Aerotropolis Ambitions

John D. Kasarda

India's burgeoning economy has led to rapidly rising household incomes generating a burst in air travel, both domestic and international. From 2004 to 2007, commercial aircraft enplanements jumped from 48.8 million to nearly 90 million, a growth rate of almost 25 percent annually. Forecasts indicate that the nation will continue to have double-digit growth in passenger enplanements at least through 2020.

Major metropolitan regions such as Chennai, Delhi, and Mumbai are expected to have the largest increases in air passenger traffic. Yet, many smaller cities will also experience rising passenger demands and need to be integrated into India's national and international air networks.

The Ministry for Civil Aviation is responding quickly and forcefully to mushrooming demand, with plans to have up to 500 airports operational by 2020. This includes creating over 100 airports in smaller cities either through developing new "greenfield" sites or expanding or upgrading existing airports and airstrips.

Many small city airports are unlikely to produce significant commercial aircraft movements or aeronautical revenues. Nevertheless, their state governments and local promoters are optimistic that land surrounding them can be effectively developed for time-critical goods processing or BPO and IT-enabled services.

Some airport developers in smaller cities such as Durgapur (in West Bengal)

Hassan (in Karnataka), Kochi (Kerala), and Nagpur (in Maharashtra) are integrating

Aerotropolis concepts into their master plans. The Aerotropolis incorporates aviationlinked business and industrial clusters at and around airports and along airport access corridors.

Durgapur City is a well-situated part of an industrial belt, while Kochi is looking at building upon the sizeable air traffic between the city and several countries in the Gulf region. Hassan, on the other hand, is looking at spawning an air cargo hub. Nagpur is being developed into a multimodal air logistics hub which is attracting considerable investment.

State governments in Karnataka, Andhra Pradesh, and Maharashtra have collectively identified at least 25 greenfield airport sites. The guiding idea is that the airports will not only be important future air transportation links for their states but also key drivers of economic development in the airport regions based on Aerotropolis dynamics.

The Aerotropolis is indeed a valuable new form of aviation-driven commercial development. Nevertheless, realism must be part of the airport planning process. Here, it needs be recognized that Aerotropolis success rests in large part on the extent of air connectivity. Connectivity is determined by the number of markets served by the airport and the frequency of service to those markets which, in turn, depends upon the strength of the respective markets.

Many of the proposed new small city airports are no more than inactive World
War II era airstrips near relatively weak markets. It is unlikely that when they get up and
running they will support greater than a half-dozen daily commercial flights. Not only

will this affect their financial viability, but the paucity of flights will also pose a severe limit on their airport-driven commercial development potential.

The Aerotropolis also assumes that good surface transportation accessibility exists to the airport area as well as sufficient skilled labor for aviation-dependent businesses, many of which are high-tech and information intensive. The small city airport region has to measure up on both fronts.

This is not to say that smaller city airports are not needed or that they cannot be important contributors to the economic integration of the entire nation. Improved air transportation benefits existing businesses and consumers by addressing their connectivity needs. However, few airports can become central hubs.

There are examples world-wide where Aerotropolises have successfully evolved around smaller city airports. These include Campinas, Brazil; Ft. Worth, Texas (USA); Louisville, Kentucky (USA); and Subic Bay in the Philippines. In each case, though, air cargo was the primary driver which was closely tied to the airport being selected by an air express or air cargo airline as a hub.

The bottom line is that the Aerotropolis has to be more than a "build it and they will come" airport dream. Success rests on market realities and adequate air service.

Dr. John D. Kasarda, Kenan Distinguished Professor of Management at the University of North Carolina (USA), is the developer of the Aerotropolis model. He advises airports and governments around the world on its implementation.