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#### **Workshop Report**

#### What Can Development Policy Learn from the History of Development?

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**Keywords:** Development policy; History of development; Coffee; Rice; Green Revolution

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On 3 June 2010 a workshop entitled "What Can Development Policy Learn from the History of Development" was held at the Economic and Social Research Council (ESRC) Genomics Policy and Research Forum, at the University of Edinburgh. The aim of the workshop was to establish a dialogue between historians of agriculture and academics working in development studies. Although members of both disciplines often share an interest in large-scale agricultural transformations, they work largely in isolation from one another: reading different journals, attending different conferences and inhabiting different departments. While the institutional obstacles giving rise to such academic tribalism are well-known, the result is intellectually damaging. Moreover where both sides are engaged in policy-relevant research, mutual isolation also weakens policyformation. The papers were given by historians from the Netherlands, Canada and the UK, followed by a commentary from the development anthropologist, Paul Richards. The audience was drawn from UK centres of development studies and policy as well as from the ESRC Genomics Network.

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Stuart McCook (University of Guelph): 'The ecology of development: a history of "bad" coffee'.

History, according to one succinct definition, is a discipline that seeks to tell "true stories about the past". Stories order events into causal sequences, in order to give meaning to complex realities. But these stories also carry risks. As the historian William Cronon has argued, stories are fraught with power relations; they sanction some voices and not others (Cronon 1992, 1350). Recent popular and academic discourse about the global coffee industry and development illustrate strengths and weaknesses of narratives about commodities and development.

The dominant narrative in recent academic and popular studies of the global coffee industry has been the rise of high-quality specialty Arabica coffee since the 1980s and, as a subset of that, the emergence of 'ethical' coffees such as Fair Trade, Certified Organic, Rainforest Alliance (Pendergrast 1999; Luttinger and Dicum 2006; Jaffee 2007). This narrative runs as follows: In the 1960s and 1970s, there was a widespread initiative to technify coffee production. This produced a host of economic and ecological problems. The specialty and ethical coffees emerged in response to these problems. Specialty Arabica coffees thus appear as 'good' coffees in several senses: they not only taste good, but they are also presented as being economically, ecologically, and ultimately morally good. Meanwhile, Robusta coffee usually appears as the counterpoint: the 'bad' coffee, known for poor or indifferent quality, and usually purchased by large coffee roasters as cheap filler in low-grade supermarket blends or for instant coffee.

The central problem with this story is not that it is wrong: the specialty revolution did encourage many producers to improve the quality of their coffee, and ethical coffees have indeed made a significant difference to the landscapes where they are produced and to the people who produce them. The problem is that story is not representative of the coffee industry as a whole. Generous estimates suggest that specialty coffee only accounts for about 20% of global coffee production, and is localized in Central America and Mexico, Kenya, Ethiopia, and a few other areas. Brazil's vast coffee industry, and producers elsewhere in Africa, Asia, and the Pacific seldom appear in these stories. Voices from this (very large) segment of the coffee industry seldom receive the same attention as the specialty industry.

But middling and poor-quality coffees have played a tremendously important role in promoting different models of 'development' since the early twentieth century, and continue to offer potential for development in the future - even if these development models differ from those of the specialty coffee market. Robusta coffees are the single largest sector of the coffee market; at the time of writing they accounted for about 35% of global coffee production. Millions of farmers – in Vietnam, in Indonesia, India, the Ivory Coast, Angola, and Brazil – make their living growing Robusta coffee. For that reason alone, this segment is worth serious and systematic attention.

