Nick Tsichlis EAS 564 11/13/20 Farming for the Long Haul: Resilience and the Lost Art of Agricultural Inventiveness

Summary

In this reading small farm owner and educator Michael Foley argues that the loss of small, localized agriculture through industrialization and our contemporary profit-driven economic model has created a situation in which we are acutely vulnerable to the challenges our civilization will face in the future. In order to create food systems which are capable of surviving economic and environmental shocks, to maintain sustainable communities which do not degrade the land we depend on, and to restore dignity to farmers and their families, we must advocate for a "subsistence first" approach to agriculture and land management. Creating truly resilient societies will require reexamination of our priorities and a shifting of focus from "production at any cost" to familial health and community wellbeing. We are reaching the end of the fossil fuel era and are beginning to experience the impacts of climate change and disruption, and Foley states that it is imperative that we use the coming decades to educate ourselves on the successes of past civilizations and creatively apply those lessons to our contemporary society. The knowledge we glean from such experiences will be invaluable in our fight to address the growing inequalities in our world, to rebuild our small towns and communities, and to create a world in which we enjoy long term economic and environmental stability.

To build successful, resilient small farming communities that future generations can depend upon, Foley insists that we abandon the current, dominant, profit-driven model of agriculture. Rather than focusing on making money and contributing to a surplus, successful farming cultures have traditionally relied on their farms and surrounding land to support them through periods of climactic, economic, and political uncertainty. Foley explains that, for thousands of years, farmers have understood the trade-offs between profiting in the short term and the economic stability associated with resilience (3). Traditional farming communities are regarded as primitive for their dedication to personal subsistence, natural resource management, and community, while contemporary American farmers have been forced to participate in markets which are influenced by speculation and geopolitics, leading them to the embrace large scale, mechanized agriculture. Such farming practices have denigrated their economic and social livelihoods as well as exhausted the ecosystems they depend upon. Foley elaborates that "in seventy years of ruinous farming practice, industrial farming has exhausted our soils, poisoned groundwater and a large portion of the Gulf of Mexico, and provided the basis for a food culture that is making most of our population sick" (6). He presents an alternative vision: returning to an equilibrium that supports our civilization sustainably by overhauling our food systems with a focus on rebuilding our relationship with the land, while also empowering a new generation of small scale farmers to create their own localized systems.

To accomplish this shift, Foley stresses the importance of proactive diversification of the landscape and the need for a fundamental reorganizing of the power structures in society. He explains that the agricultural markets of today (of which farmers are unwilling, mandatory participants) are unresponsive to the diverse needs of the communities which they extract resources from. The present-day relationships between farms and corporations obscure the fact that for thousands of years the social order of societies facilitated the resilience of producers before anyone else. Rather than focusing on cultivating single crops on vast expanses of land with the assistance of machinery, "farming for the long haul" depends on optimizing every inch of the land for a diverse set of purposes. Through

pressures derived from profit-driven business models, farmers across the globe have been encouraged to abandon time-honored agricultural practices infused with rich traditional ecological knowledge in favor of simplified systems with decreased genetic diversity, weakening and sickening their land and fostering new dependencies on fragile and unsustainable multinational markets (29). Foley provides examples of small farms, which thriftfully exploit ecological niches, that have proven to be far more productive per acre than their conventional counterparts and are intrinsically independent from fossil fuel inputs. They also inherently aim to increase species diversity across the landscape and genetic diversity within the arena of cultivated crops, strategies which are of foundational importance in the development of diverse farming systems capable of buffering future ecological shock waves (42). Rediscovering the value of such practices will be instrumental in our quest to build future societies which are capable of reliably feeding their populations with tools and practices that are not products of our current resource dependence.

<u>Overlap</u>

This book presumes that the reader is familiar with concepts underlying resource decent scenarios. Throughout the text, Foley posits that the causes of our current ecological and economic predicaments are multifactorial and are the product of years of environmental neglect and political manipulation. If we continue to consume resources at current rates, world fossil fuel reserves will be depleted within the next century. Other natural resources, such as topsoil, are also on such a trajectory. With the effects of climate change threatening to ravage the globe and upend societies, he suggests that our most promising course of action is to proactively enhance our capacity for resilience through expanding the adaptability of our farming practices (11). In this context, resilience refers to qualities which allow for something to exist and even thrive while undergoing drastic change, and there is a correlation between resilience in farming systems and resilient land management practices. Foley elaborates: "And that means that the people who farm must themselves be resilient—that is, they must be able to reorganize in the face of negative feedback or even collapse; they should be able to bring new and old ideas and techniques to new circumstances; and they must do so on a trial-and-error basis, making choices that can contribute to continued resilience" (13). Agreeing with other academics, Foley recognizes that the only way to adapt our civilization to thrive on vastly decreased levels of energy and material throughput without experiencing outright collapse is through mass experimentation performed by individuals and at the community level. Encouraging small-scale farmers to develop their own tools to adapt to changes will reduce the relevance of techno-optimism in the social discourse, which implies that through increased technological innovation we can engineer our way out of impending peril. Mechanized farming is not necessary to feed the world, and major changes must be made from the bottom up to address the systemic issues that plague our civilization.

