

Economic Clusters

The Art and Science of Making Them Work

Community Futures Alberta

Cluster Development is one of the most effective strategies for assisting with rural diversification. Economic clusters may be defined as groups of like, related, or interconnected businesses that form a significant economic unit within a concentrated geographic area. Clusters are based on unique strengths and unique products and services. The firms within an industry cluster can compete with, complement or rely on each other through both formal and informal relationships.



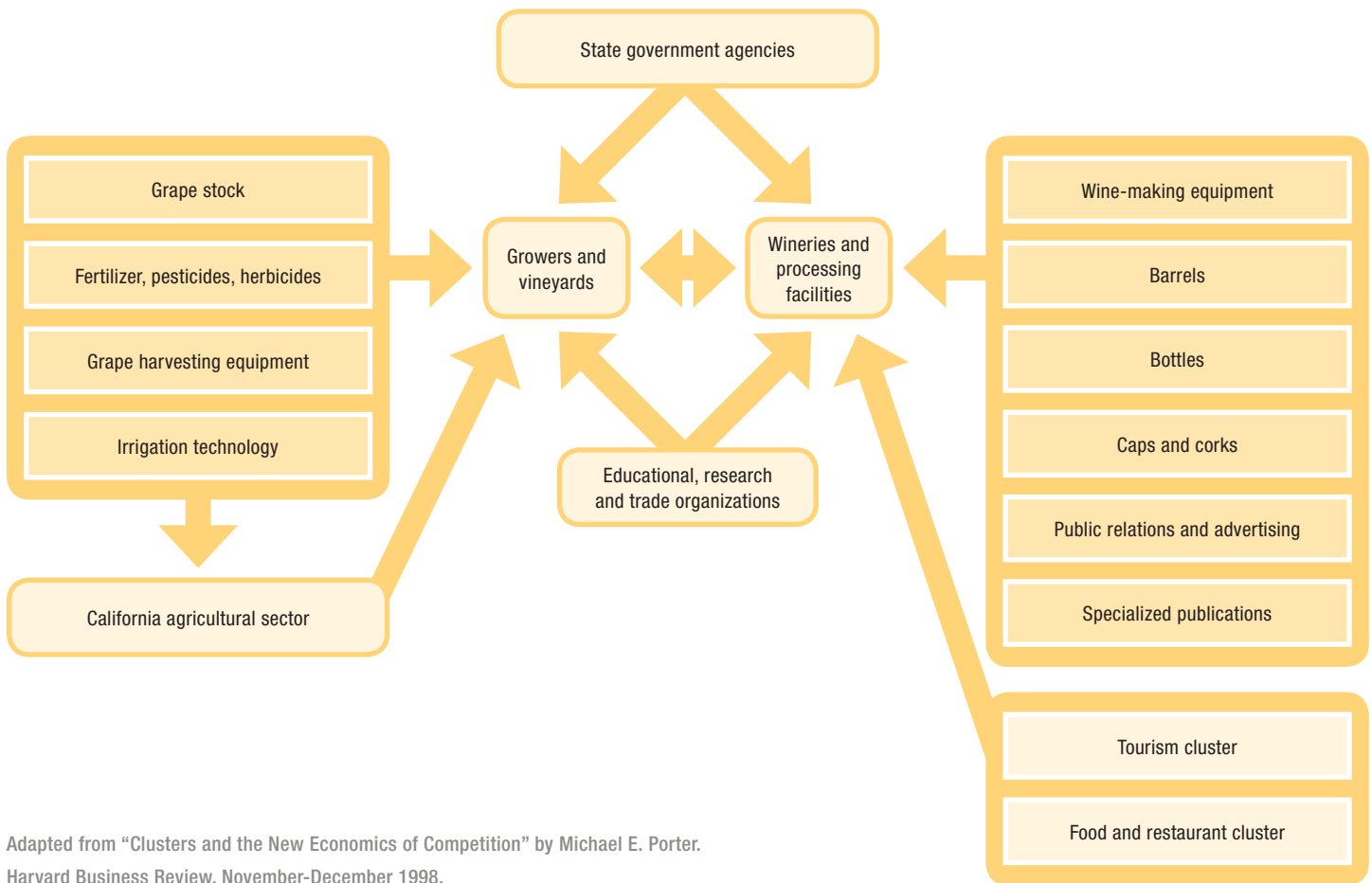
There are three forms of clustering:

- Horizontal – similar firms from the same stage in the value chain in the same industry co-locate in a region. Think tomato growers or antique dealers on the same street in a town.
- Vertical – the co-location of firms operating at different stages in an industry’s supply chain. Think about independent grape-growers supplying local wineries that are co-located with warehousing, distribution, and specialized transportation businesses.
- Diagonal – here, each firm adds value to the activities of others, even though their products are quite distinct and clearly belong to other industry classifications. This kind of clustering is very common in tourism where the entire visitor package could include recreation, accommodation, museums, antique dealers, food and beverage services, industry tours, etc.

