Using Astronomy to shape a country's science and technology landscape

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Abstract. There is data abundant to show a positive correlation between a nation's investment in science, engineering and technology and the economic prosperity of that nation. Yet, there remain many countries in the world, particularly in developing countries, where little, if any, serious investment in science, engineering and technology is evident. Even in these countries, policy documents speak positively about the positive correlation between investment in science, engineering and technology and national development and prosperity. Unfortunately these positive policy statements rarely get converted into real investment. When the National Research Foundation was founded in Post-Apartheid South Africa it set out to "...contribute to the improvement of the quality of life of all people..." and its inspiring vision was to achieve "A prosperous South Africa and African continent steeped in a knowledge culture, free of widespread diseases and poverty, and proud contributors to the well-being of humanity." This organisation, with its altruistic vision, succeeded in convincing the emerging government to invest in and support the construction of the Southern African Large Telescope as one of its flagship projects. This decision was subsequently followed by a high level national decision to leverage South Africa's geographical advantage to host major global astronomy facilities such as the Square Kilometer Array. This presentation highlighted the reasons for such decisions and how we went about motivating government organs that investing in astronomy would contribute to addressing societal challenges by stimulating the science and technology landscape.