## Conclusions

Thomas C. Pinckney

Peter K. Kimuyu

This study examines the history of development at the micro level, controlling for agroecology, in order to test whether or not large differences in government policy make a difference at the micro level. In the conclusion to *Peasants and Governments*, Bevan, Collier, & Gunning (1989 p. 291) write "the major overall conclusion to be drawn from our study is that governments are currently implementing policies whose effects span [the] wide range ... [from] highly beneficial ... through greatly overrated ... to highly detrimental." Though we consider here a markedly different set of policies, the conclusions are similar. In the previous chapters, we have encountered beneficial, overrated, and detrimental policies. In addition, we would like to add to Bevan, Collier, and Gunning's list the assessment that many policies are *substantially ignored* by households in rural areas.

Furthermore, all types of policies are in each of the two countries. Lofchie's (1989) assessment of the national data -- that Kenya's is an "agricultural 'success story" and Tanzania's "a case of policy-induced agrarian decline" -- looks considerably overdrawn when examining village-level microeconomic evidence from 1992. Yes, it is easier to list some of the policies on the Kenyan side that have succeeded marvelously: The early investments in dairy development, the development of marketing institutions and infrastructure, effective and substantial transmission of seasonal credit through the coffee cooperatives, and a more thorough expansion of primary school enrollment have all contributed in important ways to growth in incomes and welfare in rural areas.

Yet Kenya also has pursued policies which we conclude have been greatly overrated. These include the much-heralded land tenure reform, which was expensive and disruptive but,

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after more than thirty years, has made little or no contribution to the welfare of our study village; livestock policies in part of the seventies and eighties which led to overinvestment in pure-bred exotics and the breakdown of much of the supporting infrastructure; the T & V extension system, which has led to claims by the District Agricultural Officer that all farmers know the Ministry's basic recommendations for the major crops, when only 16% of the agricultural decisionmakers in our sample knew all four of the most basic recommendations; and, from a purely agricultural point of view, the massive expansion of secondary education, which according to our estimates has had and will have no direct impact on agricultural productivity.<sup>1</sup>

Tanzania has had its share of successes also, particularly in the last decade. Since 1983, investments in livestock genetics in our Tanzanian village have been substantial, aided in large part by government policies, so that within an eight to nine year period Kirua made up the most important part of the difference in genetic potential between the communities.

Furthermore, between the time of the Bevan, Collier, and Gunning (1989) survey in 1982/83 and ours nine years later, the rural health centers improved from hardly operating at all to operating at least as well as those in Murang'a. The picture Bevan, Collier, and Gunning paint of a rural society in which consumer goods are available only sporadically, leading to large adaptations in management of financial resources to cope with this uncertainty, bears no resemblance to the Kilimanjaro region in 1991/92. Lofchie's assessment also is based on data through the mid-1980's. Unquestionably, Tanzania has made very substantial and positive policy reforms during the last decade.

Moreover, Tanzania's land policy, which some others would place in the "highly detrimental" category, we call "substantially ignored." In Kirua, the community was able to ignore government land policy that, in theory, should have been detrimental; being a coffee-growing

<sup>&</sup>lt;sup>1</sup> Secondary education, however, increased the labor market potential of those who attended and, according to Knight and Sabot (1990), increased the productivity of those hired by the formal sector. Investments in secondary education, therefore, particularly ones made in the early years when education wage differentials were exceptionally large (Collier & Lal 1986), could still have been beneficial to rural households through urban/rural links. Moreover, these increases in income for households with persons educated to the secondary level could and probably did flow back to increased investment in agriculture and livestock. Thus, although secondary education according to our estimates did not have any direct impact on agricultural productivity, it might very well have had an indirect impact on agricultural investment and, therefore, productivity.

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area made it easier for households to buy and sell land, despite the *de jure* land tenure system. The evidence from Kenya strongly suggests that the residents of Kirua would be no better off today had Tanzania moved to a system of freehold tenure in Kilimanjaro at the time of independence.

