Resilience Principles

In a world of rapid change, resilience is the key to products, processes, and organizations that have staying power. It’s the capacity of a system to withstand unexpected shocks, to repair itself when necessary, and to thrive when conditions are right. The underlying assumption of resilience is that, yes, failure happens, but it is possible to design systems that can quickly bounce back from failure. When applied to the worlds of food and agriculture, resilience is the capacity of our food networks, relationships, technologies, and industries to continue to provide nutrition to the world during radical, even unprecedented, environmental and economic disruptions. In this century, our ability to foster resilient food systems will be essential, not only to our organizations, but to human survival. The principles of resilience thus provide the rules of thumb for anyone who is responsible for designing or managing activities within the the global food web.*

FLEXIBILITY
Be ready to change your plans when they’re not working the way you expected; don’t count on things remaining stable.

DIVERSITY
Not relying on a single kind of solution means not suffering from a single point of failure.

DECENTRALIZATION
Centralized systems look strong, but when they fail, they fail catastrophically.

COLLABORATION
We’re all in this together. Take advantage of collaborative technologies, especially those offering shared communication and information.

TRANSPARENCY
Don’t hide your systems; transparency makes it easier to figure out where a problem may lie. Share your plans and preparations, and listen when people point out flaws.

FORESIGHT
You can’t predict the future, but you can hear its footsteps approaching. Anticipate and prepare.

GRACEFUL FAILURE
Failure happens, so make sure that a failure state won’t make things worse than they are already.

How To Use This Map

Explore the layers of the Food Web 2020 map to build an interconnected view of the next decade. Each layer builds on the next and together they reveal an increasingly complex yet vulnerable food system that continues to evolve and respond to an ever-increasing number of disruptions. Collapse scenarios abound as its capacity to withstand shocks is precarious. Yet a geography of innovation spans the globe as different stakeholders—from individuals to communities to organizations—respond to today’s disruptive forces.

DISRUPTIONS
These are the forces—from cost volatility to environmental emergencies to taste imperatives—that will reshape the food system as we know it, both through their direct impact and through local, regional, and global responses to them. Each disruption will push stakeholders at every level to rethink food systems as the collective impact of all eight disruptions will demand new kinds of responses and innovations at different scales.

ACTIVITIES
Think of these as six broad areas of connected activity in the food system. If the disruptions are driving change in the food web, then these activities describe—and help us locate—their impact. They include agriculture and stewardship, distribution and logistics, manufacturing and branding, retail and information, consumption and taste, and disposal and renewal.

RESPONSES
Across these activities, stakeholders around the planet are responding to today’s disruptive forces. This layer of the map reveals a geography of innovation which is populated with signals of the kind of responses individuals, communities, and organizations are engaging in that will redefine, redirect, or reinvent the activities which make up the food web as we know it.

FORECASTS
The emergent food web will evolve, as the disruptive forces demand innovative responses across all the activities that make up today’s food system. These five forecasts offer a set of directional shifts that begin to characterize the emergent food web in the year 2020.

This map identifies the critical foresight that will demand strategic responses from your organization and other stakeholders in the food system. Think of this map as a tool and framework for anticipating change before it happens. The map is also a digital tool for exploring the emergent food web using the online presentation tool Prezi (http://prezi.com). Online you can access additional visual examples, data, and text. Visit www.iftf.org/FoodWeb2020 to view the completed online map.

* To give you a sense of how broadly the concept of resilience has spread, these principles come from “The Next Big Thing: Resilience” in the May/June 2009 edition of Foreign Policy.