

Case Study Series

**UNDERSTANDING MARKETS
IN AFGHANISTAN:
A Study of the Market
for Pharmaceuticals**

Anna Paterson and Asif Karimi

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About the Authors

Anna Paterson is a researcher on political economy and markets at AREU. Previously, she worked at the UK Foreign and Commonwealth Office as a research analyst, on Moldova and Ukraine, and on the terrorist threat in Russia, the Caucasus and Central Asia. She also worked for two years as a research analyst on the former Soviet Union and Afghanistan for a business intelligence company.

M. Asif Karimi is a livelihoods researcher at AREU. Since joining the organisation in 2003, he has participated in the 18-month Rural Livelihoods Monitoring Programme, as well conducted research into seasonal labour migration and the political economy of the fuel, second-hand car and pharmaceuticals markets. Prior to coming to AREU, Mr. Karimi was Southwest Afghanistan Director for the Afghan Development Association, where he implemented numerous multi-sectoral development projects in rural areas throughout the country. Mr. Karimi holds a bachelor of science degree in pharmacy from Kabul University, and attended the Reconstruction and Development Program at the University of Nebraska – Omaha.

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Executive Summary

This is the last study in a series of six case studies that aim to enhance understanding of the role of markets in affecting prospects for growth, and the distribution of the benefits of growth, in Afghanistan. The studies explore the structures and functioning of markets in Afghanistan, with a view to assisting in the formulation of policies to enhance broad-based growth and poverty reduction in a market environment.

The purpose of this study of the market for pharmaceuticals was to gain insight into the experiences of Afghan businesspeople in this market to identify how many players there were, where the greatest margins were made, what connections there were between market players and what, if any, barriers were faced by new entrants.

The study found that:

- There has been a dramatic increase in the quantity of both donated and privately imported medicines entering Afghanistan since 2002. **The private sector accounts for between 70 and 80 percent of total pharmaceuticals consumption and the market may be worth up to US\$200m per year.** [Section 2: Use of pharmaceuticals in Afghanistan, p. 4]
- Medicines for use in public health facilities are determined by the National Essential Drugs List. **Privately imported medicines are also nominally limited by the Ministry of Public Health list of medicines licensed for use in Afghanistan.** Were all importers to bring medicines into the country formally, only drugs from this list would be available on the market. However, **there is widespread smuggling of medicines into Afghanistan. The proportion of smuggled drugs may be as high as 80 percent of medicines sold in the private sector.** [Section 2: Use of pharmaceuticals in Afghanistan, p. 4 and Section 3.4: Smugglers, p. 13]
- **The pharmaceuticals market is much more chaotic than the other markets studied in AREU's political economy research stream.** Pharmaceuticals are brought into Afghanistan from many different sources, and there is a bewildering array of products on sale. **The number of players is larger at every point in the supply chain than in other markets studied. There are more importers, more wholesalers, many more pharmacies, many grocery stores that sell pharmaceuticals and street vendors of medicines, as well as purveyors of traditional medicine.** [Section 3: Main players in the market, p. 9 and Section 4: Types, prices and import routes of pharmaceuticals, p. 13]
- **There are serious concerns over the rational use of drugs in Afghanistan,** and anecdotal evidence from various sources suggests a tendency among doctors to over-prescribe medicines generally and antibiotics in particular, and that combinations of medicines are prescribed without due consideration of possible side effects. Patients often ask pharmacists to prescribe medicines even though a large proportion of private pharmacies do not have a qualified pharmacist on staff. **Exacerbating all these factors is the presence on the market of low quality and counterfeit medicines containing insufficient or no active ingredients.** [Section 2.1: Rational use

of medicines, p. 5 and Section 6.3: Quality and testing: eliminating expired, counterfeit and banned drugs, p. 25]

- **Inspection, sampling and testing facilities are inadequate to secure basic standards of medicines on the market. It makes sense to concentrate efforts on inspection and testing at the point of wholesale and retail, given the scale of smuggling.** However, the lack of testing facilities at border points, and resultant long delays in clearing imports, pending sample results from Kabul, is a serious disincentive for importers to bring their imports through official channels. The feasibility of installing testing facilities at borders or of a mobile laboratory could be considered. [Section 6.3: Quality and testing: eliminating expired, counterfeit and banned drugs, p. 25 and Section 7: Conclusions and recommendations, p. 28]
- **Pricing of pharmaceuticals also reflects the lack of control or regulation of this market.** Prices of medicines are heavily regulated in almost all countries except the US. In Afghanistan, profit margins at the point of import, wholesale and retail are technically capped by the government at between 8–15 percent. But almost all players admitted that this was not followed in practice. However, many medicines on the market are cheap, but of low quality, as market players opt for cheap products to meet the demand of poor Afghan customers. [Section 4: Types, prices and import routes of pharmaceuticals, p. 19]
- **There is room in the market for domestic production or compounding of pharmaceuticals from imported raw materials to partially substitute imports and to boost Afghan manufacturing and economic growth.** There are a number of small scale 100 percent Afghan-owned pharmaceuticals manufacturers and two foreign direct investors that have begun production of medicines. Access to land, basic infrastructure and credit is key to allowing Afghan manufacturers to break free of the small scale turnover that often makes them uncompetitive. For foreign investors, further streamlining of bureaucratic procedures for gaining permissions to begin production are vital if foreign investors are not to be frightened away by the prospect of long delays. [Section 3: Main players in the market, p. 9 and Section 7: Conclusions and recommendations, p. 28]

1. Introduction

This is the last study in a series of six case studies under the Political Economy and Markets research stream of the Afghanistan Research and Evaluation Unit (AREU).¹ The first three case studies were produced in summer 2004 and dealt with three sectors important to the Afghan economy: raisins, carpets and construction materials. The second set of studies has dealt with three important import markets: petroleum fuel, second-hand cars and pharmaceuticals. They explore the structures and functioning of markets in Afghanistan and thereby aim to assist in the formulation of policies to enhance broad-based growth and poverty reduction in a market environment. Each study is designed to stand alone, but the series can be read together to gain a fuller picture of markets across a range of sectors. A short briefing paper was produced after the first three studies, which provides discussion and preliminary analysis of overall findings. A further synthesis paper will be produced after the publication of all six studies.



The purpose of this study, like the previous studies, was to investigate the real structures of markets in Afghanistan. Researchers attempted to gain an insight into the experiences of Afghan businessmen in the private pharmaceuticals market; how numerous the players were; where the greatest margins were made; what connections there were between market players; and what if any barriers were faced by new entrants. Semi-structured

interviews were conducted with importers, wholesalers, large and small retailers, certain groups of customers, international agencies and relevant government bodies. The number of players interviewed in each category depended on the size of the market in each location.

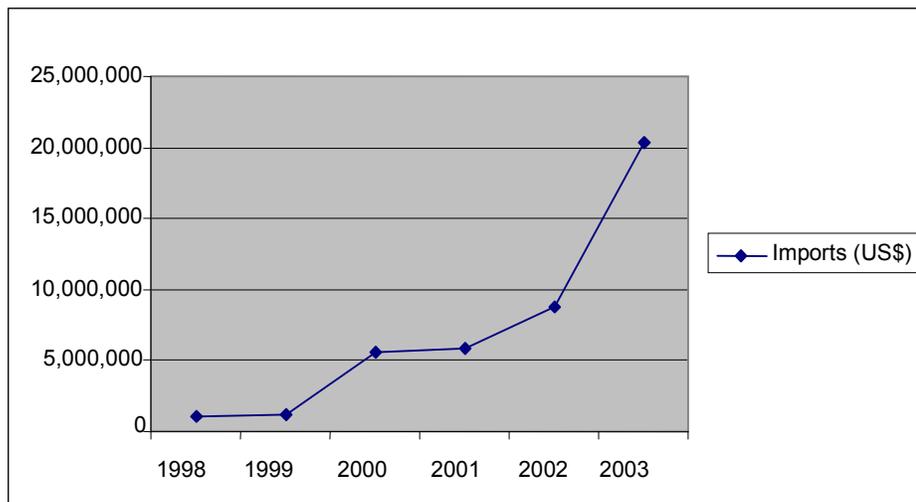
Research was conducted in Kabul; Mazar-i-Sharif and Heiratan; Herat, Islam Qala and Turghundi; Zaranj; Quetta; Kandahar; Peshawar; and Jalalabad from April to May 2005. Research was conducted by consultant Jamal Khan and by the authors, AREU researchers Anna Paterson and Asif Karimi. Asif Karimi is a pharmacist by background. Local research assistants were also used.

¹ The first three studies were produced by an AREU research team consisting of: Mohammad Moharram Ali (consultant), Tom Brown (consultant), Zainiddin Karaev (Research Intern, AREU) Jamal Khan (consultant), Sarah Lister (Team Leader - consultant), Adam Pain (consultant).

2. Use of Pharmaceuticals in Afghanistan

There has been a dramatic increase in the amount of donated medicines reaching Afghanistan since 2002. It is estimated that medicines donated in kind or bought with donated money make up between 20 and 30 percent of pharmaceuticals used in Afghanistan.² The remaining 70–80 percent of pharmaceuticals not supplied by donors is accounted for by the private sector. On the basis of a population of 25 million, the private pharmaceuticals market in Afghanistan could be worth up to US\$200m per year.³ The Afghanistan statistical yearbook from 1998–2003 shows the following imports of pharmaceuticals:

Figure 1. Pharmaceuticals imports, 1998–2003



It is difficult to record the current size of the private sector pharmaceuticals market, as many importers and wholesalers are thought to be unregistered. Smuggling is a significant concern in the pharmaceuticals sector.

Both patent and generic medicines are sold on the Afghan market. The term “generic drug” has been legally defined in France as “a copy of an original medicinal drug whereby production and marketing are made possible by the expiry of the patent covering the innovator product”.⁴ Each drug on the market has both a chemical name and an International Non-proprietary Name (INN) or generic name (Ampicillin, for example). The INN is the medicine’s official name, regardless of who manufactures or markets it. INNs are assigned through the World Health Organisation (WHO). A commercial, proprietary brand name is chosen by the manufacturer. For most common drugs, there are several branded medicines that contain the same active ingredient, such as, for example, paracetamol. The patents on many common drugs have expired, allowing a number of manufacturers to produce and market equivalent medicines under the generic name. These products are usually sold at a lower price than their branded equivalents.

