is under construction.17 RHODA and RDB with the support of the BTC project have enabled Rwandan horticulture investors to attend...
agricultural trade fairs in Germany and elsewhere. A Rwanda Horticulture Inter-professionals Organisation (RHIO) was formed with official support in 2009, and has 60 business and technical professionals as members. RHODA has contracted a Kenyan firm to advise on quality control in contract farming and it subsidises use of the certification services of Global Gap, which are essential to realising the best international prices.\textsuperscript{18} Subsidised fertiliser is being delivered to areas judged particularly suited to specific crops, along with awareness campaigns about necessary volume and quality standards.\textsuperscript{19} There is an active and much needed programme of research led by ISAR on planting materials and disease control.\textsuperscript{20} Finally, agreements in principle have been reached with several air freight companies, and the national carrier Rwandair has been encouraged to invest in two new wide-bodied planes to serve routes to Dubai and Kinshasa, both target destinations for Rwandan horticulture.\textsuperscript{21}

Currently, however, commercial horticulture in Rwanda is constrained by a series of what our interviewees refer to as chicken-and-egg problems – what might be termed more technically problems of market coordination.\textsuperscript{22} For the time being, assured production volumes are low. There is a good deal of work to be done with groups of small-scale producers and their cooperative structures to establish the right expectations and incentives for producing at high volumes with the necessary quality standards. Rwanda has already experienced a temporary ban on exports to the EU because of a failure to comply with sanitary and phyto-sanitary standards (MINAGRI Strategic Issues paper, FY 2011/12). Getting the industry started on the cultivation side is transaction-intensive, and both the technical and the commercial learning costs are high. Until this is resolved, storage and transport facilities will be under-utilised, resulting in unit costs which cannot beat the competition from Uganda and elsewhere.\textsuperscript{23} While the government and supporting donors have gone some way towards bearing those costs centrally, it is not clear that this will be sufficient to give Rwandan producers the competitive advantage they need.\textsuperscript{24}

The viability of the current approach relies on the possibility that some relatively large regional investors will be attracted and that, bringing relevant know-how with them, they will be prepared to bear the initial investments, including in respect of negotiating agreements with and providing ongoing technical extension services to groups of producers. This is in fact the model that has been followed by the existing processors, Urwibutso Enterprises, Inyange Industries and Shakina Enterprises, each of which has agreements with producer groups. The Kenyan supermarket Nakumatt, which is now established in Kigali, has some local producer agreements, although much of its sourcing is still regional.\textsuperscript{25} In the case of Urwibutso, the agreements include the provision of free or subsidised social services and a significant research and demonstration undertaking on the home farm. One well-known regional investor, East African Growers of Kenya, has established a contract-farming operation – experimenting with irrigated French bean production, their stock-in-trade.\textsuperscript{26} However, it appears that others are watching and waiting.

If and when a breakthrough occurs on volume and quality of fruit and vegetable growing, bottlenecks will quickly appear on the processing side. Inyange Industries, the largest processor, has recently invested in a $30m state-of-the-art pineapple and passion-fruit juicing plant. This has enabled the firm to establish agreements which are more remunerative for the producer groups and more easily supervised for quality. It is predicted that this will force the previous market leader in fresh juice, Urwibutso Enterprises, to upgrade its technology. However, it will remain the case that Rwanda has no plant for concentrating surplus passion fruit juice, and only one tomato processor.\textsuperscript{27}

Given these challenges, there are those who argue that policy for horticulture needs to move into a more interventionist mode, with RHODA actively negotiating public-private joint ventures in which the state subsidises the initial learning costs and demonstration effects. Taking the Tri-Star/Crystal Ventures experience into account, this proposal seems to make good sense. For the moment, we can only say that that this is being considered. We have the impression that, like policy for agriculture, horticulture policy in Rwanda is a learning process, in which setbacks and frustrations have led and will continue lead to policy shifts. This would be unremarkable except for the ample evidence from the other countries included in the PEAPA study that, for political reasons, policy can stagnate year after year in spite of manifest failures to achieve its nominal objectives.

5 Conclusion

Rwanda is not, we have seen, a case of a regime with strong political reasons to take agriculture seriously that has also followed a consistent pattern of giving adequate priority to agriculture in public policy. The political economy of policy is certainly distinctive, for reasons that have a great deal to do with the country’s violent past and the way the RPF leadership has chosen to respond to it. However, agriculture is not yet a policy success story in Rwanda. The government cannot be said to have settled upon an appropriate set of policies and delivery mechanisms for agriculture quickly and unprompted. It took a substantial food crisis shock in the mid-2000s and a significant change of mindset among donors to get an appropriate set of measures adopted. In short, policy for agriculture has been in important respects laggard and inconsistent. However, there is more to be said about the Rwanda case, and this is more consistent with the PEAPA hypothesis.