Other policies have been more clearly detrimental, particularly in comparison to the Kenyan case. Macro policies turned terms of trade against agriculture, lowering the incomes of all rural producers, particularly producers of export crops. The predominance in 1991/92 of a non-tradable crop -- bananas -- in this ideal location for coffee-growing is in part a function of past macro policies. In addition to their direct impact on incentives to produce tradable goods, these policies led to a deterioration of the overall economy that hurt our study community; strong links between rural and urban areas translate problems with the general economy to these somewhat remote rural areas. Of special importance, and particularly striking in comparison to the Kenyan community, are credit constraints, with no credit available for non-coffee inputs or for cash through the coffee cooperative society. As shown in Chapter 12, returns to marginal investments in purchased inputs are extraordinarily high in our Tanzanian sample, estimated as 2.8 times the price of these inputs; the corresponding Kenyan number is approximately equal to 1.0. While this estimate for Tanzania is somewhat sensitive to specification of the production function, no specification yields a value less than 1.6, indicating that removal of credit constraints could lead to a large expansion in output. This lack of credit seems to be primarily a case of slow institutional development of the cooperative sector -- development that must have been hindered by the eight-year ban on cooperatives imposed by President Nyerere between 1976 and 1984. The macro policies also, however, have contributed to this lack of credit by making the coffee society less profitable and less important to the farmers than they would have been otherwise. Given the recent changes in macro policies, there is now no logical reason why credit for non-coffee inputs could not be handled in the Tanzanian case just as in the Kenyan case. Although coffee plays a smaller role in Kirua and thus total credit disbursed as a percentage of non-coffee agricultural production would have to be less, the institutional arrangements could be quite similar. Furthermore, over time the changes in macro policy should lead to an increasing role for coffee once again in this economy, facilitating the expansion of credit to the households.

So when examining Tanzania, we see policies in many shades of gray rather than much black and white. Nevertheless, there is no doubt that overall Tanzanian policy -- including especially macro policies -- through the early eighties had a largely negative impact on Kirua. The negative impact of such policies is shown most starkly when one considers that the Tanzanian community appears to have been substantially better off than the Kenvan community at the time of independence. Recall that Kilimanjaro had educational levels at independence far above the national average, and far above those in the Kenyan community. Tables 12.1 and 12.2 show that those Tanzanians forty and over at the time of our survey -- and thus educated prior to or just after independence -- have on average two more years of schooling than their agemates in Kenya. Given the excellent opportunities for the few educated Africans in the 1960's, along with the easy flow of educated labor within East Africa at the time, these differences in education must have led to substantially greater income in Kirua. In addition, by independence coffee was well-established and had been profitable for many years in Kirua, while in the Kenyan community households were taking land out of production in order to establish coffee, or still waiting for trees planted in earlier years to mature. Thus, coffee incomes must also have been considerably higher in the Tanzanian community at that time. Add to these differences in income the fact that the Kenyan community over the previous decade had been at the center of the Mau-Mau difficulties, with most of its men and many of its women held in detention camps for many of those years, and entire communities uprooted; most households were relocated to land in a different area upon leaving detention. With this major disruption in their lives and fewer income opportunities, there can be little doubt that the Tanzanian community was better off than the Kenyan community at independence.

Although it has been difficult for us to document when, how, and why the fortunes of these two communities changed, the history of asset ownership gives us some clues. Figures 4.4 and 4.5 document the shift in the total real value of non-land asset holdings between 1974 and 1991. The Tanzanian community has seen the vast majority of households lose assets over

this seventeen year period, while the Kenyan community has seen substantial improvement. The evidence suggests that most of the changes between relative incomes in the two communities took place in this period from the early seventies to early eighties. Clearly the two countries' different approaches to the coffee boom revenues made a difference here, with Kenya passing on most of the increase to farmers, and the farmers investing in part in asset formation; similarly, the macroeconomic decline in Tanzania through the seventies and early eighties must have led to some asset depletion.

So in the end, incomes have grown substantially faster in the Kenyan village. How much faster? Given the absence of survey data from the early 1960's, we can only make a gross approximation. The differences in coffee earnings and income from educated household members, however, must have led to income per adult equivalent being at least 20 percent higher in 1963 in Kirua compared to the Kenyan village. Income per adult equivalent must have grown, then, at least 1.7 percent per year faster in the Kenyan community to reach its present level thirty percent higher than in the Tanzanian community.<sup>2</sup> This difference is guite substantial. Now, incomes would have grown somewhat more rapidly in the Kenyan village even if policies in the two countries had been identical. For example, the Kenyan community in 1963 was only beginning to receive coffee income after colonial policies had restricted planting. With identical policies, increases in revenue from coffee would have allowed the Kenvans to move towards the income levels of their Tanzanian counterparts in the years after independence. Similarly, even without differences in national policies, education levels in the Kenyan community would have moved towards education levels in Kirua, just as education levels in the rest of Tanzania caught up to some extent with those in Kirua. Some of the income differential from this source would also have disappeared over time, without any differences in policy.

