

## For Amulya on his 75<sup>th</sup> Birthday From Rob Socolow, October 9, 2005

Amulya: I am full of happy memories. You have been an inspiration professionally, and our families are deeply linked.

I recall that Ted Taylor told you about Princeton. Soon after, by your reading, you learned that you might have a soul mate in Princeton in the young man running the Center for Energy and Environmental Studies who was thinking about "second-law efficiency" and the energy-consuming devices around us. Then you were in Princeton for real, and I told you I had sought out C.V. Raman in Bangalore in 1960. You started educating me, and I learned lessons that have lasted a lifetime. Here are just three:

One must address "the needs of the neediest." With these words you were articulating Ghandi's message. You made this abstraction vivid with your work in Pura village, where you brought your ideals to life. You blended your social convictions with engineering reality at Pura. Then, you wrote of your work in ways that others could learn from. I treasure my copy of the BBC interview with you. And I have wonderful memories of the day trip you set up for me with Chelly in September 1997 to a village northwest of Bangalore where your Pura program was being replicated.

Western analysis of developing countries can be destructive of the development process. The alternative, assigning analysis to local experts, is usually not even considered. But better analysis results when local analysts do the job. And, critically, local analysts build local capacity. You demonstrated what this meant by building ASTRA and then IEI.

No system boundary is ever big enough. New insights result from making it bigger. My favorite example is this one: Many people understood the value of providing electric lighting for the urban poor, a far superior form of lighting than kerosene. But you, looking at the same opportunity from the perspective of the entire Indian energy economy, saw that backing out kerosene for lighting would also allow the removal of subsidies on kerosene, which, in turn, would restore balance to the modal choice between freight transport by truck and by rail, improving the efficiency of use of energy and petroleum. When a systems boundary is enlarged, new coalitions emerge, and the opportunity for meaningful action increases.

These are powerful lessons, which I try to apply as often as I can.

Amulya, you have been such a good friend. Happy birthday!