First, we have described the recent evolution of policy as a learning process, one in which GoR and its donors have arrived in a genuinely joined-up way at what appears a viable and appropriate strategic vision. The food shock and disappointing income-poverty results of the mid-2000s produced, not a short-lived, knee-jerk political response, but a sustained effort on the fine detail
of what to do differently. Donors and officials worked together on this, not without tensions no doubt, but not pulling in opposite directions either. The signs are good that the agreed strategy works, with poverty indices and inequality at last coming down. It is to be hoped that this will encourage the recent trend to take public spending for agriculture up to and beyond the internationally recommended 10% target, as the adopted formula is very intensive in organisational, extension and research inputs.

Second, at various points, we have highlighted indications of serious implementation effort, including correction of errors. Policy is not politicised in the ways that produce rigidity and stagnation elsewhere in the region. Implementation, while in many ways imperfect, is subject to performance pressures that are not widely observed in other countries with similar public-sector traditions. Abuses and unanticipated snags occur, but there are mechanisms for correcting them, including presidential interventions and arrangements such as an Annual National Dialogue, in which implementation targets are reviewed in public in a performance-oriented atmosphere. These are all favourable factors in considering the chances that agriculture and horticulture will make up lost ground in the years ahead.

Finally, regarding horticulture in particular several of the right actions have been taken. Policy action to improve the general business climate was remarkably rapid, and we will not be surprised to learn of further proactive adjustments as it becomes clearer that a sound business climate is not going to be enough on its own to induce more foreign investors into contract farming. In fact, it seems not only feasible but desirable that Rwanda adopts in horticulture more of the active public-private-partnership and ‘early stage venture capitalism’ approach with which it has achieved success in other areas of the economy.

END NOTES

1 Respectively, Director of the Africa Power and Politics Programme, based at the Overseas Development Institute in London, and APPP Associate based in Kampala, Uganda. We are grateful to Colin Poulton and two anonymous referees for comments on a previous draft of this paper, but retain full responsibility for its contents.

2 The PEAPA studies are strongly seconded in this respect by other recent research, including notably the results of the Elites, Production and Poverty Programme (Whitfield, 2011; Whitfield and Therkildsen, 2011).

3 It is based on a subset of 82 confidential interviews and other conversations conducted in Rwanda between 2007 and 2011 as well as on relevant documents and publications.

4 This finding is based in part on direct observation by Frederick Golooba-Mutebi of several Annual National Dialogue sessions and the testimony provided to him by participants in ministerial retreats.


6 For example, Pottier and Nkundabashaka (1992) and Pottier (1993).

7 Between 1999 and 2006 crop output increases were due 15% to increased land area and 85% to productivity improvements, with roots and tubers leading the way (Rwirahira, 2009: 20).

8 Interview with former minister, Kigali, July 2011.

9 Interviews with horticulture investor and minister, Kigali, Feb and Nov 2010.

10 Interview with horticulture investor, Kigali, Mar 2010.

11 An appreciation largely shared by a sector situation analysis undertaken for the local think-tank, IPAR (Rwirahira, 2009).

12 Interviews with horticulture investors, Kigali, March 2010.

13 Ibid.

14 Interviews with government official and minister, Kigali, Mar and Nov 2010.

15 Interview with technical assistant, RHODA, Kigali, Nov 2010.

16 Interviews with horticulture investors, Kigali, March 2010.

17 Interview with horticulture investor, Kigali, Mar 2010.

18 Interviews with horticulture investor and minister, Kigali, Mar and Nov 2010.

19 Interviews with horticulture investors, Kigali, Mar 2010.

20 Ibid.

21 Interview with horticulture investor, Kigali, Mar 2010.

22 Interviews with horticulture investor and minister, Kigali, Mar and Nov 2010.

23 The following points are discussed in these terms and in some detail by the first report of a One UN project (Mbanda and Rusharaza, 2010).

24 Interview with minister, Kigali, Nov 2010.

25 Interview with horticulture investor, Kigali, Mar 2010.

26 Interview with government official, Kigali, Mar 2010.

27 Interviews with horticulture investors, Kigali, Mar 2010.

28 Interview with government official, Kigali, Mar 2010.
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