The history of Robusta coffee represents a model of economic development in which coffee plays a starkly different role from that of the specialty Arabica markets. Robusta was first cultivated on a large scale in the Dutch East Indies, after an epidemic of the rust disease, caused by the fungus *Hemileia vastatrix*, wiped out most of the colony's Arabica farms (McCook 2006). As Europeans established colonies in Africa in the early twentieth

century, Robusta coffee became a tool of choice for bringing peasant farmers into the market economy: Uganda, the Belgian Congo, the Ivory Coast and Angola all produced significant amounts of Robusta. After World War II, the emergent leaders of African states also embraced Robusta cultivation as a vehicle for national development. In 1953, the future president of the Ivory Coast, Felix Hophouet-Boigny, enjoined his compatriots to "concentrate your efforts on growing good cocoa and coffee. They will fetch a good price and you will become rich" (Pendergrast 1999, 259). That decade, the Ivory Coast quadrupled coffee production to become one of the world's largest producers. In more recent years, the largest single story has been the emergence of Vietnam, which began promoting colonization and coffee cultivation in its central plateau in the early 1980s. In the ensuing three decades, Vietnam has overtaken Colombia to become the world's second largest coffee producer after Brazil. This expansion was driven by the Vietnamese government and often funded through bilateral aid programs (Doutriaux et al. 2008). The Robusta industries of Indonesia and Brazil have also grown rapidly during this period, and recently the Mexican government has announced its intention to expand Robusta coffee production in areas where Arabica coffee is not viable.

The point here is not to criticize the story of specialty coffee, nor to cast Robusta coffee as being somehow 'good'. Rather, it is to illustrate the power of stories to define what matters and what does not – and the risks that this carries. The dominant stories told about the global coffee industry these days tend to privilege a small segment of the whole, and to overlook or downplay some of the industry's most significant and dynamic sectors. The brief counter-narrative of Robusta presented above hints at the importance of taking this segment of the global coffee economy seriously, and exploring the opportunities for development work that it presents. More generally, it suggests the need to pay close attention to all narratives of development, and to attend carefully to the voices that are silenced as well as those that are sanctioned.

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# Harro Maat (University of Wageningen): 'The rice genome and its history; mutual benefit and policy implications'.

From a historical point of view, the role of research in agricultural development is quite recent. Following the establishment of agricultural research stations, agricultural schools and extension services in Europe during the nineteenth and early twentieth centuries, colonial powers introduced similar organisations in their overseas territories. Although examples exist of similar developments in other times and places, the historiography is dominated by studies on the colonial period and the involvement of post-1945 international development institutes. For understanding the evolution and development of rice, a plant in use as a food crop for several millennia, an emphasis on the last five decades or at best the last century of this longue durée process can only result in a partial understanding of that history. Therefore, looking back further in time is necessary for a better understanding of the history of rice as a food crop. This implies the opening up of a vast research area that so far is explored by very few scholars. For today's development challenges, the important questions include: what actors are involved in processes of changing cultivation patterns, introducing new rice varieties or changing the conditions in

which rice production and consumption takes place? From our current standpoint one might expect that state organisations and Western science are key players, but from a wider temporal perspective the various other actors, most prominently farmers and merchants, have been much more influential in shaping the rice crop and the ways it is cultivated. Who exactly these actors were and what they did is largely understudied (apart from Bray 1986, Boomgaard and Henley 2004).

Reconstructing the history of rice varieties and their cultivation can benefit from exchanges with bio-science disciplines. By combining historical information with information from botany and genetics, our historical accounts become more persuasive (for instance upon policy makers). In the case of rice, genetic techniques have already produced interesting insights into the origins of the different species and sub-species that make up the current genetic stock of rice across the world. Conversely, historical analysis can contribute to understanding the genetic evolution of rice by showing how this process is affected by a range of social, economic and political factors.

Genetics and history converge particularly around the domestication of rice, a process in which the characteristics of both the rice plant and rice-growing societies interact. Results from domestication studies using gene sequencing techniques and available genetic information has led to a debate about how and where Asian rice (*Oryza sativa*) originated and whether single or multiple events led to domestication. Such studies have immediate relevance for current rice-growing regions as they reveal important information about adaptation to particular climatic and ecological conditions. This is not to suggest that the history of rice growing societies can be decoded from genetic analysis but rather to suggest that the two fields can complement one another in the information they provide and to allow for cross-checking of evidence.