² Interview with Management Sciences for Health (MSH) staff, Kabul, May 2005.

³ Estimate based on interviews with producers, importers and MSH staff, 2005.

⁴ Directive 87/21, 22 December 1986, cited in WHO Drug Information, 2000, *General Policy Issues: Generic drugs: the hidden issues of quality and cost*, 14(2): 77.

There are four lists of officially approved medicines maintained and periodically updated by the National Medicines Agency and the Ministry of Public Health. These include a Licensed Drug List of medicines that are permitted for import and sale and the National Essential Drugs List of Afghanistan, which lists 27 categories of medicines, from anaesthetics to vitamins and minerals, appropriate for use in public sector health facilities. The latter defines a limited number of medicines deemed appropriate for implementing the Basic Package of Healthcare Services (BPHS) and Essential Package for Hospitals in Afghanistan. The purpose of such a list is to avoid spending health care budgets in developing countries on ineffective, unnecessary or inappropriate medicines. A limited list is chosen in order to improve supply and rational use of medicines and reduce costs. In addition, Afghanistan has a list of free sale medicines that may be bought and used without a prescription, to relieve mild symptoms and a list of medicines that are subject to special restrictions because of their particular risks.

In the private sector, which is unlikely to dispense drugs for use in hospital care, surgery, etc. researchers were told that commonly used medicines changed according to seasons, with different types of antibiotics dominating, in summer for treatment of diarrhoea, parasites and other gastro-intestinal illnesses and for treatment of respiratory infections in winter. Most common are first generation antibiotics that are affordable and effective in communities that have not had much exposure to antibiotics, but have lost some of their effectiveness in Europe and North America due to over-use and the consequent resistance developed by many bacteria. Antibiotics will not work for colds, flu or other viral infections. Private sector wholesalers and retailers also reported selling large quantities of cough syrups and cold medicines, and pain killers such as paracetamol.⁵

Antibiotics such the penicillins Ampicillin and Amoxicillin are used to treat infections caused by bacteria and work by killing the bacteria or preventing their growth. For example, Amoxicillin is used to treat certain infections caused by bacteria, such as pneumonia; bronchitis; gonorrhoea; and infections of the ears, nose, throat, urinary tract and skin. Amoxicillin comes as a capsule, a suspension (liquid), and pediatric drops to take orally. Co-trimoxazole is a sulfa drug which eliminates bacteria that cause various infections, including infections of the urinary tract, lungs (pneumonia), ears and intestines. The drug is also used to treat diarrhea. Co-trimoxazole comes as a tablet and a liquid to take by mouth. Metronidazole is an anti-parasitic medicine in tablet form used to attack parasites such as amoeba and giardia.

2.1 Rational use of medicines

As in other developing countries, there are serious concerns over the rational use of drugs in Afghanistan. Numerous reports from different developing countries have found unnecessary use of antibiotics for treatment of diarrhoeal diseases and non-complicated acute respiratory infections as well as insufficient utilisation of Oral Rehydration Salts (ORS) for prevention and treatment of dehydration, and diagnostic and treatment practices that are inconsistent with accepted practices.⁶ There is much anecdotal evidence of a tendency among doctors in Afghanistan to over-prescribe medicines generally and antibiotics in particular. This was borne out in the current study by numerous health officials interviewed and by observations during visits to pharmacies. One qualified pharmacist complained that combinations of medicines were being prescribed without proper consideration of side effects for the

⁵ Thanks to Lysbeth McCrone, MD.

⁶ World Bank Group, 2005, "Health Systems Development, Private Sector - Overview," <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTHSD/0,,contentMDK:20187235-menuPK:435121-pagePK:148956-piPK:216618-theSitePK:376793,00.html>

patient. The practice of over-prescribing medicines becomes a vicious circle, as patients begin to expect high dosages and multiple medicines and the sensitivity to demand in the private sector, both in private clinics and in pharmacies, compounds this problem. One hospital pharmacist told researchers that patients were often suspicious of the generic medicines, in very plain packaging, dispensed by the hospital pharmacy, as they had become accustomed to the “colourful packaging” and bright brand-names on the medicines sold in private pharmacies. A study of the pharmaceutical sector by Management Sciences for Health (MSH) in 2002 suggested that over-prescribing of medicines occurs more frequently in the private sector than in the public or NGO health sector. The study reviewed prescriptions at pharmacies in all sectors and found that patients in the private sector were prescribed more drugs per encounter (an average of 2.4) than in the NGO (average 2.05) and public (average 1.88) sectors.⁷ Although it was beyond the remit of this study to assess the appropriateness of prescriptions, researchers were shown many prescriptions in all locations that listed more than three medicines each.

In addition to the problem of over-prescribing by qualified practitioners, there is a serious problem with diagnosis and prescription by unqualified people posing as doctors in private clinics and by unqualified staff working in private pharmacies. Alarming cases of wrong diagnoses and treatments by individuals in private clinics with minimal or no medical training have been recorded by journalists and one official in the Ministry of Public Health has commented:

*There are lots of unlawful clinics and pharmacies all over the provinces. Even those people who were hospital cleaners in Pakistan have opened their own clinics.*⁸

Those who cannot afford to see a private doctor and who do not have access to public health care often go directly to a pharmacy or even to a street vendor to receive both a diagnosis and treatment for their illnesses. The fact that a large number of staff in pharmacies are unqualified (and, as researchers were told, sometimes even illiterate) makes this a precarious way of receiving appropriate treatment. The lack of qualified pharmacists in retail outlets is dealt with in greater detail below.

As if the issues of over-prescribing and wrong diagnosis were not serious enough, there are also a large number of low quality and counterfeit medicines on the market in Afghanistan. Thus, even when medicines have been appropriately prescribed, customers may receive a product from retailers that contains low levels of active ingredients or no active ingredients whatsoever. This research did not conduct any testing of pharmaceuticals, but does deal with the issue of low quality and counterfeit medicines, based on reports by health care professionals, below.

2.2 Pharmaceuticals and livelihoods

The pharmaceuticals sector has a significant impact upon livelihoods in Afghanistan. Research has shown that a significant proportion of incomes in the poorest households is spent on health care, including travel to public health care facilities, use of private clinics and doctors and purchase of pharmaceuticals. An AREU report on rural livelihoods found that health was the second largest expenditure after food for many households. Health crises were also identified as among the most common

⁷ MSH Afghanistan Pharmaceutical Sector Assessment, 2002.

⁸ S. Najemi, 13 August 2004, *Medical Treatments do More Harm than Good*, Kabul: Institute for War and Peace Reporting.

events leading families to seek informal credit.⁹ In Laghman and Herat, this research found that:

...households are spending between 9 and 26 percent of income on health, with poorer households generally spending more than richer households.¹⁰

Thus, if the poorest families are receiving inappropriate, low quality or counterfeit medicines or incomplete courses of medicines, they are suffering a dual loss to their livelihood. Families can end up spending far more than is necessary to treat a sick family member and can seriously impair the long-term health of the individual and therefore also the productivity of the family. It is the poor who are least served by the private pharmaceutical sector in Afghanistan.

2.3 History of pharmaceuticals import and production

Before 1992, there was a developed production capacity in Afghanistan and those pharmaceuticals that were imported from abroad mostly came through the Ministry of Public Health (MoPH), specifically through the state-owned enterprise Avicenna Pharmaceutical Institute, which kept pharmaceuticals in stock and distributed them to the provinces. At this time there were few licensed private importers, but there was large uncontrolled import of drugs from Pakistan and Iran in mujaheddin-controlled areas in the eighties and early nineties. When the government system began to collapse in the early nineties, private individuals came to dominate pharmaceuticals imports. Pharmaceuticals from Pakistan were particularly popular, and their import was aided by the large number of Afghan refugees in Pakistan. Pakistani companies began to open offices in Kabul. Iranian medicines also entered Afghanistan with the help of the Afghan diaspora in Iran. The number of players in the private import of medicines grew over the conflict and the Taliban period. Medicines are now imported into Afghanistan, via various routes, from Europe, India, China, southeast Asia, Iran, Pakistan and the Middle East.

From the 1970s until the end of the Najibullah period in 1992, Afghanistan was a producer of pharmaceuticals. As one article has noted, “Only a decade ago, Afghanistan was producing the majority of its medicine inside the country and was even developing an export market.”¹¹

The German Hoechst Corporation (now Sanofi-Aventis Corporation, one of the largest pharmaceutical companies in the world) opened a factory in Kabul in 1968, in which the government had a 51 percent stake. This factory may still be observed on the Jalalabad road in Kabul. During its heyday, the Hoechst plant produced some 130 lines of medicine, covering a wide range of Afghan domestic needs and also exporting medicines to neighbouring countries. In 1991 the German partners withdrew all of their representatives and in 1997 stopped formal production, however, there has been some small-scale production on the site since then. The Hoechst brand has clearly left a strong mark on Afghan consumers as Hoechst was frequently mentioned by customers and traders with some nostalgia and its products were clearly trusted by the public. In August 2005 the Hoechst Afghanistan AG finally got privatised after three years of struggling to acquire the governmental shares in the plant. The name has been changed to Hochpharma corporation. The MoPH holds a 15 percent stake and foreign private investors hold an 85 percent stake.

⁹ J. Grace and A. Pain, June 2004, *Rethinking Rural Livelihoods in Afghanistan*, Kabul: Afghanistan Research and Evaluation Unit, p. 37.

¹⁰ Ibid.

¹¹ A. Wali, 22 August 2002, *Phoney Drugs Put Lives at Risk*, Kabul: Institute for War and Peace Reporting.

