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Common knowledge

**How access to information
and ideas can drive development**

This briefing is the sixth in a series of short publications for the media on issues relating to the information society. To read all the briefings online, go to www.panos.org.uk/infosoc. For further information, contact media@panos.org.uk

All human development is based on the acquisition, spread and use of knowledge. Whether it is the know-how to produce life-saving medicines or the latest innovation in farm technology, access to knowledge can bring power and profitable returns. Unequal access, on the other hand, can create injustice – particularly when based on economic disparity. This briefing outlines the main arguments supporting knowledge as a tool for development, focusing on the key sectors shaping and influencing people's lives.

Promoting dialogue, debate and change

Current debates on access to knowledge are shrouded in technical jargon, yet the outcomes of these debates have a profound effect on people's everyday lives. Governments remain the largest repositories of data in many countries.

There is an urgent need to get behind the jargon and encourage informed public debate around the issue, if access to knowledge is not going to remain an obscure and distant issue for many of the world's citizens. Freedom of information – knowledge about credit entitlements, for example – is crucial for empowering citizens and for democratic governance.

“...Some people argue that intellectual property rights can also help the systematic development of public knowledge: an intellectual property right cannot be secured without making an idea public; it therefore adds to the common stock of public knowledge.”

Information and knowledge developed in the private sector comes at a price. Drug companies, computer software firms and agricultural conglomerates value their products according to the level of innovation that goes into them. Their investment in terms of time, skills and resources can be considerable. Investment is also concentrated geographically, with 86 per cent of private sector research and development (R&D) taking place in six industrialised countries. In 2006, a UK report¹ found that three sectors – pharmaceuticals and biotechnology, technology hardware and equipment, and cars and parts – account for more than half of all global R&D investment. Indeed, global investments in R&D reached US\$1 trillion in 2006, with pharmaceutical company Pfizer – the highest investor in the US – accounting for US\$8.2 billion in that country.

Access to these goods and to know-how is usually expensive and protected by legal copyright. Private companies argue that they need to put up this protective barrier, and high prices are necessary to recoup the costs of their large-scale investments. They say that knowledge and innovation without incentives, ie, competition and profits, does not attract creative minds.

Critics respond by claiming that these restrictions create a barrier to the social and economic development of poorer countries and, ultimately, to the achievement of the United Nations Millennium Development Goals.



The A2K movement seeks changes in the knowledge-sharing aspects of education policies.
GIACOMO PIROZZI | PANOS PICTURES

What is intellectual property?

Intellectual property is a legal device that gives exclusive rights to creations of the mind, including literary works, designs and discoveries. Patents and copyrights protect intellectual property rights by limiting access to information and goods. Patents protect inventions, such as a microchip component or a new antibiotic, while copyright applies to the expression of ideas, such as a book, song or computer software programme.

While patents and copyrights protect the rights of creators, inventors and discoverers, some people argue that intellectual property rights can also help the systematic development of public knowledge: an intellectual property right cannot be secured without making an idea public; it therefore adds to the common stock of public knowledge.

Access to knowledge

Growing concern over moves to control the spread of knowledge has led to the formation of an access to knowledge (A2K) movement, whose members advocate for intellectual property legislation to be balanced and for knowledge to be regarded as a means to further the social and economic development of all countries, and not simply as a profit-making tool.

The A2K movement aims to change the way knowledge is regulated across various sectors worldwide, and challenges the extent of intellectual property. A2K seeks large-scale changes in the information- and knowledge-sharing aspects of policies in sectors such as information technology, broadcasting, agriculture, health, education and publicly funded academic and scientific research.

¹ For more information: www.hm-treasury.gov.uk/independent_reviews

Balanced intellectual property laws – the A2K approach

Common development is more important than private wealth.

Because knowledge plays such an important role in economic growth, any sustainable attempt at poverty reduction must address knowledge flows.

Accountability and transparency must be promoted at the national level.

Citizens' wellbeing depends on access to the vast amounts of knowledge held by governments. Legal reforms should promote access to government information, freedom of expression and universal access to telecommunications networks.

Access to knowledge increases creativity, development and utility.

Open source software, as opposed to proprietary software, is an example of a 'knowledge environment' where relaxed intellectual property protection can lead to greater information production, as well as opportunities for corporate profit-making through the provision of services and development of support networks (see the Panos London media briefing *Giving away secrets: Can open source convert the software world?* at: www.panos.org.uk/infosoc).

The politics of intellectual property in the international context

Copyrights and patents are conferred by national governments, with an increasing overlay of global treaties and requirements designed to encourage investment in the creation of inventions and ideas. Today, the World Intellectual Property Organization (WIPO) oversees these treaties on intellectual property rights.