Industry clusters serve as a means to increase rural diversification and can indeed increase

the region’s overall competitiveness, especially as it relates to staking out a place in the global marketplace. Traditionally, rural areas see cluster development as largely focused on specific natural resources, location or lowered capital costs. However, by strengthening strategic linkages, building alliances and encouraging collaboration, cultivating rural niche clusters (and micro-clusters) can assist communities in reaching well beyond their borders and building clusters that diversify the economy.

Increasingly, economic clusters are also defined by the intellectual capital within an industry: the knowledge and innovation of processes, technology and product or service development at the core of the sector. For rural diversification practitioners, promoting clusters provides the ability to nurture sector-specific entrepreneurial spin-offs, encourage continuous product innovation and create a host of ancillary industries that both support and advance local economic development.



Adapted from “Clusters and the New Economics of Competition” by Michael E. Porter. Harvard Business Review, November-December 1998.

Building effective clusters is both an art and a science. Complex mathematical formulas can be used to calculate and extrapolate industry cluster formations. However, equally telling non-scientific methods – such as mapping out production channels – are within the reach of rural communities. Drawing on either the empirical analysis of NAICS industry codes or, simply, on existing local wisdom, can start the process of identifying existing groupings of inter-related businesses within a community.

Mapping production channels requires identifying upstream and downstream businesses for an industry sector within a defined geographical area. It is important to identify businesses both within and outside the formal confines of the community.

As an example, when Michael E. Porter pioneered modern industry cluster theory, he presented a cluster map of the California wine industry that included activities that ranged all the way from growing the grapes to serving the bottled wine in a restaurant. Through cluster mapping Porter illustrated all of the various linkages that connected the industry sector.

Several secondary benefits may result from examining a production channel map. For example, a sub-cluster or micro-cluster may be found, or gaps in the production channels may be identified. Both of these may lead to the development of strategies for recruitment and promotion of the industry sector that would have been neglected otherwise.

This more targeted approach to business recruitment is what has led many larger urban centres, provinces and states to use cluster identification in laying the groundwork for economic development policies. Resources can be targeted towards strengthening specific strategic linkages rather than embarking on “one-off” industry recruitment. Furthermore, existing business within the sector can be supported in the process. For rural communities the advantages of cluster support and development are no different.

In some sectors, industry clusters provide benefits that far outweigh the threat of competition. For example, Silicon Valley’s high-technology and computer cluster is the “place to be” for related companies, regardless of the cost of real estate and other factors which would otherwise negate the value of locating so close to competitors.

Clearly, successfully building effective clusters also requires finding and nurturing relationships with firms that have cluster potential. Firms that would benefit from the sharing of resources, including the mobilization and concentration of a specialized labour force within a geographic area, are potentially good partners for existing businesses. This type of focused partnership enhances cluster development. Indeed, cooperative relationships within the cluster are key; without them knowledge transfers cannot effectively occur across the cluster’s composite firms.

Providing entrepreneurial support within industry clusters is also a strategy well within the reach of rural diversification practitioners. Clusters become more competitive and productivity increases because of the inherent sharing

of best practices, labour pools and training resources. Tapping into this existing intellectual capital through micro-enterprise development, or cottage industries, further supports the industry sector while also creating new opportunities for employment, local economic growth and diversification.

While governments and economic development organizations clearly benefit from an industry clustering approach, especially by leveraging resources in promotional efforts, industries within the clusters also reap the rewards. In addition to increasing overall competitiveness, clustered industries can form collaborative marketing partnerships, leverage funds and increase exposure in the global marketplace.

Furthermore, opportunities for joint ventures, knowledge spillovers and sharing, and labour market pooling may also occur more readily. Entrepreneurs may also find that launching a new venture within an existing cluster provides them with access to an established knowledge base and to professional and social support networks. Consequently, needed expertise is more readily within their reach.

While some industry clusters form virtually on their own, others may require more deliberate and ongoing cultivation and promotion in order to reach the stage where collaborative competitiveness can occur. Key to this is diversification within the cluster, the development of cooperative relationships and entrepreneurial support. Using local intellectual capital, creating and supporting key linkages and filling the production channel gaps supports and promotes effective economic clusters.