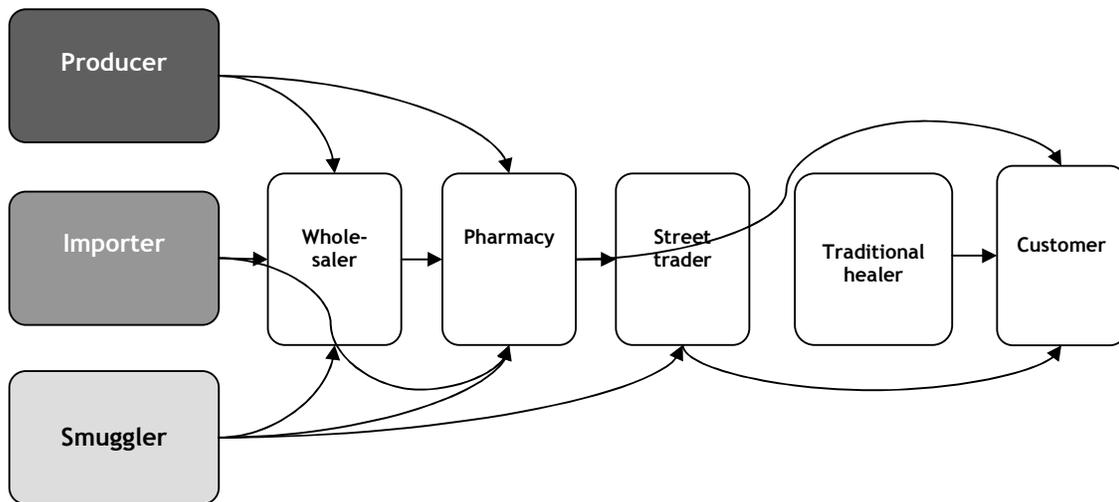
Hochpharma is receiving technical assistance in quality control, production procedures and environmental issues inside and outside of Afghanistan by Sanofi-Aventis Corporation. Hochpharma follows European standards of corporate governance, with a board of directors and management. It has around 100 employees and plans to generate a further 300 jobs. Automated packaging on a large scale will be avoided in order to maximise employment-generation potential. Hochpharma will revitalise Hoechst's traditional distribution systems in major cities of Afghanistan and will print all labels and brochures in Afghanistan to generate employment indirectly.

The Avicenna Pharmaceutical Institute (API) was established in the 1970s. Avicenna is named after the physician Jalaluddin Ibn Sina, who lived in the 11th century and whose father was from Balkh. His books were used to educate students during the middle ages. As well as importing pharmaceuticals, licensing and monitoring private sector imports, API also previously produced around 120 different types of pharmaceuticals. This production capacity was severely hampered by the conflict and when researchers visited, the institute was producing only iodine antiseptic and the future of the institute as a manufacturing centre was under review. The institute retains its sizable buildings in the fifth district of Kabul and there has been some reconstruction of buildings and machinery after physical damage and looting during the conflict period. The institute is a branch of the Department for Pharmaceuticals in the MoPH, but is reportedly self sufficient in financial terms. Avicenna is also responsible for granting licences to importers throughout Afghanistan. API is on the list of state-owned enterprises to be privatised in Afghanistan.

3. Main Players in the Private Pharmaceuticals Market

Figure 2 provides a guide to the main players in the private sector pharmaceuticals supply chain. However, there may also be middlemen, or “agents”, facilitating transactions such as distribution of pharmaceuticals from a producer, importer or wholesaler to provincial pharmacies. Researchers were frequently told that such agents were used, but did not encounter any agents directly.

Figure 2. Pharmaceutical supply chain



3.1 Producers

Producers of pharmaceuticals who are not making drugs from scratch, but using imported raw active ingredients, are technically “compounding” pharmaceuticals. Researchers visited six registered 100 percent Afghan-owned pharmaceutical production sites in Kabul. Most pharmaceutical producers are Kabul-based, but there are some producers based in provincial cities and provincial manufacturers may not all be registered with the authorities. Researchers were unable to visit producers outside of Kabul.

The producers interviewed had been in business from 10 months to four years. Most were operating on a small scale, and manufactured a similar range of products, such as cough syrups, anti-acid syrups, multi-vitamin syrups, antiseptic and anti-inflammatory ointments and powders such as talcum powder. One manufacturer had a contract with an international NGO operating in the health sector to produce chlorine, which was then distributed by the NGO across the country. These factories employed between five and 60 staff, of which between one and six were qualified pharmacists. In one case, some members of staff had been sent to a neighbouring country to receive training.



Most manufacturers said they planned to begin producing more complicated products such as antibiotics, but that conditions were not yet suitable. These factories share the same constraints as many other Afghan manufacturers, and electricity shortages and lack of access to land or secure accommodation were major complaints. The

fact that many were based in rented accommodation in residential areas meant that many were trapped in a cottage-industry scale of production. Insecurity of tenure was a disincentive to growth and development as there was little point in investing in and installing expensive new machinery, when the company might have to move premises. All manufacturers planned or hoped to move to more secure accommodation in an industrial park. One manufacturer had been promised a plot in an industrial park but the plot had not materialised and a second was in the process of applying for a plot. Another manufacturer was involved in a dispute over a piece of land for which he had paid 25 percent of the total cost 10 years previously but had since been unable to claim. There was a mechanism for claiming land, the manufacturer claimed, but the process was difficult, as many plots of land under disputed ownership were already occupied and the municipality and the police needed to negotiate with these residents in order to free up the land.

Manufacturers are also hampered by the fact that all machinery and raw materials must be imported into Afghanistan. Second-hand as well as new machinery was used and was imported from various countries, including England, China, Pakistan and Iran. Imported machinery is taxed by the Ministry of Finance at a rate of four percent. Machinery for use in medical procedures or to produce medicines must also be cleared by the MoPH and can therefore be stuck in customs for some time. As for raw ingredients for the pharmaceuticals, producers said they were unable to secure contracts with large European producers of pharmaceutical raw materials as the size of their orders was too small. Some manufacturers had contracts to buy raw materials from companies in Iran, China or India, but some bought raw materials in markets in Pakistan, where materials from different sources were sold. These raw materials, especially the active ingredients for pharmaceuticals, were subject to testing by the MoPH after import in the same way as finished pharmaceuticals. Many producers complained of a new MoPH requirement that the companies from whom raw materials were sourced should now be registered with the ministry, as this made buying from these markets in Pakistan difficult. One manufacturer had benefited from time spent outside Afghanistan during the conflict, during which he had entered the pharmaceutical business in Iran. Ongoing contacts and business interests in Iran allowed him to import machinery, containers, raw materials, and indeed, qualified staff to support his business in Afghanistan.

Insecurity of accommodation, lack of access to credit, electricity shortages and inability to take advantage of economies of scale by buying raw materials in bulk means that turnover is very small in most of the existing Afghan pharmaceutical producers and these enterprises find it hard to compete with imported medicines, especially smuggled and cheap, low quality imports.

3.2 Foreign investors

Afghanistan is surrounded by countries that are established manufacturers of medicines, such as India, Iran and Pakistan, and it is unlikely that domestic production will ever eliminate reliance on imports. Afghanistan also lacks its own chemical industry to produce active raw ingredients for medicines. Nonetheless, there is room in the Afghan market for the development of larger scale domestic production to partially substitute imports with affordable, good quality Afghan-made products and to benefit the Afghan economy by promoting Afghan manufacturing and generating economic growth and employment.

Researchers spoke to two foreign investors attempting to begin production of pharmaceuticals in Afghanistan. One German-Afghan investor, Hochpharma, has

resumed production in the Hoechst factory. Three years had passed since the investor began negotiations to the stage of closing the deal in August 2005. This was partly due to the complicated process of bidding for the tender to win the government shares in the plant. In October 2005, Hochpharma started production of generic drugs, including painkillers, anti-depressants, blood pressure medicines, gynaecological medicines and antibiotics, to meet the needs of the domestic market and replace imports. Hochpharma products can be slightly more expensive than low-end Pakistani imported pharmaceuticals, but more affordable than high-end imports of the same quality. All the raw materials for Hochpharma must be bought on the international market, as the lack of a chemical industry in Afghanistan mean these can not be bought locally. Larger ventures such as Hochpharma have an advantage over smaller enterprises that are unable to secure bulk contracts with manufacturers of pharmaceuticals raw materials. In addition Hochpharma benefits from industrial scale production equipment. In the longer term, Hochpharma may also consider production of herbal medicines, the botanical ingredients for which could be bought from Afghan producers.

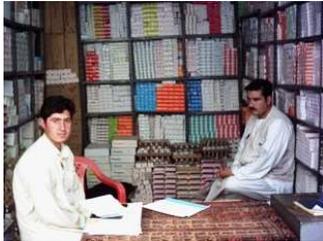
Researchers also spoke to representatives of American Afghan United Incorporated (AAUI) Pharmaceuticals, an enterprise in a new factory in Kabul, with 100 percent private, foreign ownership. AAUI plans a total investment of US\$2–5m in machinery, such as a tablet-making machine with a capacity of 100,000 tablets per day, which had already been installed at the site when researchers visited. The company planned to produce antibiotics, analgesics and other generic medicines, beginning with seven different products. These would be designed entirely for sale on the local market as a high-quality and affordable substitute for imported products. At the time of research, the start date for production had suffered two years of delay due to the complicated bureaucratic process of obtaining all the necessary paperwork and permissions and money for rent and salaries was being spent every month with no returns. However, in November 2005, the company was granted official permission to begin production of five products.

Labyrinthine bureaucracy appears in the above cases to have been more of an inhibitor of foreign direct investment than the other obstacles frequently cited, such as the absence of a banking system, the legislative backlog for basic commercial laws or the security situation. Understandably there must be an added layer of regulation in the pharmaceutical production sector, in order to ensure that safety standards are met. However, there is a general problem with unclear and prohibitive layers of bureaucracy facing investors which appears to be reflected in other sectors. Foreign entrepreneurs who are already in Afghanistan attempting to set up businesses have probably already considered the obstacles of security, banking and weak infrastructure, and a streamlined bureaucratic process would help to keep such potential investors and their investments in the country. Streamlining the process of bureaucratic permissions for foreign and domestic investors would also limit the opportunities for corruption and bribe-taking.

