

Keynote Address 1

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AIR QUALITY MANAGEMENT: HOW CAN SRI LANKA BENEFIT FROM THE LESSONS LEARNED IN CALIFORNIA?

One can only survive for a few minutes without breathing air while survival is possible for longer periods of time without water and food. Yet, the cleanliness of air they breathe does not rank high in people's minds because serious health effects (including death) of contaminated air usually appears over a long period of time (chronic) whereas those due to contaminated water/food are generally sudden (acute). While it is well established that the entire population is affected negatively by contaminated air, part of the population more vulnerable to air pollution includes infants, children, adults with prior pulmonary and/or cardiovascular diseases, and elderly. There is a significant public-health-related financial cost associated with air pollution, but this cost does not attract the immediate attention of policy makers because it is spread over time.

Often, air quality management is considered to be a hindrance to economic development. But, there are many examples in the world that proves waiting to clean the air (or more broadly the environment) after attaining a certain level of economic development can be much harder and costlier than doing it concurrently. This is especially true when the public-health costs are factored in.

While California still has at least two of the most polluted air sheds in the United States, California's air pollution has declined at a very significant rate over the last few decades. The underpinnings of this great success are a very strong political will to reduce air pollution and a world-renowned scientific program that shapes emissions control strategies. During this presentation, we will discuss the components of the air quality management program of California including government regulations, voluntary programs, assistance programs, environmental justice, climate change, and how science guides policy development.

It is very important for us to understand that Sri Lanka and California are very different in many ways and programs that work in California cannot be implemented in Sri Lanka verbatim. A more appropriate way forward is to study how/why California is doing what it does and use that knowledge to identify air quality management opportunities in Sri Lanka that are compatible with the economic development and will also lead to clean air. This is a long process that demands the leadership of the Sri Lankan academic research community (e.g., basic sciences, engineering, medical, economic, social and behavioral, etc.). Part of this process is a sustained scientific and policy dialogue between Sri Lanka and California. Our hope is that this presentation will serve as the starting point of that long journey.