One issue for further exploration is the geographical distribution pattern of genetic information. The picture of human interaction with the agricultural and genetic development of rice can be studied in more detail for more recent periods. One way of doing this is to focus on the relations and exchanges between specific geographical regions. Take, for example, the Mediterranean and West-African regions. Rice is a native species in West Africa, though only with respect to O. glaberrima (also known as African rice). Domestication of this species took place in the inland Niger delta in Mali. Nowadays, African rice is grown next to, and often in combination with, O. sativa, the species from which both the indica and japonica subspecies are derived. In the Mediterranean region the rice varieties grown are all temperate japonicas of O. sativa. These varieties are well adapted to the climate of the Mediterranean. Common to these two regions is their connection with Asian rice-growing regions. Thus there is evidence that O. sativa, and with it rice cultivation, reached the Islamic world by the end of the first millennium. From there it spread further to West-Africa as well as Southern Europe (Glover and Higham 1996). In recent years work on the analysis of genetic variation in rice has been done for the Mediterranean as well as West-Africa.

This work is motivated by the idea that more information about the origins of rice varieties in the region can contribute to the improvement of rice cultivation and thus

contribute to the development of the rice-growing societies in these areas. Similarly, historical analysis exploring the origins and dynamics of the social, economic and political conditions that jointly shaped the evolution of rice in these regions can contribute to the improvement of conditions in today's rice growing societies. To do so, historians need to investigate further the histories of specific locations and regions as well as the exchanges between various regions. Where the features of the rice crop are determined by gene flow and local adaptation, the features of the rice societies are determined by the formation of patterns of social interaction and the institutionalisation of these patterns. The tools developed by genetic research and the information that has become available on the rice genome have opened opportunities to develop more detailed accounts of the interaction between genetic variation and cultivation methods.

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# Jonathan Harwood (University of Manchester): 'Do development programmes learn from experience? Experts reflect upon the early decades of the Green Revolution'.

Designing development projects which succeed in increasing agricultural productivity is not easy. Many observers reckon that most such projects since 1945 have failed. Under the circumstances it is obviously important that development planners should be aware of which past approaches have worked and which have not. There are scattered indications in the literature, however, that this has not generally been the case. A series of authors have complained that many development experts seem unaware of the success or failure of approaches pursued only a few years previously (Chambers 2005, Ferguson 1990, Porter et al. 1991).

Because this kind of evidence is important but remains anecdotal, I have explored this issue more systematically by examining an episode in which development experts sought to extract lessons from the first generation of Green Revolution (GR) programmes of the 1950s and '60s. As is well known, around 1970 a number of critics took the GR to task for failing to help peasant-farmers. If a programme was to reach most smallholders, they argued, it had to provide appropriate technology, and the political and economic background conditions within which a programme operated were also crucial. The question I asked was: how did green revolutionaries *respond* to this critique during the 1970s and '80s? What conclusions did they draw as to how future programmes should be designed so as to reach the small farmer?

Their first conclusion, unsurprisingly, was that the way in which programmes were organised was crucial. It was regarded as important, for example, that programmes should be decentralised. Just as necessary was that a programme's intended beneficiaries also needed to be organised since well-organised peasant-farmers were better able to voice their needs and lobby for resources. Moreover the agencies which sponsored programmes needed to take the long view; pressure for quick results was generally damaging. The second conclusion was that a great deal hinged on the attitudes among those who designed programmes as well as those in the field. Arrogance and an inclination to dismiss local knowledge had hampered more than a few programmes, and it

was sometimes compounded by a basic ignorance of the problems faced by small farmers. Third, some commentators complained that many programmes failed to take into account the political implications of development: for example, that projects aimed at resource-poor farmers were vulnerable to capture by local elites.