There is a further private–public pharmaceuticals venture in Afghanistan, which researchers were unable to visit. The Baz International Pharmaceutical Company Ltd is the result of a project launched in 2002 by the Swiss non-profit organisation Business Humanitarian Forum, the Brussels-based European Generic Medicines Association (EGA) and the United Nations Development Programme Country Office in Afghanistan. Baz plans to produce 300–400 million tablets of urgently needed medicines such as antibiotics and analgesics each year. Machines have been donated by the EGA and the production plant is reportedly being completed for production,

which was scheduled to start in the fourth quarter of 2005.¹² At the time of publication of this report in December 2005, production had not yet started.

3.3 Importers and wholesalers



Importers of pharmaceuticals must register with the MoPH, and a MoPH official told researchers that some 200 importers of pharmaceuticals were currently registered, a dramatic improvement on the percentage of importers who previously complied with the registration process. Importers provide the MoPH with a form listing the medicines they intend to import and this is compared to the list of permitted medicines before being approved. This list must show

that the pharmaceuticals for import are manufactured by companies registered with the MoPH. Importers may sell to wholesalers, but the majority of importers encountered in this research also had their own wholesale outfit. Wholesalers also require a licence from the MoPH and must have a qualified pharmacist on their staff. They must make a deposit of 10,000 Afghanis (US\$225) to register as traders.¹³ Import enterprises are often referred to as “private limited” pharmaceutical companies.

Wholesale markets in Kabul, Herat and Mazar are mostly co-located in the same part of town, often in multi-storey blocks of shops built around small courtyards. In Kabul one of the wholesale markets is located in the Parwan Hotel area in district 11. Researchers were told that the area had become a centre for wholesale trade in pharmaceuticals during the mujaheddin period, when the pharmacy department was temporarily relocated to the area. Many import/wholesale outfits have representatives in more than one city, most commonly in Herat, Kabul and Mazar but sometimes also in other provincial capitals.

Researchers found that importers of regular and larger scale consignments of medicines either had an agreement with a foreign manufacturer or made regular visits to wholesale markets abroad, particularly in Pakistan. Medicines were reportedly brought by importers to Kabul and to other cities by truck. Importers and wholesale outfits tend to specialise in pharmaceuticals from one location, so one importer might bring Indian medicines and another might bring Korean, Iranian or Pakistani medicines. As an aforementioned report by MSH of the pharmaceuticals sector pointed out:

“There are some 150 wholesalers based in and around this market. Most of us have been in business since the war. We are currently very concerned about our businesses as we have heard that the authorities are clamping down on unregistered wholesalers. Few of us have registration documents. We should be given an opportunity to register, but we are afraid as we have been told that our businesses will simply be closed down if we are found to have no registration documents.”

Wholesaler, provincial capital

¹² United Nations Development Programme - Afghanistan website, “First Generic Medicines Factory being set up in Afghanistan”, http://www.undp.org.af/media_room/press_rel/press_rel.htm#generic

¹³ MSH Afghanistan Pharmaceutical Sector Assessment, 2002.

*Competition between traders is very strong, and battles for market share, special deals with manufacturers and control of certain distribution zones in Afghanistan are serious.*¹⁴

This competition may account for the specialisation of many importers and wholesalers.

One importer with seven years of experience in the Parwan Hotel area reported that he brought 40 different types of Indonesian medicine into Afghanistan and that his business was the sole dealer of a number of Indonesian manufactured goods. These medicines were shipped to Karachi and then transported to Kandahar by road. This importer sold to wholesalers and also directly to pharmacies. In one office in a wholesale market in Herat, researchers spoke to a representative of the official dealer of one multinational pharmaceutical company with a manufacturing plant in Pakistan. The import company, which also had offices in Kabul, had an agreement with this multinational to import 32 items, including a well known anti-bacterial soap. Another import business was co-owned by a former surgeon with 20 years of experience working in a hospital, who specialised in imports of medicine and medical equipment from China. His business partner was in China at the time of the interview, selecting pharmaceuticals that were in high demand on the Afghan market such as antibiotics, analgesics and tonics.

Wholesalers and importers typically had several years of experience in the pharmaceuticals business, ranging from 5–26 years. Their backgrounds were various. Some appeared to have started in this business after losing their jobs as government employees at the end of the Najibullah regime in 1992, some were previously health care professionals who could not make a sufficient wage as doctors, some had previously owned pharmacies and had extended into the import business. Some importers were also involved in the import of other commodities such as food into Afghanistan, but all of these reported that trading in pharmaceuticals was more profitable than any other commodity. A number of wholesalers indicated that as well as importing their own pharmaceuticals or buying from importers, they also bought medicines from unofficial and unregistered importers.

3.4 Smugglers

Smuggling of medicines into Afghanistan was an ever present subject in all interviews conducted for this research, but perhaps unsurprisingly, researchers did not directly interview any self-confessed smugglers. Estimates by interviewees of the percentage of private sector pharmaceutical imports accounted for by smuggling were very high, ranging from 60–80 percent. One MoPH official told researchers that Afghanistan's porous borders had allowed "practically anyone" to bring medicines into the country, especially before 2002. A previous MoPH official told a journalist in 2002 that:

*The borders with Iran and Pakistan are open and are not under the control of the government. Most of the drugs used in Afghanistan are imported along these borders and we cannot control the entrance of medicine into our country.*¹⁵

The sheer number of different kinds of medicines available on the market in Afghanistan testifies to the amount of smuggling occurring in this sector. Technically, medicines should only be sourced from foreign manufacturers that are

¹⁴ Ibid.

¹⁵ A. Wali, *Phoney Drugs Put Lives at Risk*.

registered with the MoPH, but the number of brands and types on the market far exceeds the number of registered medicines, thought to be between 1,100 and 1,200 in total.¹⁶ There are donated medicines to be found on sale by private pharmaceutical retailers, indicating that there is some degree of “leakage” of donated medicines onto the private market. In addition, there are anecdotal reports that medicines donated for Afghanistan are exported for sale in neighbouring countries such as Pakistan.

It is likely that some larger scale importers are not registered with the authorities and do not bring their products through customs or MoPH procedures. In addition, as pharmaceuticals are a high-demand commodity that are small, light and easy to transport, it is possible that individuals bring small amounts of medicines into the country on an ad hoc basis. Most smuggled medicines are likely to come from Pakistan and Iran, in that order. Counterfeit medicines must, by definition, circumvent official procedures in order to come into the country as these could not be officially registered and would not pass the MoPH tests of medicines brought through customs. These counterfeit medicines are either manufactured in Pakistan or come from China and India, often via Karachi. The opinions of importers, wholesalers and retailers on smuggled medicines differed. Many were concerned about the unfair competition posed by such imports. Others said that while some of these illegal imports were of poor quality, some smugglers brought high quality products that were needed on the Afghan market.

3.5 Pharmacies

Hospitals and clinics in Afghanistan have pharmacies that are supplied by donors, the MoPH or NGOs operating in the health sector. In the private and public-private sphere, Afghanistan has both privately owned pharmacies and government

“This family-run pharmacy has been in business for 30 years. My father began this business at a time when there were hardly any other pharmacies in Nimroz. This remained the case for some 20 years, but then many more pharmacies began to open. I have recently moved from another part of town and have been based at this shop for 18 months. The owner of the shop which we were renting in our previous location could see the success of our business, so he asked us to move so that he himself could set up a pharmacy there.”

Pharmacy owner, Zaranj

pharmacies. Government pharmacies are sometimes known as API pharmacies. These were previously supplied by API until the latter lost much of its production and importing capacity during the conflict period. Government pharmacies are now only partly supplied by the MoPH. All government pharmacies visited by researchers also bought medicines from importers and wholesalers on the local market. Some government pharmacies told researchers that they were supplied 70 percent by the MoPH and 30 percent from importers and wholesalers on the local market, others

said they received only 30 percent from the MoPH. Staff at these pharmacies are technically MoPH employees but they receive no salary, and make an income from the business turned over by the pharmacy. Some staff reported that they took a 50 percent share of the profits made by the government pharmacy. All government pharmacies visited by researchers were staffed by qualified pharmacists.

There are around 13,000 licensed private pharmacies in the country¹⁷ and it appears that these proliferated during the Taliban period, during which many respondents

¹⁶ Interview with WHO staff, Kabul, 2005.

¹⁷ Interview with MSH staff, Kabul, May 2005.

suggested that licences were handed out liberally. Pharmacies should technically be a certain distance apart from each other, but a drive around any Afghan city shows that this rule is not implemented in practice. The sheer number of pharmacies in close proximity to one another in many Afghan cities testifies to the popularity of the pharmaceutical business and pharmacy owners interviewed had been involved in the business for anything from 1–30 years and it seemed that new players had been moving in and out of the pharmaceutical business with relative ease over this time frame and that this business has been quite flexible. Research in Kandahar and Jalalabad found that many pharmacies were relatively new and had opened during the past four years.¹⁸ It is likely that some pharmacies no longer belong to the owner appearing on official documents.¹⁹

Pharmacy owners do not need to be qualified pharmacists, but a pharmacist should be in attendance at all times during opening hours. This study suggested that this rule is not always followed in practice. Researchers visited several pharmacies which had MoPH lists of regulations for pharmacies displayed on their walls or windows, but nevertheless did not have a pharmacist on duty. Researchers were told by a qualified pharmacist and pharmacy owner in Herat that he knew of no other pharmacy in the area that had a trained pharmacist on duty. While researchers were interviewing this pharmacist, staff from a neighbouring pharmacy came into the shop to ask the pharmacist for advice on how to read a prescription that had been brought by a customer. There may have been some relaxation of this rule and assistants with a shorter period of pharmacist's training may now be permitted to take the pharmacist's role in pharmacies. In Mazar researchers were told of a recent initiative to train nurses to work in pharmacies.



Pharmacies buy medicines from wholesalers, directly from importers, or through “agents”. For example, one pharmacy owner said he employed agents to travel to Kandahar and Herat to buy pharmaceuticals from wholesalers. Most pharmacies reported good profits, but high rents and insecurity of tenure was a common problem. Many businessmen who reported to have “guarantees” from landlords appeared upon further inquiry to have only informal promises based on trust and personal connections. Such informal guarantees may in fact be as effective as a legally enforceable contract in the Afghan context.