Value Added

Foley offers a unique historical perspective on conventional agricultural practices, analyzing the industry from it's development in the late 1800's to its full cultural acceptance in post-WWII America. He emphasizes that while industrialized agriculture has become the dominant source of food production worldwide, that outcome has been costly for the planet and its inhabitants. The impacts of the degradation of land, the ruining of livelihoods, and the upending of established, multigenerational communities have not been taken into account by economists and politicians, who instead have focused on narrow, profit-driven models of success (19). Because small, resilient farms produce primarily for

their own survival they have been written off as anachronistic, and their proprietors have been relentlessly pushed into the arena of unsustainability by those with alternative motives. Foley explains: "The winners will always be the bankers, tractor manufacturers, chemical and seed companies, and, of course, that legion of agricultural advisers, including business advisers, so willing to help us out. When farmers fail these folks go on with their jobs, which have always paid more than the average farmer earned in any case. For farmers 'acquiring business skills' has too often left us with debt, diabetes, and the death of our dreams" (22). Returning to the "subsistence first" model will require a thorough rejection of the destructive and exploitive practices we have become reliant upon and a return to paradigms which promote diversity and autonomy in the agricultural landscape.

Throughout this book Foley emphasizes the importance of equal access to land in achieving long-term sustainability. He provides multiple historical examples of widespread, sustainable, communal land-use practices and illustrates how society has evolved away from that paradigm. Indeed, a negative byproduct of the industrialization and commoditization of agricultural systems throughout the last several centuries has been a shift in the culture of land ownership from systems that recognize the value of communal land as an environmental intermediary and as the source of sustainably extracted of non-farm goods to systems of privatized land ownership. The concepts of private property rights and of land as a speculative commodity, established first in seventeenth century England and expanded upon through western expansion in the United States, have systematically created land access issues in every culture which they have been adopted (54-56). Because the ownership of private property carries risks of loss, generations of farmers have been forced to produce high value crops for distant markets on every inch of their land, sacrificing other components of the farm landscape which historically have enabled resilience and a stable livelihood for themselves and their families. When farms fail because of market forces outside of their control, they are often incorporated into larger conventional systems which amplify these same issues.

Subsistence first farming, once at the heart of civilization, has thus been relegated to the periphery of the system and to land less suitable for sustainable farming practices (70-71). The cultural practices that resulted in the equitable redistribution of land through generations have been lost in our privatized world and this continues to have innumerable consequences both environmental and on quality of life. Additionally, because traditional societies supported their familial structures over generations through subsistence agriculture, embracing practices that resulted in land degradation and soil depletion simply were not an option. Historically, cultures around the world have understood and employed soil conservation tactics and other regenerative land management strategies, however philosophical shifts and governmental regulations relating to land use and ownership have been critical in shortening that perspective (80). Foley contends that rapid technological innovations, which are reliant on unsustainable inputs, and cultural ignorance to the benefits of traditional farming cultures have exacerbated this trend. The resulting destructive feedback loop has contributed to the poisoning of our environment, a dependence on resources from distant locales, and a hollowing out of community structures across the world.

To address these issues and revive localized, regenerative agriculture in our communities, Foley explains that we must alter our consumption of resources and embrace a "whole farm" approach to systems management that accounts for the less quantifiable benefits of non-production focused elements of a small farm. For thousands of years farmers have employed creative solutions to address sustainability issues such as genetic diversification of seed stock, water conservation, non-industrial season extension methods, and communal woodland management tactics (102-122). Along with the

revival of these concepts we must recognize that resilient farms do not dominate their environments, but rather are "a series ecosystems inside ecosystems", interconnected and reliant on each other for functions and services (135). The productivism-oriented mindset of our current culture does not consider these benefits when evaluating systems and thus overlooks resilience and other quality of life factors when determining the efficacy of farming systems.

Perhaps the keystone argument in this book, Foley details how a revival of subsistence first farming will also necessitate a return of personal resilience; the ability of farmers to think, relax, and reflect on their livelihood which has been absent for years as a result of our profit-driven system, where a privileged few benefit from the work of innumerable masses of producers. He arrives at the conclusion that learning the practice of farming is important, but equally important is learning how to build and live in a culture that supports agricultural labor at a farm level. Farmers will require supportive communities, and larger societal structures and networks will be necessary for collective problem solving and to maintain social order on a larger scale (150-151). Embracing these changes are essential to reestablishing robust communities in rural areas where the industrialization of agriculture has rendered populations dependent on unfulfilling and exploitative jobs and lower quality food products from distant locations for survival, while simultaneously depriving them of meaningful livelihoods and a connection to land and community (166-167). In recent decades economic conditions of which individual farmers had no control often resulted in situations where increased mechanization and "scaling up" was their only option for survival. These changes have come at the expense of the "whole farm" and the independence of small farming communities and have resulted in a mass migration to cities and the loss of a vast amount of traditional agricultural knowledge. Building back these communities from the bottom up will require a commitment to the principles of sustainable agriculture and a willingness to embrace concepts long abandoned by contemporary society.

The process of correcting our cultural and environmental missteps will be arduous and will involve a great deal of experimentation and debate. By rediscovering value in community structures which have long been considered expendable in the pursuit of agricultural surpluses and profits, Foley disproves pervasive cultural myths regarding individuality and self-reliance. As Foley elaborates: "We can openly attack the presumption, so widespread in American rural culture, that families do not owe a start to their children, that Junior must pay full market price to take over Grandma's place. We can build collective vehicles for providing farmers with access to land, cooks with access to kitchens, and all of us with access to real health care" (157). The path to a sustainable future will require a reversal of course in multiple societal arenas and recognizing the role that localized agriculture will play in that transition will be vital in order to secure a healthy, equitable, and just society for generations to come.