Although these reflections since the 1970s upon the strengths and weaknesses of the first generation of GR programmes yielded valuable insights, the odd thing about them is that for the most part they were not actually new. Nearly all of them can be found in successful development programmes from an earlier era: the interwar experience of some British, French and Dutch colonial agricultural officers; the remarkable agricultural development of Japan from about 1880 to 1930; and the Central European movement for 'peasant-friendly' plant-breeding from ca. 1900. Each of these episodes already displayed the 'hallmarks of success' later identified by green revolutionaries from the 1970s. Research and extension in Japan and Europe were decentralised, and in both regions much attention was devoted to organising small farmers. When initial attempts to use imported western methods failed, scientists in all three contexts turned to promising indigenous practices, improving them using scientific analysis. And in Japan and Central Europe elite resistance was not a problem since development programmes enjoyed strong state support from the beginning.

What, then, is the state of play at the moment? Have past lessons been learned so that current development programmes are now better tailored to the needs of resource-poor farmers than were those of the 1950s and '60s? The evidence is not encouraging. Over the last few years a variety of development experts have called, once again, for more attention to be given to the needs of small farmers (implying that this has not been a priority until recently). And over the last decade a series of reports issued by the World Bank, the International Fund for Agricultural Development (IFAD) and International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) have emphasised the importance of fighting poverty and hunger through targetting smallholders. Significantly, their recommended solutions all include empowering farmers' organisations, decentralising development efforts, stronger state intervention in many areas and technologies appropriate for the needs of smallholders.

Why, then, this apparent failure to learn from the past? It is probably too crude to say that development programmes don't learn from experience; like any institution, a programme is a differentiated entity whose members possess different interests, expertise and experience. Thus some parts of the organisation may be better informed about past programmes (or technical and political feasibility) than others, or more committed to poverty-alleviation. It seems plausible to think of a programme as a hierarchy consisting of three levels:

- 'experts' with field experience who provide advice to
- 'planners' who design programmes, sell them to the donor agency and to the host country, and oversee them, and

- 'decision-makers' who approve programmes (or not).

Once one disaggregates programmes in this way, it seems likely that those who are aware of past experience (experts) often face barriers to implementing that knowledge. Those who design programmes are often rewarded for getting them underway quickly rather than for making them effective. And those with the power to implement programmes may be indifferent to questions of efficacy because for them development projects are less a mechanism for poverty-alleviation than a political tool.

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#### Paul Richards (University of Wageningen): Commentary

At the Commonwealth Prime Ministers' Conference in Edinburgh in 1997 a delegation of the elected government of the West African state of Sierra Leone, exiled by a coup, presented to Tony Blair a plan of action intended to cover the first 100 days of its restoration to power. This was the exception that proves the rule - a policy document grounded in a careful reading of history. Post-war policy for the legitimate government of Sierra Leone in 1998 was modelled on British colonial policy. In 1898, for example, the British put down a rebellion in Sierra Leone and devised a scheme to make traditional chiefs the agents of a new pacificatory regime in the interior. For this, they recruited a new class of chiefs, willing to do the bidding of the regime while keeping the peace locally through tradition (whereby "tradition" included protecting the rights of a slave-owning elite empowered through war-lord control of 19<sup>th</sup> century trade). And in 1998? Once the civil war in Sierra Leone had ended (2000), a British aid programme funded an item on the elected government's 100-day plan – the restoration of chiefs to the countryside. Since then the contribution of these 'defenders of tradition' has been to facilitate a number of land deals involving agribusiness and biofuels.

My point in referring to this story is to inject a note of scepticism about the very idea of learning anything from history. Those we label "policy makers" are the servants of politicians, and this 'art of the possible' has little use for skills which scientists and scholars bring to the table. I hasten to add that this does not mean that the answer to the question 'What can development policy learn from the history of development?' is 'nothing'. My sense is that the real value of this question lies more in what science and scholarship can gain from careful comparison, rather than in any hope that policy makers pressed by contingency will pay attention to the lessons of history.

