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SIMON BRAND GEDENKLESING SIMON BRAND MEMORIAL LECTURE

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Institutional economics as a theoretical framework for transformation in agriculture

SW Omamo¹

1. Introduction

It is a great honour and privilege to have been invited to give the Simon Brand Memorial Address. I met Simon very briefly shortly before he passed away. He struck me as a man who seemed to be able to do something that very few of us can do, namely marry his personal convictions with his professional practice. I admired that greatly. He was also clearly a man of great vision. His memory is a humbling one.

When I was a much younger man and the fight for democracy in South Africa was still raging, I remember making a list of things I wanted to do in my life. Very high on that list was "to visit a free South Africa". It was a time when the fight for democracy in South Africa was at its height. Looking back, I realize that my admiration for this country stems from then. Most of my African heroes were and remain South African men and women. As a Kenyan, as an African, it is therefore deeply moving and humbling to have this opportunity to share my thoughts with the Agricultural Economics Association of South Africa.

The topic you have asked me to address is, "Institutional Economics as a Theoretical Framework for Transformation in Agriculture". When I first saw the topic I was very excited by it but also very challenged. For one can interpret it either very narrowly or very broadly. A narrow interpretation would entail a lecture on institutional economic theorizing accompanied by some theory on agricultural transformation. A broad interpretation would entail a lecture on agricultural development with some institutional economics thrown in. I decided to take the average. This is not a lecture on the theory of either institutional economics or agricultural transformation. Rather, I will argue that institutional economics provides a lens that is especially well suited to asking

¹ International Food Policy Research Institute.

and answering a set of questions that raises the relevance and potential impact of our profession in agricultural development policy design and implementation.

2. The puzzle, the problem

Back in 1991, I was conducting field research in western Kenya and found myself confronted by a phenomenon that puzzled me then, puzzles me now, and encapsulates the fundamental problem facing agricultural policy makers in Africa today. I noted that in apparent disregard to opportunities forgone, smallholders in western Kenya were trying to provide the bulk of their food requirements from their own output. Specifically, they often choose to grow low-value food-crops rather than significantly more profitable cash-crops (Figures 1 and 2) below.

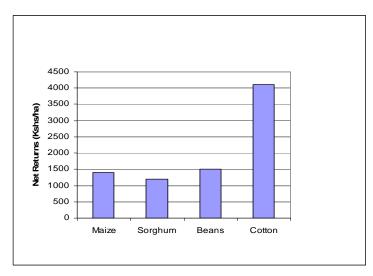


Figure 1: Returns to food-crops and cash-crops in Western Kenya - 1992

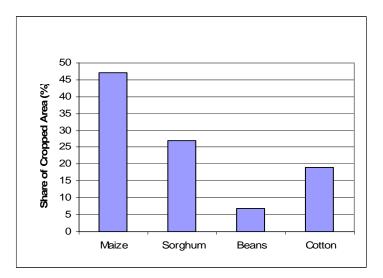


Figure 2: Typical cropping pattern in Western Kenya - 1992

A decade later, I returned to the same part of Kenya to do some field research and found that these seemingly irrational cropping patterns were still in evidence (Figure 3 and 4) below.

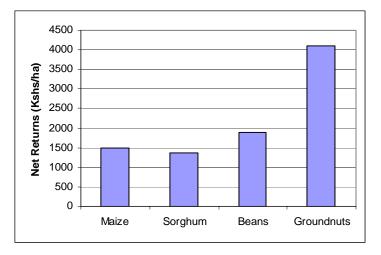


Figure 3: Returns to food-crops and cash-crops in Western Kenya - 2002

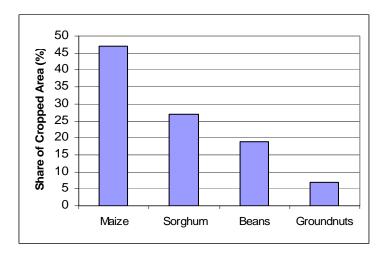


Figure 4: Typical cropping pattern in Western Kenya - 2002

Standard neoclassical economic theory provides a full explanation for diversified subsistence oriented agriculture of this kind. An optimal response to high transaction costs in a market for a good in which a household is a net buyer, e.g., a staple, is greater production of the item. Conversely, high transaction costs imply reduced production of goods for which a household is a net seller, e.g., most cash-crops, where a "cash-crop" is any farm output that has a small share in household consumption expenditures and a high market value relative to marketing costs. The seemingly inefficient prominence of low-return food-crops in smallholder farming systems thus is wholly rational food import substitution by households facing high transaction costs in product markets (Omamo, 1998b). For given consumption preferences and endowments, increased specialization by definition implies that the range of production items declines while that of traded goods rises. The higher are unit transaction costs in markets, the more costly are strategies to specialize in production with a view to trading for items in the consumption bundle, and thus the greater is the pressure toward domestic production of some of these items. It is therefore quite feasible that yield- and income-increasing production technologies will be rejected if they raise specialization and trade to such a degree that total transaction costs exceed the sum of the net output revenue (net of input costs and accounting for consumption) and the value of the endowment (Omamo, 1998a). Agricultural production decisions generally reflect technical choices that facilitate or catalyze the substitution of relatively abundant (hence cheap) factors of production for relatively scarce (hence expensive) ones. Technological adjustments that ease these factor substitutions release constraints imposed by resource scarcity. Production decisions and technical choices in agriculture are behavioural responses to particular constraints that both determine and reflect resource intensities and specializations. Shifts in production patterns are driven by changes in farmers' evaluations of the relative returns to resources employed in different pursuits, and on farmers' assessments of the range of feasible resource substitutions.

