Give prizes not patents

It is right to reward innovation, but the way we do it now exacts too high a price from the world’s poor, argues Nobel prize-winning economist Joseph Stiglitz.

INNOVATION is at the heart of the success of a modern economy. The question is how best to promote it. The developed world has carefully crafted laws which give innovators an exclusive right to their innovations and the profits that flow from them.

But at what price? There is a growing sentiment that something is wrong with the system governing intellectual property (IP). The fear is that a focus on profits for rich corporations amounts to a death sentence for the very poor in the developing world. So are there better ways of promoting innovation?

Intellectual property is different from other property rights, which are designed to promote the efficient use of economic resources. Patents give the grantee exclusive rights to an innovation – a monopoly – and the profits this generates provide an incentive to innovate. Recent years have seen a strengthening of IP rights: for instance, the scope of what can be patented has been expanded, and developing countries have been forced to enact and enforce IP laws. The changes have been promoted especially by the pharmaceutical and entertainment industries, and by some in the software industry who argue that the changes will enhance innovation.

Monopolies can lead to higher prices and lower output, and the costs can be especially high when monopoly power is abused, as courts around the world have found in the case of Microsoft. What’s more, the hoped-for benefit of enhanced innovation does not always materialise.

Why is this? First, the most important input into research is knowledge, and IP sometimes makes this less accessible. This is especially true when patents take what was previously in the public domain and “privatise” it – what IP lawyers have called the new “enclosure movement”. The patents granted on Basmati rice (which Indians had thought they had known about for hundreds of years) and on the healing properties of turmeric are good examples.

Second, conflicting patent claims make profitable innovation more difficult. Indeed, a century ago, a conflict over patents between the Wright brothers and rival pioneer Glenn Curtis so stifled the development of the airplane that the US government had to step in to resolve the issue.

The developing world has other complaints against the IP system that was imposed as part of an international deal that has become known as the 1994 Uruguay Round trade agreement. Developing countries are poorer not only because they have fewer resources, but because there is a gap in knowledge. That is why access to knowledge is so important. But by strengthening the developed world’s stranglehold over intellectual property, the IP provisions (called TRIPS) of the Uruguay agreement reduced access to knowledge for developing countries. TRIPS imposed a system that was not optimally designed for an advanced industrial country, but was even more poorly suited to a poor country. I was on President Clinton’s Council of Economic Advisers at the time the Uruguay Round was completed. We and the Office of Science and Technology Policy opposed TRIPS. We thought it was bad for American science, bad for world science, bad for the developing countries.

In the case of pharmaceuticals, the costs of our IP system go beyond money. The global intellectual property regime denies access to affordable lifesaving drugs, even as the AIDS epidemic lays waste to so much of the developing world. Despite the billions drug companies earn in profits, they spend next to nothing looking for cures and vaccines for the diseases of the poor. They spend far more on advertising than on research and far more on researching lifestyle drugs than on lifesaving ones. The reason is obvious: the poor can’t afford to pay much for drugs. For those concerned about health in developing countries, the intellectual property regime has not worked.

Patents are not the only way of stimulating innovation. A prize fund for medical research would be one alternative. Paid for by industrialised nations, it would provide large prizes for cures and vaccines for diseases such as AIDS and malaria that affect hundreds of millions of people. Me-too drugs that do no better than existing ones would get a small prize at best. The medicines could then be provided at cost.

In any system, someone has to pay for research. In the current system, those unfortunate enough to have the disease are forced to pay the price, whether they are rich or poor. And that means the very poor in the developing world are condemned to death.

The alternative of awarding prizes would be more efficient and more equitable. It would provide strong incentives for research but without the inefficiencies associated with monopolisation. This is not a new idea – in the UK for instance, the Royal Society of Arts has long advocated the use of prizes. But it is, perhaps, an idea whose time has come.