

Cluster-Based Economic Development: Examples from Armenia

The first annual Armenian Competitiveness Report (ACR) highlights the role of clusters as a powerful engine for economic growth. In order to understand how clusters function in practice and the kinds of economic benefits they can deliver, we will examine Armenian clusters in tourism, information technology, and pharmaceuticals. A greater understanding of Armenia's existing clusters can help Armenia understand how nascent clusters might be supported in other industries.

Introduction

Clusters, or geographically proximate groups of related companies and supporting institutions, have proven to be a powerful tool for economic growth because they take advantage of existing synergies and complementarities between these entities. Clusters are observable worldwide; some of the best-known examples include Silicon Valley in California, the Italian leather and footwear cluster, and pharmaceuticals in Switzerland. Clusters allow for greater communication and cooperation between firms and their suppliers and partners, thereby promoting and reinforcing linkages that cut across firms and industries.

Early cluster development efforts have begun already in Armenia. With the assistance of the USAID-funded Competitive Armenian Private Sector (CAPS) project, cluster initiatives are underway in tourism, information technology (IT), and, more recently, pharmaceuticals. Although work with the pharmaceuticals cluster is just beginning, work with both tourism and IT has shown measurable impact in job creation, sales, and exports. We will examine each of the cluster efforts.

The Tourism Cluster

Tourism makes up about 15% of Armenia's total export earnings. Armenia faces several obstacles to further development of its tourism industry, including the appreciation of the Armenian dram, the increasingly demanding nature of global travelers, the inadequate state of much of Armenia's tourist infrastructure, and lack of a national "brand". However,

many opportunities are also available, such as its unique historical, cultural, and natural resources; its small industry size, which allows it to more easily improve levels of satisfaction and service quality; and its nature as a little-known destination, which may be appealing to travelers seeking something new and different.

In the tourism cluster strategic plan, developed by the project cluster members and the CAPS project, seven key interventions were identified. These included 1) adoption of a tourism industry vision, 2) strengthening of the tourism cluster, 3) engaging in product and market development, 4) employment of targeted promotion techniques, 5) improvement of education capacity and workforce skills, 6) improvement of access to facilities, services, and safety, and 7) enhancement of the business environment, business institutions, and business practices.

Aligned with these more general objectives, the project has carried out a number of specific activities. Two of the most successful cluster-wide initiatives have included 1) a strategy to specifically understand and target the Italian market in an attempt to find higher-value customers, and 2) market research to enhance the cluster's ability to make informed decisions and better understand customer needs and the nature of demand (including research on Armenian diaspora tourists, an international visitor survey, benchmarking of competitiveness, and geographical and activity-based market research).

To date, according to data supplied by the CAPS project, cluster initiatives such as those mentioned above have resulted in sales increases of \$317 million, an increase of 49% among cluster members; 7% employment growth, resulting in the addition of 1,584 new jobs in the industry; and export growth of 30%.

The IT Cluster

The IT sector makes up approximately 6% of total Armenian exports and approximately 2% of GDP. IT and research and development

also accounted for approximately 3% of total FDI between 1998 and 2005. While Armenia boasts relatively strong technical capacity and diaspora connections it, like tourism, has been struggling recently with the appreciating currency, which has been impairing its cost competitiveness. This has created an incentive for Armenia's IT sector to move up the value chain into higher value-added products rather than those that rely on inexpensive labor.

The IT strategic plan lays out four goals: 1) to target and develop markets systematically by identifying and pursuing specific geographic, product, and customer segments, 2) to develop human capital by strengthening feedback loops between industry and targeted learning institutions, 3) to improve the business environment and core infrastructure via policy reform, and 4) to strengthen the IT cluster by improving the regularity and promotion of stakeholder meeting opportunities.

Like the tourism cluster, the IT cluster has converted these goals into specific actions that would benefit cluster members. For example, the cluster recently held the "DigiTec 2007" exhibition, which was designed to link Armenian and international companies – among the 47 participants included Microsoft and IBM. The exhibition also featured the presence of the Armenian government as well as several Armenian educational institutions. In addition to the opportunity for generating sales leads, the exhibition provided cluster participants with an excellent opportunity to observe the latest technologies, as well as giving Armenian companies a chance to speak with sophisticated customers to better understand market demand.

Other successful initiatives include the IT career fair, which linked students with recruiters from firms in the IT field to foster university-industry linkages; and the ArmTech Congress, a diaspora event held in San Francisco, California designed to allow Armenian companies to showcase their products and services and meet potential investors and business partners. Work with the IT cluster to date has resulted in 12% employment growth (with over 500 jobs created); 16% sales growth (a total of \$97 million); and 23% export growth.

The Pharmaceutical Cluster

The success of the cluster initiatives program has led to a new cluster program with a third promising cluster, pharmaceuticals. A work plan for the cluster is being finalized now and activity is projected to start at the beginning of 2008. Initial activities are expected to include support to the government to implement good manufacturing practice (GMP) standards and assistance to companies in adopting them; development of a strategic development plan to enhance the association's sustainability by increasing its responsiveness to its members' needs; and assessment of the perception of Armenian generic drugs on the local market as well as identification of key foreign markets.

Concluding Thoughts

Armenia's experience to date illustrates some of the ways that a country can benefit from support of nascent clusters. Clusters, when nurtured properly, can be an important part of a country's strategy for economic development. Armenia should make the support of clusters a central component of a comprehensive approach to enhancing its competitiveness.



The contents of this article are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.