The three papers before us are indeed rich in implications for a global analysis of the role of science and technology in agrarian development, and the comparative lessons are especially enticing. I was immediately struck by an implicit link in all three papers concerning the Cold War, and wondered whether it would be useful to try and bring this to the surface more explicitly (cf. Paige 1975). I was thus particularly interested to learn from the McCook paper that the International Coffee Agreement emerged in the early 1960s, among otherwise impeccably free-marketeering commercial coffee interests, because of the fear of more Cuban-style communist revolts. This made me wonder whether we can separate out any study of global agro-technology development in this era

from international politics, as both West and East struggled to establish their own distinctive forms of global mercantilism. I would thus appeal for more cross-institutional analysis of plant sciences and crop development, tracing what is common to private and public sectors, and to the socialist and so-called "free market" sectors. Perhaps policy makers were not very interested in the lessons of history because they found themselves too preoccupied with some of the earliest pitched battles of globalization?

Harwood notes that the older Japanese and German systems were particularly good at responding to local signals about farmers' needs, in part because their scientists often had a peasant social background, which seems to imply that this is not true of, say, African research stations today. Paarlberg (2009) has recently given African governments a probably well-deserved bashing for their anti-science orientation in regard to their own food security needs. Many regimes do indeed behave with some of the mentality of an absentee rentier landlord, stashing the funds overseas, and allowing the peasant small-holdings to fall into rack-and-ruin for want of proper investment. But I would hesitate before extending the blame to the kind of personnel recruited for work in African research stations. Consistently, African agro-scientists have proven capable - when given a chance - of rethinking their task along lines that would exactly fit the best-practice models in Japan and Germany.

The papers for this session were decidedly rich, but I was a bit surprised to note how little scientific issues come into the stories told. The battle for and against Robusta coffee unfolds on an epic scale – but where is the science? No breeding? No genetic engineering to resolve the disease problems? No agonies over modelled predictions of imminent climatic catastrophe? I also wondered whether the case for the decentralization of breeding was as simple as portrayed in the Harwood paper. For it seems to overlook the importance of phenotypic responsiveness to a broader or narrower set of environmental conditions (Stearns 1989). For example, green revolution breeders discovered broad adaptation through shuttle breeding and turned it into a trade-mark speciality, and broadly and narrowly adapted varieties are known among farmer crop types as well. There are thus strengths and weaknesses associated with both widely and locally adapted plant types.

So, what is the bottom line? Development policy makers have quite blatantly ignored the agricultural sector for the best part of 20 years (other than to assert that commercial biotechnology would solve any outstanding agrarian problems). In the past few years, however, attitudes have started to shift, and poverty-alleviation is again on the agenda. Is it thus time to try and distil the lessons of agrarian history? Rather than trying to catch the ear of policy-makers, it may be more useful for historians to try to establish links with a user community comprising both agro-technologists and peasant farmers, appealing over the heads (or beneath the gaze) of those who engineer policy. Perhaps the latters' incapacity to make use of history is actually an asset, leaving the field clear for those determined to pursue other options?

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#### Discussion

The formal presentations were followed by a lively and wide-ranging discussion that confirmed that historians and development academics have much to say to one another. In summarising these discussions, we can identify three distinct but related themes:

First, any evaluation of the success or failure of previous agricultural development initiatives may depend heavily on what historical or sociological perspective one adopts. Early critiques of Green Revolution initiatives were generally based on a short-run assessment, but longer-run developments have problematised these critiques. While such initiatives generally failed in meeting their professed aims of promoting rural development and alleviating rural poverty, for instance, they appear to have been more successful in feeding urban populations and thereby supporting industrialisation. Effective evaluation may also need to consider conflicting aims, for instance where bringing marginal land under production may pose a threat to biodiversity or ecosystem services. Evaluation should also take account not just of factors such as crop yield and productivity, but also issues such as social organisation and infrastructural development. Retrospective evaluations may thus need to be extremely complex, and to take account of a number of different perspectives.