Nevertheless, these two factors could account at most for the Kenyan community making up the earlier deficit in incomes, leaving the 30 percent greater income today to be

<sup>&</sup>lt;sup>2</sup> This is calculated by assuming that income per adult equivalent is 0.8 in the Kenyan community and 1.0 in the Tanzanian community in 1963, and 1.3 in the Kenyan community and 1.0 in the Tanzanian community 29 years later at the time of our survey. The required differential in growth rates is approximately the same if incomes are growing moderately in the Tanzanian community.

explained. By this measure, policy differences may have accounted for a difference in the growth rates of income per adult equivalent of about 0.9% per year -- still a sizable amount.

Yet despite these differences in the rate of growth of income, the Tanzanians in our sample have been able to maintain health and nutrition at levels at or above their Kenyan counterparts. These outcomes are arguably just as or more important indicators of well-being as the income statistics. In Chapter 5, we conclude that these results are not related to any specific government health interventions; indeed, we leave the better health of the Tanzanian sample as a puzzle, unexplained by any of the hypotheses we consider. We are hampered when looking back in time by the absence of any earlier nutrition and health information from these villages. Once again, however, what we know suggests that health and nutrition may have been better at independence in the Tanzanian village. With higher levels of education, more income, and without the disruptions to home and family of being rounded up into detention camps in the previous decade, it seems highly likely that health and nutrition in Kirua were better at independence than in the Kenyan village. If this story is correct, throughout the postindependence period, families struggled to maintain health in the face of increasingly difficult economic circumstances; they apparently succeeded in doing so to a large extent. On this view, investments made in the Tanzanian community in the distant past may help explain the relatively good statistics for health and nutrition that we find in the present. People in this village learned how to manage resources to live healthier lives in the past, and held on to that knowledge through the hard years. The Kenyan households, only recently having passed the Tanzanians in terms of income, perhaps have not yet learned how to most effectively channel that income into health outcomes.

Therefore, to address the questions raised in the introduction, do large differences in policy make a difference at the micro level? The answer is a qualified "Yes;" some policies have made a very substantial difference. Nevertheless, one theme running throughout this study is that rural households are not complete victims of circumstances, but maintain considerable

control over their lives, in part through control of local institutions.<sup>3</sup> They mold these institutions into vehicles for improving their welfare, and respond when appropriate to economic incentives as they perceive them. Thus, indigenous land tenure arrangements have persisted even when they were inconsistent with government policy in both countries, making that government policy almost irrelevant in these communities. Households in both communities perceived that the benefits of the indigenous tenure system were greater than the benefits of conforming to new government land policies. They responded by continuing to control land markets at the local level. Similarly, households in Kenya responded to increasing scarcity and thus price of woodfuel by investing in woodlots, not simply allowing their environment to deteriorate to the detriment of the community. Government policies that acknowledge both the persistence and the evolving nature of rural institutions -- and the economic rationality of these households when perceiving circumstances from their point of view -- are more likely to have a positive impact on rural societies.

Thus, government policies do make a difference, either for good or for ill. Rural households will work to negate some government policies when possible if these policies are perceived as detrimental to household or community welfare, violating values shared by the community. Policies that spur true rural development will work with local institutions rather than against them, build up these institutions rather than replace them, provide incentives to modify and mold these institutions in ways that advance rural welfare rather than impose solutions from outside. These types of policies will play a role in fostering rural development in Africa. But in the end, this cannot be accomplished without the consent and active participation of rural people themselves. Rural development is about their lives, after all.

<sup>&</sup>lt;sup>3</sup> Hyden (1980) makes this same point about the persistence of rural institutions and the ability of the peasantry to counter government policy. He seems to lament this ability; we applaud it, arguing that in most cases the rural people know better than the government what is in their interests.

## References

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