

Rwanda: the costs of conflict for subsistence households

We know that civil conflict is hugely costly for poor countries but how can we measure the costs of such strife for individuals?

Florence Kondylis looks at the impact of the waves of ethnic violence and consequent mass migrations in Rwanda on the economic performance of subsistence agricultural households.

Civil conflicts continue to affect some of the poorest countries in the world. Episodes of civil strife are often driven by poverty and socio-economic inequalities, and they can lead countries into even starker levels of deprivation than before the crisis – what is often called the ‘conflict trap’.

My research looks at the economic impact of such civil strife at the individual level. I argue that taking the individual as the unit of analysis is crucial in economies that consist mainly of subsistence agricultural households, and where the provision of health care and access to education are precarious. By definition, subsistence households seldom have access to credit, live mostly on their own agricultural production or rely on informal markets to buy consumption goods and labour. Such behaviour has virtually no impact on consumption and credit figures, so aggregate wealth indicators fail to account for the effect of conflict on the economic performance of subsistence households.

Rwanda has experienced sustained waves of ethnic violence since 1959, with a peak in the intensity of killings in 1994. These episodes led to massive population displacements in the 1960s and after 1994. The resulting refugee populations were placed in camps either within Rwandan borders or in neighbouring countries. As the Rwandan conflict has lasted for over 30 years, some of the displaced were left in camps without economic prospects for long periods of time. It is only their children, born in the camps, who returned to Rwanda after 1994.

Those refugees were encouraged by the government to return en masse to Rwanda after the 1994 genocide. This resulted in a land and housing crisis, which threatened to trigger even more violent outbursts. The population density in Rwanda is one of the world’s highest, and combined with the collapse of infrastructure resulting from the conflict, these return migrations put more strain on the demand for land and housing.

Land plays a critical role within Rwandan society since most households’ survival depends on it. The legislation defining and enforcing access to land in Rwanda is mostly based on custom, corresponding more to a ‘right to use’ than to possess. As land became scarcer, there were fewer

opportunities for returnees to rely on custom-based law to find a parcel of land.

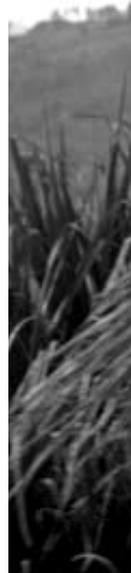
In 1997, the government implemented a policy of ‘village-isation’, aimed at reducing land-related tensions through a programme of resettlement and land allocation to post-1994 returnees. In order to distribute parcels of arable land to the returnees, the government deforested large areas and redistributed some of the land left behind by the 1994 refugees that had not been reclaimed.

The chosen pattern of resettlement was to agglomerate new housing facilities (or *imidugudu*) in relatively small areas on the borders of existing Rwandan villages. Other forms of resettlement were forbidden within programme villages, and all returnees to these areas were moved into imidugudu. They were then allocated parcels of land within larger fields, not necessarily positioned alongside their house. Hence the density of population within imidugudu was much higher than in traditional Rwandan villages. It was argued that this would minimise the amount of wasteland, hence leading to a more efficient use of the land.

At the time that my data were collected, not all villages benefited from the programme. Hence it became possible to compare the economic performance of returning households that benefited from the programme with those who did not.

My study of Rwanda is based on the working assumption that periods spent in camps may have had some impact on the productivity of returnees, either through a depreciation of their skills or other sociological or psychological channels. Isolating the impact of this potential loss of ‘human capital’ on returnees’ agricultural productivity relative to that of stayers is a new contribution to the assessment of the economic cost of conflict at a microeconomic level, which may bear important policy implications.

The data allow me to measure whether there are differentials in agricultural productivity across migration status. Moreover, exploiting the differences in patterns of resettlement across imidugudu and traditional villages, I can examine the impact on agricultural productivity of assimilation of the returnees with the stayers.



The government's resettlement policy is generating economic inequality and potential for discontent

If we assume that the stock of human capital varies between returnees and stayers, then assimilation is likely to be an important channel for returnees to acquire agricultural skills and knowledge. Exchange of skills between returnees and stayers is likely to be the fruit of neighbourhood interactions, and hence depend mainly on the patterns of settlement. Hence returnees living within imidugudu are likely to have less interaction with stayers compared to returnees living within traditional villages.

My results show that for the group of returnees that moved into imidugudu, who received more land than they would have otherwise, the programme had a positive asset effect on their agricultural production. Nevertheless, this group experienced lower returns to inputs than the group of returnees who were not in the imidugudu programme. Not only does this suggest that the episode of displacement lowered the returnees' level of know-how, but also that the imidugudu policy did not allow for transfer of skills between stayers and returnees.

One possible explanation for the differentials in returns across migration status and programme areas is that there are 'social pressures', such as ethnic stigmatisations in imidugudu areas. Another possible explanation is that the land is systematically of lower quality in programme areas.

These findings suggest not only that conflict-induced migration had a mixed impact on agricultural returns, but also that the resettlement policy generated further sources of economic inequality between groups. A straightforward implication is that in order to prevent discontent from erupting among certain groups – and thus to promote durable peace – the sources of disparity should be tackled. One way of doing this would be to provide agricultural knowledge and training to the population of returnees in the programme areas.

This article summarises 'Agricultural Returns and Conflict: Quasi-experimental Evidence from a Policy Intervention Programme in Rwanda' by Florence Kondylis, CEP Discussion Paper No. 709 (<http://cep.lse.ac.uk/pubs/download/dp0709.pdf>).

Florence Kondylis is a research economist at CEP and, from October 2006, a postdoctoral fellow at Columbia University in New York.

Image: Kresta King Cutcher



Mass migration in Rwanda resulting from the conflict has had a mixed impact on agricultural returns