Pharmacies are often concentrated in areas near hospitals or clinics, both public and private. Many doctors in private clinics are thought to own their own pharmacies or patronise a particular pharmacy owned by a business contact with whom they have a mutually beneficial agreement. Doctors can either direct their patients to a particular pharmacy or can write prescriptions in such a way as to be comprehensible only to the pharmacy with which they had a business arrangement. On one occasion, researchers were shown prescriptions, which pharmacists said were written in incomprehensible acronyms that were supposedly intended for use in another pharmacy. It is thought that doctors sometimes import medicines themselves for sale in their own pharmacies.

¹⁸ J. Khan, 2005, *Pakistan-Afghanistan Pharmaceutical Market*, Unpublished consultant report for AREU.

¹⁹ MSH Afghanistan Pharmaceutical Sector Assessment, 2002.

If pharmacies are very common in urban areas, they are less prevalent in the districts. The above mentioned MSH assessment of health facilities in 2002 surveyed pharmacies in 32 provinces that could be seen from health care facilities and found 72 districts with no pharmacies within eyesight of visited health care facilities.²⁰ This research did not conduct comprehensive visits to pharmacies outside urban areas, but did visit three districts in Kabul Province and two districts in Herat Province. Access to pharmaceuticals in the districts comes from public sector health care centres where they exist, private clinics and pharmacies and general grocery stores that also sell medicines.²¹ The link between private doctors and clinics and private pharmacies was even more evident in the districts visited than in urban areas. In the districts pharmacies were sometimes clearly owned and co-located with private clinics. The types of pharmaceuticals available at the district pharmacies and their prices were similar to the medicines available in the provincial capital, and pharmacy owners reported that it was from wholesalers in the capital that they bought their products. None of the districts visited were very remote, and one can speculate that pharmaceuticals may be more scarce and possibly also more expensive in remoter areas. In small communities, it appeared that sale of pharmaceuticals on credit was common. In one district in Herat Province, a pharmacist and private doctor showed off a log book with long lists of unpaid debts of community members who had not been able to pay for their purchases.

3.6 Street vendors, grocery stores and purveyors of herbal medicines

Pharmacies are not the only retail outlets selling pharmaceuticals in Afghanistan. Grocery stores selling basic foodstuffs also often sell medicines. Although these shops do not require a licence from the MoPH to sell pharmaceuticals, the MoPH reportedly conducts occasional inspections of such shops.²² Medicines are also commonly available on the street, sold by street vendors who congregate in busy street markets and sell a variety of medicines by blister strip. These medicines are bought from pharmacies or wholesalers. Street vendors in Kabul, who typically congregate in one area of town, told researchers that they could advise the appropriate medicine for headache or other pain, diarrhoea and respiratory illnesses. However, none of the street vendors had any formal pharmaceutical training and two were children aged 12 and 14, respectively. Many of the medicines being sold by street vendors appeared very old and may have passed their expiry dates. The vendors reported that they could make up to 300 Afghanis (US\$6) per day by selling medicines on the street. An article from 2004 records some adverse reactions experienced by customers buying medicine from street vendors and also confirms

“My family has been selling traditional medicines in this part of Kabul for generations. I studied herbalism in India. During the conflict, most of my family immigrated to India, but my brother stayed here in Kabul, which made it easier for us to resume business here two years ago. We buy herbal ingredients both from Afghanistan and imported ingredients and medicines from India.”

Herbal medicine shop owner, Kabul

²⁰ MSH, December 2002, “Afghanistan National Health Resources Assessment”, http://www.msh.org/afghanistan/ANHRA_2002_LITE.pdf

²¹ For provincial maps of health care facilities in Afghanistan, see <http://www.aims.org.af/home/ssroots.asp?seckeyz=z2&secido=8&seckeyt=a53&seckeyth=b58>.

²² MSH Afghanistan Pharmaceutical Sector Assessment, 2002.

that many such vendors are very young. The article relates that a 17-year-old describes his main patrons were “the poor and the uneducated”.²³

In addition to pharmaceutical medicines, traditional and herbal medicines are commonly used in Afghanistan. Traditional medical treatments are often dispensed by self-appointed traditional healers and can sometimes have adverse effects on health. Patients, especially in rural areas, can be subjected to questionable treatments, such as inhalation of ground camel bones for epilepsy or application of ashes from burned cotton for stomach pains.²⁴

However, there is another dimension of traditional medicines in Afghanistan. Although much knowledge of herbal treatments has been lost during the conflict period, there remains a store of knowledge on plants and their potential healing uses. In Herat Province, a female village Community Development Council (CDC – the elected *shura* established under the National Solidarity Programme) told researchers how they accessed medical treatment when community members were sick. As well as use of pharmacies and, for more serious illnesses, the nearest clinic, the women reported that female village elders would sometimes recommend teas or other remedies made from plants that grew locally. In urban areas, shops and market stalls selling herbal remedies are common, often run by members of the Indian–Afghan community for whom this is a traditional occupation in Afghanistan. Researchers were told by one such Indian–Afghan purveyor of herbal medicine in Kabul that as well as importing some ingredients from India, Afghanistan also produced many herbal ingredients that were exported to India for use in herbal remedies. A selection of Afghan medicinal plants, mostly from Badakhshan, is shown in the picture below.



The Afghanistan Statistical Yearbook records some US\$9m worth of exports of “botanical medicines” from Afghanistan in 2003 and there is clear room for development of this export market, especially given the large market for herbal remedies in India, Central Asia and Russia. The Hochpharma corporation is planning production in the former Hoechst factory and has a future intention to begin producing recognised and high quality herbal

medicines in Afghanistan on a large scale, using Afghan-grown ingredients.

3.7 Distribution systems in the private sector

This report does not investigate in any depth the rather confusing distribution processes for directly donated medicines, provided by the US Agency for International Development (USAID), the World Health Organisation (WHO), UNICEF, International Committee for the Red Cross and UN Population Fund (UNFPA), among others. However, a brief outline is necessary because some medicines bought with donated funds are procured locally on the private pharmaceuticals market. The extension into the provinces of the Basic Package of Healthcare Services (BPHS) is funded by the World Bank, the European Community and USAID and the origin of medicines dispensed in BPHS centres and hospitals differs. USAID stipulates that medicines bought by implementing partners (IPs) cannot be bought on the local

²³ R. Babekerkhel, 25 February 2004, *Do-It-Yourself Health care*, Kabul: Institute for War and Peace Reporting.

²⁴ A. Omar, 21 August 2002, *Traditional Remedies Put Health at Risk*, Kabul: Institute for War and Peace Reporting.

market. Thus, implementing NGOs in 14 provinces who are delivering BPHS health services with USAID grants must buy on the international market if they purchase their own medicines. There are various methods of supplying IPs with pharmaceuticals to run BPHS programmes. Some donated medicines are supplied directly to the IPs by donors, some medicines are donated to the MoPH and supplied by the ministry to IPs and some IPs supply medicines themselves by buying on the international or local market. There is a lack of coordination in procurement of pharmaceuticals by NGOs and each has set up its own system of purchasing, storage and distribution. One report conducted a small survey of NGOs in the health sector and revealed 12 different sources of supply from 11 respondents. Of these 11 NGOs, nine reported that they bought medicines on the local market, either through formal contracts or on an ad hoc basis.²⁵ Researchers for this case study found some Afghan import and wholesale enterprises reporting that they had won contracts to supply NGOs, and one wholesaler claiming that these contracts were worth up to US\$52,000 in value.

In the private sector, there are different distribution options. Manufacturers often distribute via an agent, or their own distribution system to wholesalers, retailers, or directly to prescribing doctors. Afghanistan currently lacks a significant manufacturing capacity, but the existing small scale manufacturers have different distribution systems, some using direct contacts with wholesalers or agents who seek retailers in the cities and provinces. One manufacturer reported sending its own representatives directly to pharmacies and even to NGOs that were known to buy pharmaceuticals. Another two manufacturers reported using agents based at the Parwan Hotel area in Kabul, where many such middlemen as well as importers and wholesalers are based, to identify markets for their pharmaceuticals. Agents and middlemen are reportedly involved in many transactions between manufacturers and importers, wholesalers and retailers. One manufacturer reported that it had received a request to buy a large consignment of pharmaceuticals, but had refused as it suspected that the “agent” making this request intended to sell the pharmaceuticals on at an inappropriately inflated price. Many instances were reported where pharmaceuticals were distributed to pharmacies without payment until the products were sold.

The supply chain in the pharmaceuticals sector is much more complicated, more malleable and contains more players than the supply chains encountered in other AREU studies of markets such as fuel and second-hand cars. This complicated supply chain makes the market harder to record and to regulate.

²⁵ Ibid.

4. Types, Prices and Import Routes of Pharmaceuticals

4.1 Prices

Prices of pharmaceuticals are regulated in almost all countries except for the United States. Every country has a different mechanism for pricing pharmaceuticals. In the United Kingdom, the Pharmaceutical Price Regulation Scheme is negotiated between the government and the association of British drug manufacturers. Elsewhere in Europe there is a system known as reference pricing, where prices are set according to the price of the same product in a basket of other countries. Prices of pharmaceuticals in Afghanistan are capped by the MoPH, with importers and retailers allowed to make between 10 and 15 percent margin on the sale of medicines, and wholesalers allowed to make an 8–10 percent margin, but many importers and pharmacies implied or even stated outright that they did not follow the official pricing guidelines. Most of these traders argued that prices should be unregulated and market-driven now that Afghanistan had a “free market”. There is a serious lack of capacity in the MoPH for enforcing regulations on pricing, especially outside of Kabul.

“New brands of medicines are constantly appearing on the market. We often see prescriptions for brands that we have not heard of before, or written in shorthand. These have usually been written by doctors wanting to send patients to a specific pharmacy. We are constantly trying to keep up with the range of brands sold by other pharmacies. If a particular brand that we do not stock starts appearing regularly in prescriptions, we know that we need to try to get hold of it.”

