

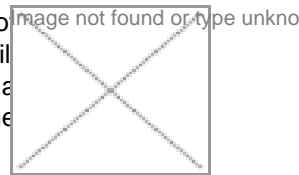
## Global Knowledge Pool for Global Good through Global Funding

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What has brought this issue into sharp focus is the HIV/AIDS case in South Africa. CIPLA offered a cocktail of three anti-retroviral drugs for \$ 350 for a treatment for one year, as against the multinational drug pharma companies, whose cost would have been around \$10,000. Eventually the companies were forced to bring down the costs to less than \$1000. This has raised the issue of availability of medicines at an affordable price to the poor of the world.

But another question that arises is also about the necessity of finding ways and means by which drugs of interest to the poor of the world, be it Malaria, TB and so on, could be created. The key question is who will work on these? I wish to propose a model. The famous economist Geoffrey Sachs had proposed that a global fund of \$5 to 6 billion be created through which products could be acquired and distributed to the poor. I suggest that the fund could be used also for generation of knowledge.



There is a problem about creating the drugs for treating the diseases of the poor. For instance, in 1998 global spending on health research was \$70 billion but just \$300 million was dedicated to vaccines for HIV/AIDS and about \$100 million to malaria research. Of 1,223 new drugs marketed worldwide between 1975 and 1996, only 13 were developed to treat tropical diseases and only four were the direct result of pharmaceutical industry research.

It is obvious that there is a pressure on large drugs and pharma companies to provide the maximum value to their shareholders rather than provide value to the poor of the developing nations. Their research portfolio is obviously heavily slanted towards drugs which bring in maximum profits to the firms and not towards the drugs for the poor. Even though there is an orphan drug law, the developed world does not have an incentive to work on diseases which do not affect at least some

part of their own population. Therefore, there is no substitute to creating new drugs for the poor through public funding (national as well as international) and also through meaningful public/private partnerships.

Can new drugs be developed by public funding? Two issues arise here. First, the track record of the government in commercializing research is generally poor. Second the governments of the developing countries will not have adequate R&D budgets of their own to support research on diseases of the poor, especially tropical diseases.

These problems can be circumvented by using successful models like the ones that have been used in agriculture. Agriculture research supported through public funding (both national & international) has given benefits to the developing countries bringing green revolution in several countries. Human Genome project is another example of successful results arising out of public funding.

The solution is to create a global knowledge pool for global good through global funding. The global fund should be created and managed by an international body. The funding would be given for creating new knowledge and products for identified diseases of concern to the poor. The research agenda will be set and programs monitored by this body. The norms for sharing the intellectual property arising out of this could be decided in such a way that access at affordable prices to the poor is ensured.

There are three ways of funding. The first is to create new world-class R&D centers in countries which have the intellectual capacity to deliver. These centers could be specially fenced, structured and managed. The second is to fund already existing public institutions in developing countries, who have a successful track record and whose performance could be bolstered with additional and directed funding. The third is to create a global knowledge network with partnership between the public and the private organizations.

Can such a model work? A number of countries in the developing world have such a capacity to deliver e.g. India, Brazil, China, Thailand etc. Consider, for example, the recent developments in India which is rapidly becoming a global research, design and development platform. Sixty companies from Europe and USA have set-up their R&D Centres in India during the last five years. Recently General Electric (GE), a company with a turnover of \$115 billion, setup their R&D centre at Bangalore employing about 1000 Ph.Ds. Jack Welch, the then CEO of GE declared that this was their second largest R&D centre but further plans for expansion have been already approved. The advantage that Jack Welch saw in India was that "the intellectual capital per dollar that was available in India was one of the highest in the world". This is borne out by the fact that India's entire R&D budget in 2001 is slightly less than \$3 billion. Contrast this with the R&D budget of a single company such as Pfizer which is about \$5 billion. India's great achievements in space, defence, atomic energy, agriculture etc., have been thus made with a budget that is less than that of a single pharma company! The private companies are locating their R&D in India to create proprietary knowledge for private good through private funding. The concept, in contrast, is to create a global knowledge pool for global good through global funding.

The interesting challenge, therefore, is as follows. Rather than using the 'spare and expensive capacity' of the large multinational companies to create drugs for the poor, use the capacity of countries which are economically poor but intellectually rich to create drugs for the poor through global funding.

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