Some countries believe that WIPO and other intellectual property treaties protect the position of powerful business interests in developed countries at the expense of other interests. A2K advocates say that WIPO needs to embrace explicitly new development goals that go beyond the task of simply protecting intellectual property rights.

Several southern countries have suggested that WIPO should adopt a 'development agenda', which would make economic growth in developing countries an explicit component of its mission.

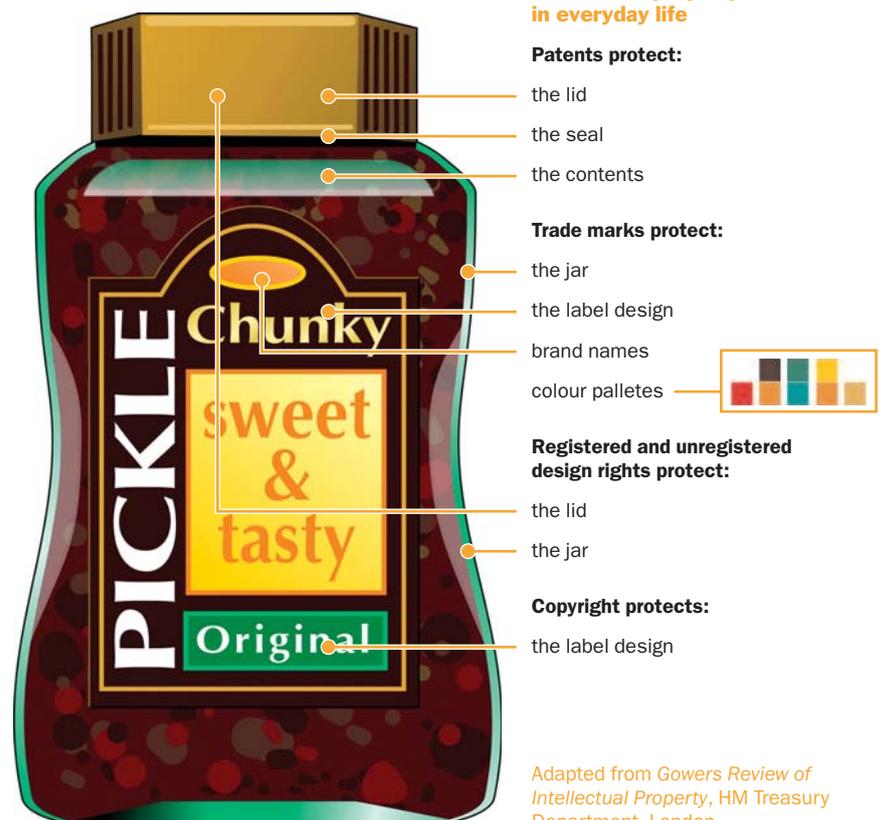
The development agenda would work to ensure that intellectual property is protected as a means of promoting growth rather than as an end in itself. Indeed, WIPO adopted the development agenda in October 2007, but how it will be implemented remains to be seen.

Another international body that is active in this field is the World Trade Organization (WTO), which, like WIPO, is based in Geneva. The agreement on trade-related aspects of intellectual property rights (TRIPS) is the centrepiece of WTO intellectual property regulation, representing a vision of globally harmonised intellectual property protection.

On many counts, a large number of developing nations stand to lose much more than they will gain from such harmonisation. For that reason, they have been critical where they believe the practical impact on them has been neglected. However, the TRIPS agreement does also provide an opportunity for flexible implementation. The provisions for 'exceptions and limitations' in the TRIPS framework favour the poorest countries – allowing them to access cheap and generic versions of branded drugs, for instance. A2K fights for an expansive approach to this flexibility.

'Ideas are expensive to produce but cheap to copy.'

Gowers Review of Intellectual Property



Public health, intellectual property and human lives

The TRIPS agreement

TRIPS ensures that all the profits from the sale of a product go to the individuals or companies who hold the patent. This is particularly controversial in the field of medicine. When a company develops a drug, it can apply for a patent that allows it to control who has access to the drug and at what price. This results in high prices which restrict access to life-saving medicines, especially for people in developing countries and their governments. An example is the many patented life-saving antiretroviral drugs (ARVs) used in the treatment of HIV and AIDS.

Pharmaceutical companies argue that they need to charge high prices to cover the costs of R&D to develop new drugs. The A2K movement seeks ways to bridge the gap between the need to encourage the development of medicines and the need to provide affordable life-saving drugs.