Pharmacy owner, Herat

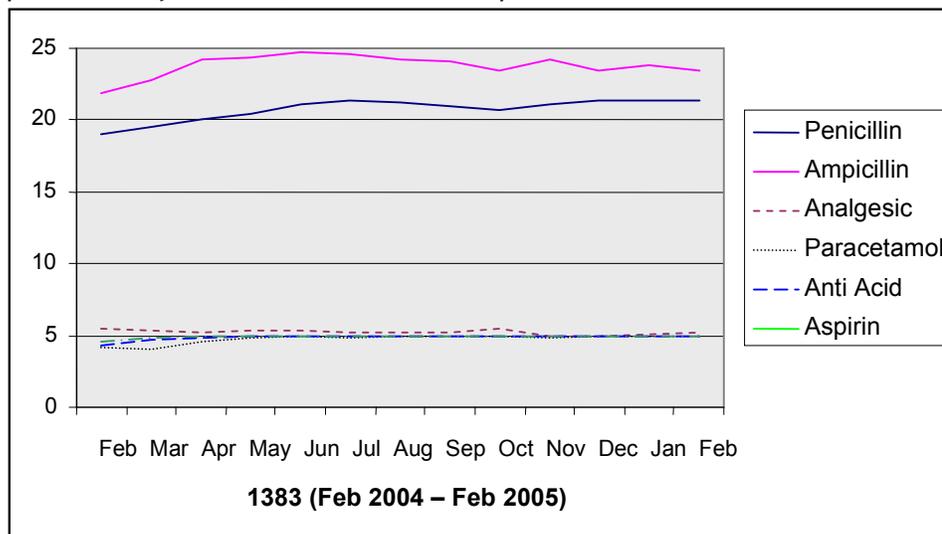
Some importers complained that the government cap on pharmaceuticals prices was a disincentive to the import of higher quality, but more expensive, medicines into Afghanistan. One importer claimed that “the government might study a brand of European paracetamol and stipulate that it should cost the equivalent of US\$1 on the Afghan market, but this product might cost US\$3 on the European market, so there was no profit to be made in importing it to Afghanistan”. Other evidence suggests that it is the vigorous competition in the market and the impetus to keep prices low that contrives to drive down the quality of medicines. As an aforementioned MSH report notes: “Competition, and the desire to keep prices low, are suspected as contributing to poor drug quality.”²⁶ There is ample evidence that Afghan customers prefer cheaper products. Research in Jalalabad found that the high prices of pharmaceutical products produced by multinational companies encouraged customers to look for cheaper substitutes and that as prices for medicines generally rose, customers were increasingly opting for cheaper brands that could be of questionable quality.²⁷ Several importers and pharmacists said that prices of pharmaceuticals were strongly linked to the exchange rate of the Afghani to the dollar, and, since so many medicines were imported from Pakistan, particularly to the Pakistani rupee. Government clampdowns on smuggled medicines could also cause shortages and hence drive up the price of that medicine.

The Kabul consumer price index for 1383 (February 2004–February 2005) records the following price changes for Iranian medicine in that year:

²⁶ Ibid.

²⁷ J. Khan, *Pakistan-Afghanistan Pharmaceutical Market*.

Figure 3. Price of basic Iranian-manufactured medicines in Afghanistan per course of 12 units, Kabul consumer price index



The above provides a useful guide to the change in price for Iranian medicines over time, but does not capture the entire spectrum of prices for medicines on the Afghan market, as Iranian makes (like Indian, Chinese and counterfeit Pakistani makes) are widely acknowledged to be significantly cheaper than Indonesian, Middle Eastern or Irish makes.

There is a bewildering array of pharmaceuticals from different countries, at different prices, of varying strengths and qualities, available on the Afghan market. MSH staff told researchers that there may be up to 5,000 different items in the private pharmaceuticals market in Afghanistan. An MSH study in 2002 assessed the availability of 24 essential tracer drugs at public and private health facilities. The tracer drugs were found to be generally more available in private pharmacies than in MoPH or NGO health facilities.²⁸ Thus there is no question that private pharmacies are offering access to essential medicines. However, there are concerns over the quality of the medicines offered.

During this research, some basic information was collected on the range of types and prices of pharmaceuticals available on the market. These are not statistically reliable data and are intended only to provide a snapshot of prices and types of medicine at a particular time in different locations. Four to five pharmacies were visited in each location, and the prices and origins of common medicines were recorded. The origins of medicines are not listed in the table, but were remarkably diverse in all the locations and especially diverse in Zaranj, Kabul and Herat. This is probably because Herat and Zaranj are border areas and because medicines are sent to Kabul from many different supply routes. Every location had both generic and "brand" medicines and all had medicines from Iran, India, China, Pakistan (both from multinational companies and generic medicines), Malaysia, UAE, Indonesia and Turkey. Medicines from Korea were available in Herat, Kabul and Zaranj. German medicines were available in Kabul, Mazar and Zaranj. Indonesian medicines were found in Herat and Zaranj and a French brand of Metronidazole was found in Zaranj. Indian, Chinese, Iranian and many Pakistani medicines are generic drugs. Many

²⁸ MSH Afghanistan Pharmaceutical Sector Assessment, 2002.

medicines from southeast Asia, Pakistan and the UAE are produced by multinational companies.

Table 1. Comparison of price of common medicines²⁹

Type of medicine	Location			
	Herat	Kabul	Mazar	Zaranj
Ampicillin	250–500mg, 12–33 Afs per strip*	250–500mg, 13.5–29 Afs per strip	250–500mg, 16–30 Afs per strip	250–500mg, 18–38 Afs per strip
Amoxicillin	250–500mg, 11–32 Afs per strip	500mg, 19.5–69.5 Afs per strip	250–500mg, 12–60 Afs per strip	250–500mg, 12–61 Afs per strip
Cotrimixazole	120–960mg, 4–24 Afs per strip	4.6–24.5 Afs per strip	480mg, 4–32 Afs per strip	120–960mg, 5–24 Afs per strip
Paracetamol	325–500mg, 3–15 Afs per strip	500mg, 2.4–8 Afs per strip	500mg, 4–7 Afs per strip	80–500mg, 3–13 Afs per strip
Metronidazole	250–400mg, 4–12 Afs per strip	250–400mg, 4–14.5 Afs per strip	250–400mg, 2.2–13 Afs per strip	250–400mg, 5–15 Afs per strip
Cough Syrup (Ammonium Chloride)	100–135ml, 4–35 Afs	120ml, 2–26 Afs	60–120ml, 13–20 Afs	100–135ml, 15–55 Afs
ORS (Oral Rehydration Salts)	200–250g, 3–5 Afs per pack	250g, 5 Afs per pack	250g, 4–7 Afs per pack	200–250mg, 3–5 Afs per pack

According to the above prices, a typical course of Metronidazole for one adult, a total of 30 tablets taken over five days, would cost between 6.6 and 45 Afghanis (US\$ 0.13–0.9). This is a significant amount in a country where average wages range from US\$1.9 to US\$5.2 per day depending on region and type of work, and where poverty levels, in terms of the internationally recognised standard of US\$1 consumption per day, is thought to be between 60 and 80 percent.³⁰

The most expensive medicines across the board were those coming from Europe or produced by multinational companies in Pakistan, followed by drugs manufactured in the Middle East. The cheapest medicines across the board were unbranded Pakistani medicines and Indian and Chinese drugs. Iranian medicines were in the middle price range in all categories. Medicines with lower doses of the active ingredient were cheaper than those with a higher dosage, across the board. The indeterminate number of poor quality and counterfeit medicines on the market in Afghanistan means that a packet showing a certain quantity of an active ingredient might not contain the stated dosage. Medicines were also found in more than one location with no labels or indications of origin, type, dosage or date on sale in a number of locations.

²⁹ It is interesting to note how medicines are sold in Afghan pharmacies. Pharmacies typically sell tablets by individual blister strips, not according to the number of tablets in the packet. This can mean that the customer does not receive the instructions often contained in, or written on, the packet, and therefore must rely on the instructions given by the doctor and pharmacist. Blister strips typically contain 10–12 tablets. There is also a risk that customers may not receive the full course of medicines prescribed by their doctor. Pharmacists are willing to sell even one or two tablets from a course of medicines individually.

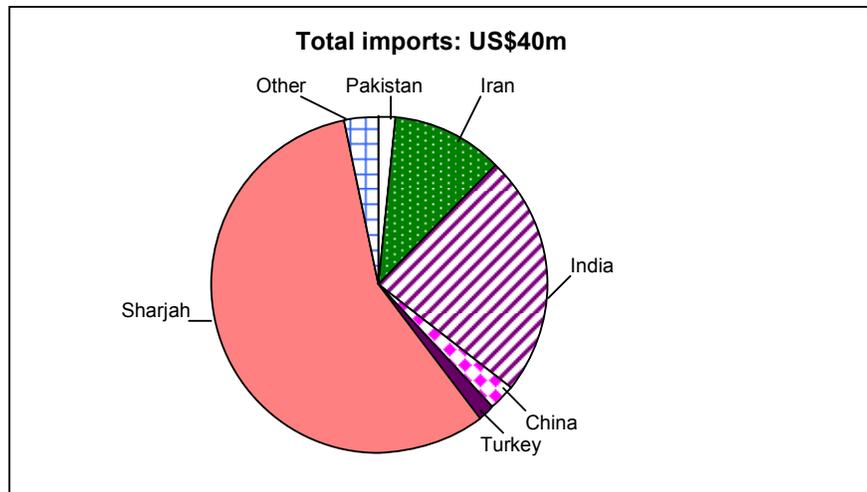
³⁰ Asian Development Bank Institute, 2004, *Post Conflict Reconstruction: The Afghan Economy*, Manila: ADBI, p. 24.

4.2 Import routes

As previously noted, there are no formal reliable data on volumes or values of imports to Afghanistan, but Pakistan is probably the most important source of imported drugs, followed by Iran, India, China, the Middle East and European sources.

The Afghanistan Statistical Yearbook records the following imports of medicines per country in March 2003–March 2004, but does not specify whether these include donated medicines.

