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Diversification and Development in Pastoralist Ethiopia

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Summary. — Recent droughts in the Horn of Africa have again raised concerns over the viability of pastoralism. Vulnerability to drought, arguably increasing on the back of climate change and population pressures, provides a compelling justification for encouraging economic diversification. It is less clear, however, which specific social or economic sectors can provide pro-poor economic transformation. In this paper we assess the potential for diversification into both sedentary agricultural and non-farm activities in Ethiopia. We conclude that while irrigation and large farm investments do have sizeable potential to create jobs, education should be the central pillar of diversification strategies in pastoralist areas.

Key words — Ethiopia, pastoralism, resilience, economic diversification and transformation

1. INTRODUCTION

This recurrence of humanitarian disasters in the Horn of Africa has prompted renewed interest in achieving more sustainable development, particularly with regard to enhancing the resilience of the region's economy to withstand future shocks. But while there is substantial consensus on the need for greater emphasis on development, and not just relief, in pastoralist areas, there is far less consensus on which sectors really merit substantive investment. One view is that pastoralism is part of the problem, and the key solution to this problem is sedentarization.[1] An alternative view is that inappropriate policies toward pastoralism constitute the chief constraint (including restrictions on mobility), and that relieving this constraint is the main solution. In the middle are those who emphasize that development in the region requires walking with two feet by improving the policy environment for pastoralism, and also encouraging pro-poor forms of economic diversification (Devereux & Scoones, 2008; Little, 2012; chap. 21; Little, Behnke, McPeak, & Gebru, 2010b; Little *et al.*, 2010a).

In this paper we focus both on the need for economic diversification, and some of the possible means of achieving diversification, with a specific focus on Ethiopia. The value of our papers stems from three sources. First, the overall evidence base for policymaking in pastoralist regions is very weak in relative terms. There is certainly some excellent research on pastoralism, but the types of evidence that normally inform development strategies, such as large scale household surveys and macroeconomic models, often do not exist in pastoralist areas, or not at a scale that gives confidence in the external validity of the conclusions drawn.[2] Much of the evidence also consists of a gray literature dominated by relatively small scale evaluations of relatively small scale interventions by bilateral donors or NGOs. Second, the evidence that does exist is often specific to particular areas or particular issues, thus making it hard to paint a big picture of development issues in the Horn. Ambitious though it is, painting such a picture —at least in the Ethiopian context—is very much the central aim of this paper. Finally, there is certainly less research on economic diversification in arid and semi-arid lands (ASAL) than there is on pastoralism itself.

For these reasons the focus of this paper is on reviewing more rigorous academic pieces on diversification issues, and augmenting these with new evidence from a large scale household survey in Ethiopia, and an Africa-wide model of profitable irrigation potential (You *et al.*, 2011). Although we believe that this focus on more rigorous evidence is justified, we still emphasize that the evidence we do draw upon is often still piecemeal and invariably hindered by some important methodological constraints. For example, there are no reliable data on trends in herd size in pastoralist areas, even though this is surely one of the most important welfare indicators in the region. A second important caveat is that our study stops short of addressing the important "How?" question of how policymakers should go about implementing their desired portfolio of interventions. In fact, this pervasively important

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question is arguably more important in the Horn of Africa, given its very low population densities and highly mobile populations, which will often make cost-effective service delivery and infrastructure investments a daunting challenge. Finally, our "big picture" analysis mostly aggregates above location-specific nuances. ASAL areas vary markedly in terms of natural resources, market access, degrees of mobility, and cultural factors. Clearly, effective decentralized policymaking needs to take these specifics into account. That said, we try to disaggregate by the major ASAL regions of Ethiopia wherever possible.

Bearing these important caveats in mind, we believe our review of existing and new evidence points to some reasonably strong conclusions. We argue that education investments should be the central pillar of diversification and transformation strategies in ASAL regions, with irrigation schemes and other attempts to promote diversification into sedentary farming a distant second. The latter have some potential to promote economic growth and create jobs, but that potential is limited by basic agroecological and agronomic factors, and by institutional factors that appear to exclude ASAL populations from substantially benefitting from these schemes. Education, in contrast, is a direct investment in the very young populations found in ASAL areas, and one likely to generate assets and income sources (such as remittances) that are far less vulnerable to covariate shocks, and even more mobile than pastoralist livestock. Advances in female education will also reduce population growth (with a lag) and improve health and nutrition outcomes for children. And one would expect less tangible benefits in terms of improved capacity in public institutions. There is also some evidence of increased demand for education, which has long thought to be a constraint on human capital accumulation in pastoral communities. Hence if the right delivery modalities can be developed, we expect that education investments will be a high return investment, albeit one that will require a decade or so to truly bear fruit.