The policy implications that emerge from this brand of analysis are clear: improve functioning of factor markets, especially credit markets; increase farmer access to input and output markets; reduce farm-to-market transport costs; increase productivity of production systems; promote specialization and intensification; and so on. But the issue is, how? Standard neoclassical economic theory and practice have very little to offer by way of answers to how-questions.

3. **Propositions**

I would like to argue that neoclassical economics is very good at identifying and explaining problems such as diversified subsistence oriented agriculture, and what needs to be done about those problems. But it is largely silent on how to go about it. I want to suggest that institutional economics is well-suited to framing and answering how-questions.

4. The institutional view

Four concepts underpin the institutional view: institutions, institutional environments, institutional arrangements, transformation costs, and transaction

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costs. While this is not a lecture in institutional economics, it is worth defining these concepts briefly.

Institutions are humanly devised constraints that structure human interaction. They include formal constraints (such as rules, laws, constitutions), informal constraints (such as norms of behaviour, conventions, self-imposed codes of conduct), and their enforcement characteristics. They thus comprise the formal and informal constraints through which knowledge is discovered and employed to facilitate coordination of economic activity, and, together with the technology employed, determine the costs of production and exchange, and thus total costs. Institutional environments refer to the fundamental political, social, and legal ground rules that establish the basis for production, exchange, and distribution. Examples include rules governing elections, property rights, and the right to contract.

Institutional arrangements are defined by institutional environments. They refer to relations between economic units that define how these units can cooperate or compete. Examples: market arrangements (e.g., auctions and exchanges), collective action.

Transformation costs refer to costs of producing, consuming, and exchanging goods and services over space (transport costs), time (storage costs), form (processing costs), and expectations (insurance costs).

Transaction costs relate to increases in transformation costs associated with coordination, information, and strategic behaviour. Coordination costs are the sum of the costs of the time, capital, and personnel invested in negotiating, monitoring, and enforcing agreements among actors. Information costs are the sum of the costs of searching for and organizing information, and the costs of errors resulting from a lack, or an ineffective blend, of knowledge about time and place variables and general scientific principles. Strategic costs are the increased transformation, power, or other resources to obtain benefits at the cost of others. The most frequent sources of strategic costs are free riding, rent seeking, and corruption.

5. A three-level framework

Davis and North (1971) and Williamson (1994) argue that the comparative efficacy of alternative institutional arrangements varies, on one hand, with the institutional environments within which economic activity takes place, and, on the other, with the attributes and behaviour of given agents (that is,

individuals and organizations). Conditions and changes in institutional environments define and shift the comparative costs of institutions, which, in turn, influence and reflect behaviour at the micro-level (Figure 5) below. Understanding institutional arrangements and ascertaining scope for welfareenhancing institutional innovation, means understanding the driving forces behind the "larger" and "smaller" phenomena that those institutions condition and express.

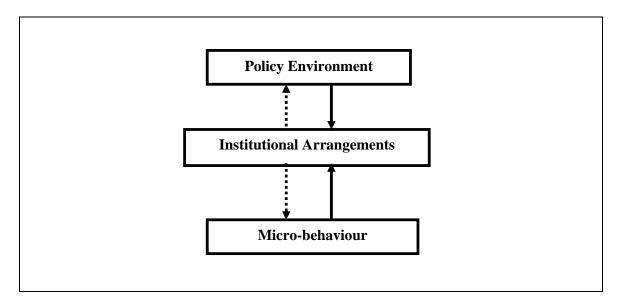


Figure 5: Policies, institutions, and micro-behaviour - A 3-level schema

In this schema, diversified subsistence oriented agriculture springs from a fundamental incompatibility among institutional environments, institutional arrangements, and micro-conditions and micro-behaviour in agriculture. Institutional environments and institutional arrangements imply high transformation and transaction costs in agricultural sectors, leading to micro-behaviour that affirms those cost structures.

6. The way forward

The theoretical literature springing from this perspective is expanding rapidly (Williamson, 2000). But precious few contributions deal with the problems afflicting agricultural development in Africa. This association is remarkably well placed to help fill that gap. Again, the how-question is the key one. And institutional economics is a good way to ask and answer it. Taking institutions seriously means taking time seriously. There are no quick fixes. Taking institutions seriously also means paying attention to operational feasibility. That means tracking both techno-economic and organizational impacts of

changes in institutional environments and arrangements. The Ultimate Goal must be to paint the "big picture" in African agriculture and the details that make it up.

Thank you for listening.

References

Davis L & North D (1971). *Institutional change and American economic growth.* Cambridge University Press, Cambridge, UK.

Omamo SW (1998a). Farm-to-market transaction costs and specialization in small-scale agriculture: Explorations with a nonseparable household model. *Journal of Development Studies* 35(2):152–163.

Omamo SW (1998b). Transport costs and smallholder cropping choices: An application to Siaya District, Kenya. *American Journal of Agricultural Economics* 80:116–123.

Williamson O (1994). Transaction costs economics and organization theory. In Smelser N & Swedberg R (eds), The Handbook of Economic Sociology. Princeton University Press, Princeton, NJ, USA.

Williamson O (2000). The new institutional economics: Taking stock, looking ahead. *Journal of Economic Literature* 38(3):595-613.