Secondly, the course of any particular development initiative my be profoundly influenced by the organisation and internal politics of the various agencies involved. Historical accounts of such initiatives may therefore need to take account of a wide range of social and institutional factors including, for instance, the rapid turn-over of ministers and civil servants, the influence of 'street-level bureacrats', and the often different views adopted by different actors within a single organisation. However, historians wishing to develop analyses at this level of detail may face serious problems of access as governments and development agencies close their doors in the face of continuing criticisms of development policy.

Thirdly, at the opposite end of the micro-macro spectrum, large scale economic and political factors may also be crucial. The dominance of neo-liberalism in policy means for instance that research for agricultural development tends to follow commodity prices rather than need. At the same time, the global politics of market structuration and the continuing influence of the global North remain crucial in determining commodity prices. Historical accounts of agricultural development will therefore need to attend to such factors, as well as to institution-level structures and politics.

Finally, if historical analyses are to impact on policy itself, historians will need to consider what kinds of narratives may be effective in capturing policy makers and development practitioners. Policy-makers, in particular, appear to suffer from systematic amnesia and highly selective remembering. History is commonly understood to start at Bretton Woods, while the ascendancy of neo-liberalism and the rejection of the role of the state have led to the writing-out of previous histories. Meanwhile, new organisations, especially those such as the Gates Foundation which place particular emphasis on the role of science, appear equally uninterested in learning from history. It seems that policy makers tend to favour simple causal stories and linear narratives at the expense of more

complex analyses, while long-term historical perspectives may be of little interest for agencies concerned with securing quick results.

Continuing dialogue between historians and policy academics offers one way of developing shared narratives that can be used to counter the short-termism, linear thinking and neo-liberal assumptions that continue to underpin much development policy and practice. It is clear that development policy cannot continue as at present, and the time may be ripe for alternative narratives to secure acceptance among policy makers and practitioners alike. The organisers of this workshop are already planning ways of taking forward these discussions, and we will welcome input from any readers of Food Security who wish to contact us.

#### References

Bray F (1986) The rice economies: Technology and development in Asian societies. Oxford: Blackwell

Boomgaard P, Henley D, eds (2004) Smallholders and stockbreeders: Histories of foodcrop and livestock farming in Southeast Asia. Leiden: KITLV Press

Chambers R (2005) Critical reflections of a development nomad. In Kothari U ed. A radical history of development studies: Individuals, institutions and ideologies. London: Zed Books: 67-87

Cronon W (1992) A place for stories: Nature, history, and narrative. The Journal of American History 78: 1347-1376

Doutriaux S, Geisler C, Shively G (2008) Competing for coffee space: Development-induced displacement in the Central Highlands of Vietnam. Rural Sociology 73: 528-554

Ferguson J (1990) The anti-politics machine: "Development", depoliticisation and bureaucratic power in Lesotho. Cambridge: Cambridge University Press

Glover IC, Higham CFW (1996) New evidence for early rice cultivation in South, Southeast and East Asia. In Harris DR, ed. The origins and spread of agriculture and pastoralism in Eurasia. London: UCL Press: 413-441

Jaffee D (2007) Brewing justice: Fair trade coffee, sustainability, and survival. Berkeley: University of California Press

Luttinger N, Dicum G, (2006). The coffee book: Anatomy of an industry from crop to the last drop. New York: The New Press, revised edition

McCook S (2006) Global rust belt: *Hemileia vastatrix* and the ecological integration of world coffee production since 1850. Journal of Global History 1: 177-195

Paarlberg RL (2009) Starved for science: How biotechnology is being kept out of Africa. Cambridge, Mass. & London: Harvard University Press

Paige J (1975) Agrarian revolution: Social movements and export agriculture in the underdeveloped world. New York: Free Press

Pendergrast M (1999) Uncommon grounds: The history of coffee and how it transformed our world. New York: Basic Books

Porter D, Allen B, Thompson G (1991) Development in practice: Paved with good intentions. London & New York: Routledge

Stearns SC (1989) The evolutionary significance of phenotypic plasticity. BioScience 39: 436-445