2. WHY DIVERSIFY? SOME BACKGROUND ON SOURCES OF VULNERABILITY IN PASTORALIST LIVELIHOODS

Existing policy and research narratives in Ethiopia revolve around an important debate over whether the persistent or increasing vulnerability of ASAL populations is the result of "structural" factors (population growth, climate change, or anachronistic traditional institutions), or of purposive government policies and institutions that inhibit the resilience of pastoralist communities (Little, Behnke, McPeak, & Gebru, 2010c; Little *et al.*, 2010a). The evidence that informs this debate is far from satisfactory, but in this section we will review what evidence there is.

(a) *Dependence on pastoralism and vulnerability to drought*

The ASAL regions of eastern Africa cover most of Djibouti, large areas of southern and eastern Ethiopia, the vast majority of Kenya, and virtually all of Somalia. Figure 2 shows these pastoralist areas, along with major trade routes (often informal) of livestock and maize. The size of the pastoral population in the Horn of Africa has been estimated at between 12 million and 22 million people, depending on how pastoralism is defined and on data sources used (Sandford, 2012). Moving beyond an occupational definition, our own estimates of the ASAL population in these four countries—defined as those living below an altitude of 1,500 m—is 40 million people, 85% of whom living in rural areas.[3] In the present paper we focus on arid and semi-arid pastoralist Ethiopia—linked though it is with neighboring economies—which we define as the Afar and Somali regions, and the Borena zone of Oromia region. The 2007 Ethiopian Census puts their collective populations at about 6.8 million.

The areas of Ethiopia are often called pastoralist or agro-pastoralist areas, and not without reason. The livestock sector heavily dominates economic activity, and there are strong reasons to believe that it also drives economic fortunes in other sectors, via multiplier effects. The dominance of livestock, or conversely, the extent of diversification does vary across the region, however. In a study of the Somali region of Ethiopia, Devereux (2006) found that almost 70% of households engage in livestock rearing, but large shares also engage in cereal crop production (43.4%), firewood production (17%), and charcoal production (14.7%), while smaller but not insubstantial numbers of households engage in various cottage industries (for example, mat making at 6.3%), petty trade or services, or higher value crop production. A more recent survey conducted by one of the authors found similar estimates for the Afar region of Ethiopia and the agro-pastoralist Somali region of Ethiopia. Around 79% of Afar household heads participating in the labor force reported livestock rearing or herding as their primary occupation, and around 29% of Somali agro-pastoralists listed this as their main occupation. Of course, this diversification is often marginal: the capacity to scale up petty cottage industries and firewood or charcoal production is limited, and in the case of firewood and charcoal production a scaling up would be undesirable for environmental reasons. Moreover, these are essential petty trade and services sectors that are probably highly influenced by local demand, which is largely a function of the livestock sector.[4]

Livelihoods are also diversified within households and within pastoralism itself. For example, the purely nomadic form of pastoralism, based on seasonal migration, has long been giving way to transhumance pastoralism, wherein part of the household and livestock herd is migratory (typically male adult household members and male and more robust animals), while the remainder of the household lives in a permanent or semi-permanent setting (typically women and children with a herd dominated by female and less vigorous animals) (Devereux, 2006; McPeak, Little, & Doss, 2011). Many relatively sedentary households substantively engaged in crop production as well as livestock rearing are more aptly described as

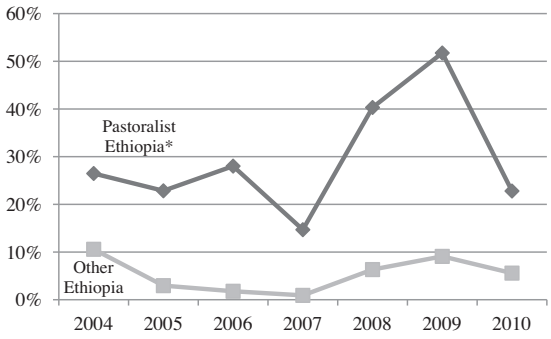

Figure 1. *The percentage of Ethiopians receiving emergency beneficiary assistance: 2004–2010. Notes:* * *Pastoralist Ethiopia is here defined as the Afar and Somali regions, and the Borena zone of Oromia region. This is not an exact definition, but it does cover the majority of the population in drought prone pastoralist areas. Source: Authors' estimates from WFP data on emergency beneficiaries and Ethiopian Census (2007) data on population. Source: FEWSNET (2011).*