18. Agricultural Contracts

DOUGLAS W. ALLEN and DEAN LUECK

1. INTRODUCTION

It is somewhat surprising that academic economists are interested in agricultural contracts given their otherwise urban affiliations. No doubt this interest arises because farming has historically been the fundamental economic enterprise of mankind. Its omnipresent place in our culture makes it a familiar context to couch otherwise abstract theoretical models. Thus we find casual reference to landowners and tenant farmers in economic theory (e.g., Sappington 1991) and, indeed, the modern theory of contracts developed in this context.[1] There is also a seemingly disproportionate amount of attention paid to agricultural contracts in literatures dealing with economic institutions. Again, this partly stems from agriculture having always been with us. Adam Smith could hardly have written about restaurant franchise contracts, but he, John Stuart Mill, and other classical economists concerned themselves with the contracting and organization of farming.

Agriculture, says Webster's Dictionary, is "the science and art of farming" and the term typically refers to a sequence of biological production stages, which in the broadest interpretation, could run from breaking land to restaurant services.[2] More typically, agriculture is thought of as a narrower set of stages than these, usually from land preparation to food processing. Still others consider agriculture to span only those production stages controlled by the "farm". Figure 1 presents various stages of production for a generic crop—animal or plant—and draws attention to the arbitrariness of what is meant by "agriculture," since drawing a firm boundary at any given stage seems almost *ad hoc*. Figure 1 also shows that the range of farm production activities has narrowed over time. In 1800 the typical North American farm would have broken the land, produced its own seeds, and carried production through to some form of crude processing and, in many cases, to marketing as well. Today, what we normally think of as "the farm" is a firm that essentially controls just the narrowest growth-based biological stages of production. For example, a wheat farmer plants the seed,

[1] In fact, the theory of contracts really begins with Cheung (1968) and Stiglitz (1974) and their analyses of cropshare contracts.

[2] See Webster's *New World College Dictionary*, 3rd. Edition, 1997

C. Ménard and M. M. Shirley (eds.), Handbook of New Institutional Economics, 465–490.

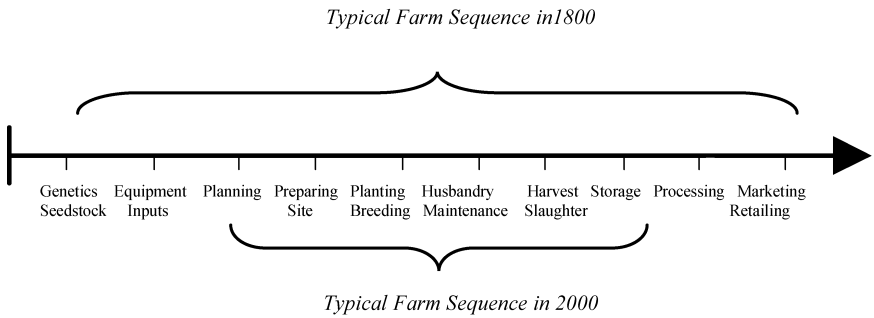

Figure 1. The extent of agricultural production.

controls pests, and harvests the wheat. Seed development, storage, and milling into flour are routinely undertaken by separate enterprises.

The distinction between the growth-based biological stages and the other manufacturing stages is important. In this chapter, we focus on the contracts that exist over these particular growth-based biological stages. We do this for several reasons. First, our expertise lies in these stages of agriculture. Second, our data are concentrated here. And finally, for reasons that will become apparent, the contracts that exist outside of these stages generally have more in common with contracts found elsewhere in the economy, and are less unique to farming. Although we make some effort to discuss agricultural contracts over a broad number of stages, and some attention is given to international contracts, there remains a focus on the farming contracts found in North America. Still there is reason to believe the issues we examine will have application elsewhere and agriculture and other sectors of the economy.

Agriculture within the biological range, to a greater extent than most other forms of modern production, is heavily linked to Nature, and this linkage importantly affects the institution of agricultural contracts. Here 'Nature' refers to the aggregate of natural forces that can influence the outcome of agricultural production and includes the forces of climate and weather, pests, seasons, geology, and hydrology. In the aggregate, Nature not only generates random havoc and blessings on crops and livestock, but Nature also restricts the ability of farmers to specialize and exploit the gains from specialization.

In many cases the constraints of Nature, coupled with social and economic forces, lead to rather simple contracts.[3] For example, contracts between farmers and landowners tend to be enforced through the use of reputation. When agriculture includes the non-biological or non-growing stages of production, or when production is designed in such a way that Nature's role during the growing stage is minimized, contracts tend to become more complex and the organizational structure of the farm tends to move from simple family farms

[3] What is not explored here is the possibility that Nature's incentives are the root cause of the social and economic structures of farm communities, which in turn, influence contract structure.