Figure 4. Imports of medicine by country, 2003–2004



There are many features of the official statistics which do not tally with the pharmaceutical market as it appears on the ground in Afghanistan. This is probably due to the dominance of illegal and unrecorded imports in this market which cannot be fed into the statistics. The small share of Pakistani imports recorded above, for example, is misleading. Moreover, it is uncertain why so many medicines are recorded as coming from the UAE Emirate of Sharjah. Researchers did find that UAE-produced medicines, especially from the company Julphur, were prevalent on the market in Afghanistan, but these brands did not appear to take up anywhere near the market share suggested above.

The various routes and methods of importing pharmaceuticals into Afghanistan are more disparate and involve greater numbers of players than in the other import markets that have been the subjects of AREU case studies (fuel, second-hand vehicles). However, it is fairly certain that a large proportion of imported medicines are made in Iran and Pakistan and many that are manufactured elsewhere must in any case enter Afghanistan via these two countries.

Types of imports from Pakistan to Afghanistan fall into three categories: high quality brands of pharmaceuticals produced by multinational companies with factories in Pakistan, Pakistani manufactured generic drugs of varying qualities and sub-standard counterfeit pharmaceuticals. All three types of medicines may come into Afghanistan either legally or through smuggling. There are over 316 pharmaceutical companies, including 30 multinational companies, with manufacturing facilities registered in Pakistan. Some 37 manufacturers are based in the North West Frontier Province (NWFP) on the Afghan border. Some of these companies have in the past oriented their production specifically towards the export market to Afghanistan.

According to one trader, during the war in Afghanistan, “Local (Pakistani) manufacturers would send their agents to find out what was in demand in Afghanistan. Then they would produce whatever was in demand and put the required label on it.”³¹ Outside of government registration and regulation, it is believed that there are factories in Pakistan that produce counterfeits of medicines made by multinational companies. These are packaged in a similar way to the originals, but are far less effective, often containing little or no active ingredients.

As well as imports of both high and low quality Pakistani products, Afghan importers often buy medicines that may originate in third countries in Pakistani wholesale markets. Large markets of this kind exist in Karachi and Lahore, but Afghan traders also often buy from wholesalers in Quetta and particularly in Peshawar and then transport these goods by road into Afghanistan. Research in Peshawar wholesale markets suggested that many medicines sourced here are unofficially imported into Afghanistan and that this is a vibrant business.³² Contracted consignments of Indian and Chinese medicines are often delivered via Karachi and then shipped to Afghanistan over land.

Iran has a developed domestic manufacturing base producing mostly generic medicines, which supplies 95 percent of the needs of the domestic market. Like Afghanistan, Iran caps the profits of pharmaceuticals market players and Iranian officials claim that medicines are cheap in Iran compared to their market price in neighbouring countries.³³ This research was unable to verify what difference there may be between the retail price of pharmaceuticals in Iran and Afghanistan. Many importers of Iranian medicines said they had contracts with Iranian manufacturers, but it is possible that individuals are also bringing smaller ad hoc consignments of medicines from Iran into Afghanistan. The long porous border between the two countries would make such unregistered imports possible. The port of Islam Qala near Herat is one of the largest entry points for formal consignments of Iranian pharmaceuticals. One importer and wholesaler of Iranian and Indian medicines in Mazar related that as well as using the Islam Qala–Herat route, Iranian medicines were also imported into Afghanistan, via Turkmenistan, through the Afghan–Turkmen border crossing at Akina. Medicines from other sources also enter Afghanistan via Iran and one large importer reported that European medicines, particularly from Ireland, come via Iran as do Middle Eastern medicines. One interviewee told researchers that the quality of imports from Iran had deteriorated over time. At first, individuals would bring medicines in small quantities, and these were drugs that were intended for the Iranian domestic market and therefore of good quality. However, when importers began to make contracts with Iranian manufacturers for larger quantities, some of these manufacturers began to offload lower quality products, as they knew these were for export to Afghanistan, the interviewee alleged.

Researchers were told that during the Najibullah period, Soviet made medicines were imported into Afghanistan very cheaply. However, one importer claimed that it was no longer profitable to import medicines from Russia or the former Soviet Union, as these had become too expensive. Nonetheless some medicines manufactured in Central Asia are thought to enter Afghanistan from Heiratan on the Uzbek border and Sherkhan Bandar on the Tajik border.³⁴

³¹ J. Khan, *Pakistan-Afghanistan Pharmaceutical Market*.

³² *Ibid.*

³³ Iran Daily, 17 May 2005, “Iranian Medicines: Recovering Lost Ground”, <http://www.iran-daily.com/1384/2276/html/focus.htm>

³⁴ Interview with MSH staff, Kabul, May 2005.

5. Government Regulation

5.1 Customs procedures

When medicines arrive at the border entry ports, they are checked by customs staff along with their documentation and then are referred to the main customs offices in provincial capitals. Imports of medicines into Afghanistan are taxed at a rate of four percent and this tax is charged at the main customs offices. Chemical and pharmaceutical raw materials imports are taxed at 2.5–5 percent. Value added tax is also charged on pharmaceuticals at two percent.³⁵

As there are no laboratories for testing medicines or raw materials for pharmaceuticals production at border ports or in provincial customs offices, medicines and raw materials are held in these offices while samples are sent to the MoPH laboratories in Kabul to be tested. This process can be very lengthy, as the laboratory in Kabul is itself lacking in staff and equipment. As a result pharmaceuticals can be held for up to three months, according to importers, before being released from customs. As many medicines require refrigeration and some are damaged by extremes of heat or cold, many pharmaceuticals are damaged or destroyed while they are being held by customs. This represents a serious disincentive to involvement in official customs procedures for importers of pharmaceuticals. Enforcement of proper customs procedures is generally problematic and some have suggested that unfair differential tax rates and tax exemptions are being granted in some cases. The lack of enforcement capacity means that local customs officials may be granting unfair tax concessions to favoured traders. However, those wanting to circumnavigate customs procedures in the pharmaceuticals market are probably more likely to avoid declaring their imports at all.

5.2 Ministry of Public Health role

The MoPH has a large and important role in regulating the pharmaceuticals market at the point of licensing manufacturers, importers and retailers, sampling and testing manufactured products and imports and inspecting manufacturing facilities, wholesale warehouses and retail outlets. In addition, the MoPH has an overarching role in deciding drug-related policies in Afghanistan as well as identifying which medicines are appropriate in the Afghan context. This involves a number of departments in the ministry, including the Department for Pharmaceuticals and the Department for Legislation. The ministry is currently undergoing a reorganisation of its organigramme, which is intended, among other objectives, to achieve a tighter focus on pharmaceuticals. There are many addendums to existing medicine laws currently in the pipeline, similarly aimed at tightening regulation of the pharmaceuticals market. In practice, the MoPH lacks the capability to regulate the wholesale, retail and particularly the import of medicines effectively. The sheer number of imports brought unofficially into the country greatly outweighs the capacity of customs and border guards to control them and so does not come to the attention of the MoPH until the smuggled products reach the shelves of wholesale and retail outfits.

An updated essential medicines list, based on a World Health Organisation model, was produced in August 2005 and the national drug donation guidelines were

³⁵ From Ministry of Finance Customs Department document, obtained 2005.

published in April 2003. Afghanistan has a National Medicine Policy, published in January 2004. This contains articles relating to imports of medicines, stipulating that they must be purchased only from companies meeting certain requirements, including presentation of appropriate documents such as production licences and quality control documents from the country of origin. Samples of the medicines importers intend to import must be taken and these must pass tests at the quality control laboratory, based in the main building of the MoPH in Kabul.

Almost all importers complained about the bureaucratic process of filling in forms to get MoPH approval for medicines to be imported, which they said required many signatures and took a long time to complete. This was compounded by the common delays in waiting for samples of imported medicines to be tested in Kabul before the products could be released from customs offices. Many importers reported that they sold, often at a discounted price, 20 percent of the medicines they imported to the Department of Pharmaceuticals in the MoPH. Researchers were unable to find out whether this is a requirement for all importers and what is its legal and institutional basis.

The Department for Pharmaceuticals also has 66 inspectors, including 32 pharmacists,³⁶ responsible for conducting visits to check the type, quality, date and price of medicines sold in wholesale outfits, pharmacies and reportedly even in grocery stores. If these inspectors find substandard or expired medicines on sale, they confiscate and destroy them. Inspectors are active in Kabul every day, and inspections are technically also conducted in the provinces, but it is unclear how widespread such inspections are outside Kabul.

5.3 Quality and testing: eliminating expired, counterfeit and banned drugs

Almost all interviewees in all categories in this study said that there were many medicines of very poor quality on the Afghan market. Products of concern that are believed to be present on the market include: counterfeit medicines, expired medicines and medicines that have been banned because of their adverse side effects.

Researchers were told on many occasions that medicines banned in Afghanistan such as the analgesic and anti-inflammatory drug, Metamizole, and combinations of Metamizole such as Novalgin and Analgin, were still being imported into Afghanistan and sold by retailers. Researchers saw Analgin on sale on one occasion.

Expired medicines are available on the private market in Afghanistan. Expiry dates have also sometimes been a problem with donated medicines; as in other developing countries there have been cases where large quantities of nearly expired medicines have arrived in Afghanistan as aid. The MoPH has publicly burned some stockpiles of expired drugs found on the market on more than one occasion over the past year to illustrate its activities in eliminating expired drugs from the market. There is anecdotal evidence that outdated medicines are re-packaged as veterinary medicines or for other uses. One international official reported in Mazar that his gardener had bought a pesticide which did not work in spite of persistent use. Upon inspection, the pesticide turned out to be an injectible antibiotic, expired in 2003. The dangers to health of expired medicines are unclear and in some cases expired

³⁶ MSH Afghanistan Pharmaceutical Sector Assessment, 2002.

medicines do not pose a danger to health. The issue of removal of expired drugs in areas where there is a shortage of medicines is therefore controversial.

Appropriate storage of medicines is also an important issue. Many wholesalers and retailers do not store medicines in suitable conditions, and certain drugs can be damaged by extremes of temperature. Capsules, for example, are damaged by excess heat.

