Research Statement

Pedro Naso*

September 2025

My research examines how institutions shape economic development in low-income countries. One part of my work studies how developing countries can achieve sustainable growth. I focus on environmental regulation, natural resource use, and corruption in resource governance. Another part studies how social norms and institutions influence behavior. This includes work on religion and economic behavior, informal labor markets, firm dynamics and gender discrimination. I use a broad set of methods, including causal inference with secondary data, field experiments, and macroeconomic modeling. This methodological range allows me to address a diverse set questions and to expand this agenda across contexts.

A central interest of mine is the intersection of development and environmental economics. Two papers examine how environmental regulation create unintended distortions. In Naso et al. (2020b), we use a difference-in-differences design with synthetic control to show that new pollution standards in China led firms to relocate from coastal to inland regions. Naso (2024a) shows that limiting inspectors' discretion under South Africa's 2005 Air Quality Act reduced perceived corruption among firms. I have also studied the trade-off between economic gains and environmental quality. Namubamba et al. (2024) finds that forest plantations in the Democratic Republic of Congo generate rural income but at the cost of displacing native forests. More recently, ongoing work with researchers at Pennsylvania State University extends this theme to market-based approaches. Through an RCT, we are evaluating the effects of an avocado certification program in the Mount Kenya region that connects farmers to export markets. We study how this program affects the quantity and quality of farmers' harvests, as well as possible spillover effects on non-certified farmers.

I have also approached this intersection through lab-in-the-field experiments and behavioral economics. My focus is on the governance of natural resources and decision-making under uncertainty. In Naso et al. (2023), we conduct a five-country experiment with more than 7,000 participants, from both developed and developing countries, to study how information about others' actions influences cooperation on climate mitigation. Budurha et al. (2025) use a lab-in-the-field experiment with local authorities and forest users in Burundi to study environmental corruption. We find that lowering permit costs reduces corruption, while more frequent monitoring can backfire. This study contributes to the literature by testing policies to curb corruption in contexts where governments have limited resources. Naso (2024b) combines a recall experiment with secondary data to analyze how smallholder farmers remember and use past information. I show that recall is generally accurate but shaped by memory biases, which in turn affect forecasts. This is among the first studies to examine how past information influences farmers' decisions.

A smaller but significant part of my work in this area examines the macroeconomics of natural resource use. I use unified growth models, calibrated with historical data, to study

*Department of Economics, Swedish University of Agricultural Sciences: pedro.guimares.naso@slu.se

how land use and population may evolve over the next hundred years. Naso et al. (2020c) shows that slower population growth can, counterintuitively, tighten resource constraints over time. Naso et al. (2022) builds on this by proposing policies to reduce dependence on land-intensive agriculture. These papers are among the first to highlight the pressure that demographic decline will place on natural resource use.

More recently, I have become interested in the economics of religion. My work in this area began with a study of sermon content in churches in rural Burundi, aimed at laying the foundations for future research (Naso and Budurha (2024)). In Naso and Swanson (2025), we use dictator games to compare the in-group and out-group boundaries of aspiring and established religious leaders in Burundi. Our findings suggest that the conferment of leadership status may reshape leaders' perceptions of group boundaries. In Naso (2025), I study how religious priming affects risk-taking and find that farmers take more risks when religion is made salient. More recently, together with researchers from the University of Burundi and the Université Évangélique en Afrique in the Democratic Republic of Congo, I am running a lab-in-the-field experiment to test whether religious priming can promote forest conservation among forest users in Burundi. This work points to an important but largely unexplored area at the intersection of religion and the environment in developing countries.

An important part of my work studies informal labor markets and technology diffusion in low-income settings. Two studies revisit long-standing questions in economics. Cefala et al. (2024) is an RCT in which we paired knowledgeable farmers with farmers unfamiliar with row planting in Burundi. We find that incentives significantly increased technology adoption. The results suggest that low appropriability of returns—the fact that trainers do not fully capture the benefits of training their employees—limits the spread of modern technologies. In a second paper, Cefalà et al. (2024), we study knowledge hoarding, the act of withholding information to avoid creating competition. Using a similar matching design, we show that skilled farmers withhold information when paired with potential competitors. More recently, Naso and Ndayikeza (2025) conduct an RCT with micro-tailor shops in rural Burundi, converting manual sewing machines into automatic ones. Our objective is to test whether labor-augmenting technology—technology that makes workers more productive but reduces labor per unit of output—affects firm employment. We find that it increases employment, wages and investment, but does not affect other firm outcomes. In ongoing work with researchers at Cornell University, I study how small firms in Burundi move into more complex and higher-value products, and how this shift affects market competition and firm performance.