Affordable ARV drugs in Thailand

In Thailand, where 580,000 people (1.4 per cent of the population) are HIV positive and AIDS-related illness is a leading cause of death,² the government provides ARV medicines for a nominal fee to all those who need them but cannot afford them.

In November 2006 Thailand lowered the price of an ARV called Efavirenz (Sustiva®), the patent of which is owned by the US pharmaceutical company Merck. In February 2007, it brought down the price of a second ARV (Kaletra® which combines the two drugs Lopinavir and Ritonavir), owned by another US company, Abbott Laboratories. The Thai government did this by issuing a compulsory licence which allows countries to copy and use a patented drug without the permission of the patent-holder under certain conditions.

The Thai move has significantly lowered the price of both drugs. A Reuters article in November 2006³ revealed that this move brought down the price of Efavirenz treatment from US\$38.84 to US\$20–22 per month, enabling the government to increase the number of people under treatment from 17,000 to 100,000. Under the terms of the licence, those who can afford to buy the patented drug will not have access to the cheaper generic version, and the patent-holder receives a 0.5 per cent royalty on sales of the locally produced generic drug.

Although the TRIPS agreement allows compulsory licences, there has been a backlash against the Thai government's action. Abbott laboratories has announced that it will not be applying for licences to sell seven of its newest products in Thailand, while the US government has placed Thailand on a 'priority watch list' of countries believed to be committing intellectual property piracy. This move could damage trade relations between Thailand and the US.

The cost of some essential drugs puts them out of the reach of many impoverished people. Patented drugs are controlled by their pharmaceutical producers, but governments can intervene to create compulsory licences, which allow the drug to be copied and sold more cheaply. Alternatively, this Jamaican woman is collecting her government-subsidised prescription drugs.

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² More information available on www.unaids.org

³ To read the full article, see www.alertnet.org/thenews/newsdesk/BKK14412.htm



Open or closed? Accessing scientific knowledge for development

Governments and public agencies spend billions of dollars on R&D to find solutions to problems and seek innovations to improve quality of life. The R&D economy is huge: in the US alone, government research agencies spend US\$140 billion annually on R&D. Once research has been conducted, scientists publish their results in peer-reviewed journals – a publication model that evolved in the early-to-mid twentieth century, and is now a US\$6 billion-per-year industry dominated by a handful of large publishers. The industry quality-checks and catalogues articles, usually deposits them in private web domains and sells them at a high price through journal subscriptions.

The scholarly media industry is the fastest growing media sub-sector of the past 15 years.⁴ Although dominated by a handful of large firms, nearly 2,000 publishers issue close to two million articles in more than 70,000 journals every year. In 2000, the turnover of the UK's scholarly media was US\$48 billion – significantly larger than the UK pharmaceutical industry (US\$24 billion).⁵ Transferring the intellectual property rights of authors to publishers is a precondition for publishing in academic journals.

They also argue that public money is effectively 'subsidising' the production of scholarly material which is then sold back to public institutions by private publishing companies. Public money funds research; pays researchers' salaries; and funds public institutions to purchase these research findings from scholarly media. A2K supporters say this 'triple payment' is unfair and unethical. For example, if the South African government funds a research project on malaria and publishes the results in a scholarly journal, South African universities and doctors can only access this knowledge after making another payment.

Open access publishing

A diverse collection of A2K voices is promoting 'open access publishing', through which web-based journals operated by non-profit organisations can select their own articles for publication through a peer-review process, and make them freely available. Several scientific disciplines are in the midst of successful experiments in open access publishing, including the Public Library of Science in the field of biology and medicine.

Open access publishing is not without its challenges, however. Although publication can be cheap, it is not free. Thus far, costs have been met by a combination of private funding and publishing fees (where authors pay a fee to publish in the journal), but the sustainability of this approach has not been demonstrated. Other problems include:

- proprietary journals have capacities to quality-check and edit research findings – something that the nascent open access journals are struggling to address
- new online journals have been unable to join the top ranks of scientific publications because of a lack of support and recognition from academic peer groups and government bodies.

'Our traditional agriculture was fully self-reliant. The seeds, the manure and the bullock, everything was personal. Only seeds were exchanged by farmers.'

Vijay, founder of Save the Traditional Seeds Movement, India

A2K advocates argue that restricted access to scholarly articles may prevent citizens, researchers and policymakers from participating in the knowledge revolution because they cannot afford the cost of access.

Moreover, they say the scientific knowledge base in the developing world can only be strengthened through access to the global library of research information. Currently, this is inhibited by the high costs of journal subscriptions, with the result that most institutes in poorer countries cannot afford to buy many of the journals they need.