There is no common internationally agreed definition of a “counterfeit” medicine. In countries such as the US, counterfeiting of medicines is legally defined as the deliberate and fraudulent mislabelling with respect to the identity, composition and/or source of a medicinal product.³⁷ Not all countries recognise or abide by this definition. In India, for example, “patent pirating” whereby well known brands are reverse-engineered is not illegal under domestic law and this practice, considered a breach of intellectual property rights by the US, is widely used by Indian manufacturers. The WHO defines a “counterfeit” medicine as one that is produced with an intention to cheat. This can include mislabelling (including fudging expiry date), or use of no active ingredients, a wrong active ingredient, or the correct ingredient in an insufficient quantity. Both branded and generic products can be counterfeited according to this definition. Counterfeit medicines are distinct from substandard medicines, which are genuine medicines produced by legitimate manufacturers that do not meet the quality specifications that the producer says they meet.³⁸

There is a large amount of anecdotal evidence that both substandard and outright fake medicines are available on the Afghan market. Researchers were repeatedly told that medicines were available that contained little or no effective ingredients. Moreover, research conducted in Pakistan indicated that some factories in that country may be producing counterfeit medicines designed specifically for the Afghan market.³⁹ It is also thought that there are counterfeit medicine producers in India and China, southeast Asia and the former Soviet Union. Manufacturers of counterfeit medicines are motivated by the large profit margins to be made on relatively small quantities of counterfeit medicines and by the fact that trading in counterfeit medicines is seen to carry less risk than trafficking in addictive drugs.⁴⁰ Counterfeits are often difficult to detect, especially in countries such as Afghanistan, where the regulatory system is weak.

The consequences of taking such medicines for the patient can be serious. As an article on counterfeit medicines has surmised:

*Counterfeit drugs can trigger allergic reactions, dangerous interactions with other drugs or, in a worst-case scenario, death.*⁴¹

In the case of antibiotics, low dosages of the active ingredient are particularly dangerous as the bacteria develop resistance against the antibiotic and the antibiotic becomes inefficient.

³⁷ A. R. Spies and V. Van Dusen, 15 January 2003, “Counterfeit Drugs: A Menace Keeps Growing”, http://www.uspharmacist.com/index.asp?show=article&page=8_1014.htm

³⁸ WHO website, May 2005, “Counterfeit medicines - some frequently asked questions”, http://www.wpro.who.int/media_centre/fact_sheets/fs_20050506.htm

³⁹ J. Khan, *Pakistan-Afghanistan Pharmaceutical Market*.

⁴⁰ Ibid.

⁴¹ MSH Afghanistan Pharmaceutical Sector Assessment, 2002.

The World Health Organisation estimates that some 10 percent of medicine on the world market is counterfeit and that in developing countries the percentage of counterfeit medicines is 25 percent.⁴² It is impossible to assess the real scale of substandard and counterfeit medicine on the market without more comprehensive testing of samples. Some sampling of pharmaceuticals on the market has been conducted by external bodies, such as MSH, which selected 16 samples from a random selection of private pharmacies in Kabul in 2002 and sent them for testing in Baltimore, Maryland in the US. The results of these tests were surprisingly positive, with only one sample failing to meet acceptable standards.⁴³ The MSH report stressed that this sample did not represent a very broad selection, and there is clearly scope for more research in this field. It is possible that fake medicines are targeted at more remote and poor areas. As the WHO points out, “the main victims of this trade in the (developing) world are usually the poor, particularly in rural areas. They buy these drugs because they are often cheaper than the genuine products.”⁴⁴

The current quality control system in Afghanistan relies on the laboratory in the main building of the MoPH in Kabul. This laboratory has received some equipment from the World Health Organisation, but when researchers visited, staff reported that their capacity and equipment was not equal to the huge task of testing samples from customs offices and from the market.

⁴² WHO website, “Counterfeit medicines - some frequently asked questions”.

⁴³ MSH Afghanistan Pharmaceutical Sector Assessment, 2002.

⁴⁴ WHO website, “Counterfeit medicines - some frequently asked questions”.

6. Conclusions and Recommendations

6.1 Regulation

All over the world, pharmaceutical markets are some of the most regulated market sectors. Most countries recognise that regulation in this sector is necessary to ensure the supply and quality of essential medicines. Regulation of the pharmaceuticals market in Afghanistan represents a formidable challenge, but could be promoted in the following ways:

- Given the gargantuan nature of the task of bringing Afghanistan's borders under control and the sheer number of smuggled imports of pharmaceuticals, it makes sense to concentrate in the first instance on regulating pharmaceutical products at the point of wholesale and retail. Simple measures such as publishing more widely the list of permitted medicines and obliging retailers to display this in a prominent place on their premises might be a useful tool. Lists of common counterfeits and banned medicines could also be displayed.
- Continued support for the training of pharmacists in the Faculty of Pharmaceutical Sciences in Kabul University would help to secure the supply of qualified staff both for pharmacies and for regulatory authorities.
- Licensing procedures should be fair and transparent, and licensing authorities should be independent and demonstrably free from any influence by the private sector. Streamlining of the process for licensing importers could provide an incentive for importers to enter the official economy and would eliminate room for corruption, favouritism and bribe taking.
- The feasibility of installing testing facilities at main border entry ports, or even a mobile laboratory for testing of pharmaceuticals, should be assessed. Such facilities would improve the testing of pharmaceuticals and avoid delays and damage caused to pharmaceuticals imports while they are stored in customs offices.
- There are already some public education campaigns on pharmaceuticals use, including posters explaining the appearance and function of different medicines on display at clinics and other public health centres. More comprehensive public health campaigns are needed, possibly using different media such as radio and television.
- If the Avicenna Pharmaceutical Institute is in fact to be privatised, the process should be transparent and there should be proper valuation of assets.



6.2 Sustainability

It is unclear how the different mechanisms for supplying provincial comprehensive and basic health centres with pharmaceuticals will be standardised over time. At some point in the future, more private sector involvement is envisioned in the supply of pharmaceuticals to public health facilities.

- A long-term strategy for securing sustainability of high quality pharmaceuticals supply should be available in the public domain. The future

role of the private sector in this strategy should be clearly outlined, and opened for debate and consultation.

- Development of a good quality domestic manufacturing base to substitute imports is a good means of securing sustainability of pharmaceutical supply.

6.3 Import substitution and the investment climate

The bureaucratic system for registering and gaining permissions for foreign and domestic investors should be streamlined to eliminate long delays and the potential for corruption and bribe taking. The Afghanistan Investment Support Agency has already achieved a great deal in this respect. Afghanistan could consider targeting key industries where import substitution could benefit the Afghan economy, by prioritising investment friendly reform, access to plots in investment parks and other institutional support in these areas. Investment and private sector development more generally could be promoted in the following ways:

- Access to credit through banks and other financial organisations would open the market to players who were not able to gain unofficial credit. Access to micro-credit would allow small players to expand their businesses.
- Improved procedures for buying land and secure tenure for businesses renting accommodation are vital in order to encourage the growth and expansion of small and medium-sized players.
- Processes for granting licences to importers should be clear, transparent and accountable and should be subject to rigorous inspection.
- Transparency and corporate governance should be emphasised in private sector development and in the allocation of large contracts.
- Appropriate space should be maintained between senior politicians and other officials and large business players in order to reduce the improper patronage of certain businessmen by political figures.
- The establishment of membership-based, democratically run chambers of commerce beyond Kabul should be supported as effective lobby groups for the private sector.
- Anti-competitive practices in trade should be addressed in order to ensure the maximum realisation of the benefits of free market competition in terms of increased productivity and innovation for businesses and better value for consumers.

References

- Asian Development Bank Institute. 2004. *Post Conflict Reconstruction: The Afghan Economy*. Manila: ADBI.
- Babekerkhel, R. 25 February 2004. *Do-It-Yourself Health care*. Kabul: Institute for War and Peace Reporting.
- Grace, J. and A. Pain. June 2004. *Rethinking Rural Livelihoods in Afghanistan*. Kabul: Afghanistan Research and Evaluation Unit.
- Iran Daily. 17 May 2005. "Iranian Medicines: Recovering Lost Ground". <http://www.iran-daily.com/1384/2276/html/focus.htm>
- Khan, J. 2005. *Pakistan–Afghanistan Pharmaceutical Market*. Unpublished consultant report for AREU.
- Management Sciences for Health. December 2002. "Afghanistan National Health Resources Assessment". http://www.msh.org/afghanistan/ANHRA_2002_LITE.pdf
- Najemi, S. 13 August 2004. *Medical Treatments do More Harm than Good*. Kabul: Institute for War and Peace Reporting.
- Omar, A. 21 August 2002. *Traditional Remedies Put Health at Risk*. Kabul: Institute for War and Peace Reporting.
- Spies, A. R. and V. Van Dusen. 15 January 2003. "Counterfeit Drugs: A Menace Keeps Growing", http://www.uspharmacist.com/index.asp?show=article&page=8_1014.htm
- United Nations Development Programme – Afghanistan website. "First Generic Medicines Factory being set up in Afghanistan", http://www.undp.org.af/media_room/press_rel/press_rel.htm#generic
- Wali, A. 22 August 2002. *Phoney Drugs Put Lives at Risk*. Kabul: Institute for War and Peace Reporting.
- WHO. May 2005. "Counterfeit medicines – some frequently asked questions", http://www.wpro.who.int/media_centre/fact_sheets/fs_20050506.htm
- WHO Drug Information. 2000. *General Policy Issues: Generic drugs: the hidden issues of quality and cost*. 14(2): 77.
- World Bank Group. 2005. "Health Systems Development, Private Sector – Overview". <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTHSD/0,,contentMDK:20187235-menuPK:435121-pagePK:148956-piPK:216618-theSitePK:376793,00.html>

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Afghanistan Research and Evaluation Unit
Charahi Ansari (opposite the Insaf Hotel and Popolano's)
Shahr-e Naw, Kabul, Afghanistan
phone: +93 (0)79 608 548 email: areu@areu.org.af website: www.areu.org.af