I am also interested in how gender norms and legal institutions shape economic opportunities. Two studies show how gender norms constrain women's economic development. Manea and Naso (2020) show that eliminating primary school fees in Tanzania has a stronger impact on girls' enrollment, especially in districts with a higher investment in education. Hans and Naso (2025) find that in Burundi, the presence of an adult male in female-headed households increases income, asset ownership, and children's education. Naso et al. (2020a) studies legal pluralism in Sierra Leone and shows that overlapping legal systems can reduce the risk of expropriation by limiting the power of any single authority.

In my future research, I plan to build on the themes of my past and current work. I am particularly interested in four broad areas: environmental regulation and corruption, firm dynamics in low income settings, the acquisition and diffusion of information among smallholder farmers, and the intersection of religion and the environment.

References

Budurha, J., Diomède, M., and Naso, P. (2025). Deterring Environmental Corruption: Experimental Evidence from Burundi. *Available at SSRN: https://ssrn.com/abstract=5194950*.

Cefalà, L., Irakoze, F., Naso, P., and Swanson, N. (2024). The Economic Consequences of Knowledge Hoarding.

Cefala, L., Naso, P., Ndayikeza, M., and Swanson, N. (2024). Under-training by employers in informal labor markets: Evidence from Burundi. *Working Paper*.

Hans, I. and Naso, P. (2025). When Boys Become Men: Economic Benefits of Male Adulthood in Female-Headed Households in Burundi. *Review of Economics of the Household*, pages 1–48.

Manea, R. and Naso, P. (2020). School Fee Elimination and Educational Inequality in Tanzania. *Centre for International Environmental Studies, The Graduate Institute*.

Namubamba, A. M., Manirakiza, D., and Naso, P. (2024). Forest Plantations in the Democratic Republic of Congo. *Available at SSRN: https://ssrn.com/abstract=4577445*.

Naso, P. (2024a). Delegation of environmental regulation and perceived corruption in South Africa. *Resource and Energy Economics*, 79:101462.

Naso, P. (2024b). Recalling the past: Memory and forecasting in burundi. *Available at SSRN: https://ssrn.com/abstract=5034772*.

Naso, P. (2025). Religious priming, risk-taking, and the activation of religiosity. *Journal of Economics, Management and Religion*, 2550005.

Naso, P. and Budurha, J. (2024). Church services and religious change in Burundi. *Available at SSRN: https://ssrn.com/abstract=4802156*.

Naso, P., Bulte, E., and Swanson, T. (2020a). Legal pluralism in post-conflict Sierra Leone. *European Journal of Political Economy*, 61:101819.

Naso, P., Haznedar, O., Lanz, B., and Swanson, T. (2022). A macroeconomic approach to global land use policy. *Resource and Energy Economics*, 69:101302.

Naso, P., Huang, Y., and Swanson, T. (2020b). The Impact of Environmental Regulation on Chinese Spatial Development. *Economics of Transition and Institutional Change*, 28(1):161–194.

Naso, P., Lanz, B., and Swanson, T. (2020c). The return of Malthus? Resource constraints in an era of declining population growth. *European Economic Review*, 128:103499.

Naso, P. and Ndayikeza, M. (2025). Labor-Augmenting Technology and Firm Employment. https://drive.google.com/file/d/1L7AfzD9om8WqO2XMQO0jCiATAOnP4Lj/view?usp=sharing. Working Paper.

Naso, P. and Swanson, T. (2025). Religious Leader Status and Group Boundaries. *Available at SSRN: https://ssrn.com/abstract=5038408*.

Naso, P., Theoduloz, T., Tyack, N., Gelo, D., Sarr, M., and Swanson, T. (2023). Using information to improve global cooperation: a climate change experiment.