⁴ Read the full industry overview here: www.econ.ucsb.edu/~tedb/Journals/morganstanley.pdf

⁵ For more analysis on the economics of scientific publishing: www.wellcome.ac.uk/doc_WTD003181.html

Questions and story ideas

Sector	A2K issues
Health and pharmaceuticals	<p>What is responsible for the high cost of life-saving drugs for malaria, TB and HIV and AIDS?</p> <p>Who benefits from this high cost?</p> <p>What initiatives are being taken by the government to negotiate with pharmaceutical companies to minimise these costs?</p>
Agriculture	<p>Do farmers in your country have to pay for seeds? If so, why? What do farmers think of their situation?</p> <p>What is the reason behind paying, if that is the case?</p> <p>Do you know of any of your country's traditional and indigenous crops or species which are the subject of intellectual property laws?</p> <p>What kind of role are governments and civil society organisations playing here?</p>
Research, education and knowledge	<p>Is your government committed to implementing open access publishing principles?</p> <p>How much of your country's publicly funded research is published by private publishing companies?</p> <p>Does your local doctor/health practitioner have access to the latest information about local diseases?</p>
Politics	<p>Is your government willing to share data/information with its citizens?</p> <p>Is your government proactively seeking to adopt cost-effective non-proprietary information systems?</p> <p>Are there basic legal instruments for access, such as a right to information act in your country? If so, how effective are they?</p>





What can journalists do?

Access to knowledge is a useful lens for journalists when reporting on issues related to health, medicine, education, politics, information technology, the music industry, agriculture and discussions around the achievement of the millennium development goals. Although policies in these sectors are complex, the A2K approach can be useful for understanding the issues from the perspective of development.

The challenge to journalists: bring the A2K debate into the public arena

Issues relating to free access to information come up in many different sectors and in diverse forums. Advocates of the A2K approach face a stiff challenge in convincing individuals, companies, governments and international agencies about its place and need in the development arena. Those who invest in the intellectual property law system believe that it offers the best – if not the only – way to create incentives for the production and distribution of knowledge.

The A2K debate has so far been dominated by specialists. It is now time to involve the general public by increasing public awareness and generating a wider debate around the issue. Journalists can do this by clarifying the links between the issues and principles of enhanced access to information and knowledge for human development and the policies behind national and international development goals.

Academic knowledge is an area where access can be restricted by publishers charging a high price for journal subscriptions. The A2K movement argues that this area should be opened up so that everyone can take advantage of the information available.

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Global investment in R&D reached US\$1 trillion in 2006. Access to the resulting goods and know-how is usually expensive and protected by legal copyright.

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Useful websites for more information

www.iprsonline.org – an online portal on intellectual property rights (IPR) and sustainable development, including a glossary of IPR terms and the latest IPR news.

www.wipo.int – the official website of the World Intellectual Property Organization.

www.wto.org/english/tratop_e/trips_e/trips_e.htm – information on intellectual property in the World Trade Organization, including news and information on TRIPS.

www.wipo.int/freepublications/en/intproperty/907/wipo_pub_907.pdf – a simple guide to intellectual property.

http://en.wikipedia.org/wiki/Access_to_knowledge – popular glossary on the A2K movement.

www.keionline.org – useful source of research on knowledge resources.

www.odfalliance.org – clearly written website of the international campaign for Open Document Format (ODF) to ensure that government information is accessible.

<http://balkin.blogspot.com/2006/04/what-is-access-to-knowledge.html> – short summary explaining the importance of A2K.

http://research.yale.edu/isp/a2k/wiki/index.php/Main_Page – Wiki of the Yale University A2K conference with useful resources and presentations.

www.accessmed-msf.org – website of the campaign for access to essential medicine of the international humanitarian aid organisation Médecins Sans Frontières.

www.soros.org/initiatives/information – donor champion for open access to knowledge.

A few sample articles on A2K issues

www.nytimes.com/2007/05/07/opinion/07mehta.html – op-ed from the *New York Times* on the patenting of Indian traditional knowledge and generic medicines.

http://news.bbc.co.uk/1/hi/world/south_asia/4916044.stm – write-up by the producer of a programme on the Neem tree which has been the subject of court battles over patents on it.

www.iht.com/articles/2005/11/18/yourmoney/mpatent.php – old but useful journalistic piece.

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<http://research.yale.edu/isp>

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Cover image:

There are thousands of varieties of rice grown and consumed around the world. Many of them have come about through conservation and agricultural innovation by indigenous communities. It would be difficult to put a price on this innovation. An attempt some years ago by a multinational company to patent the popular Basmati rice was challenged by the Indian and Pakistani governments.

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