Finish the Job: Jump-Start Afghanistan's Economy

A Handbook of Projects

S. Frederick Starr with Adib Farhadi

Contributors: Kaush Arha, Peter Middlebrook, Leif Rosenberger, Gulshan Sachdeva

> SILK ROAD PAPER November 2012



Central Asia- Caucasus Institute Silk Road Studies Program

Finish the Job: Jump-Start Afghanistan's Economy

A Handbook of Projects

S. Frederick Starr with Adib Farhadi

Contributors: Kaush Arha, Peter Middlebrook, Leif Rosenberger, Gulshan Sachdeva "Finish the Job: Jump-Start Afghanistan's Economy" is a Silk Road Paper published by the Central Asia-Caucasus Institute and the Silk Road Studies Program. The Silk Road Papers Series is the Occasional Paper series of the Joint Center, and addresses topical and timely subjects. The Joint Center is a transatlantic independent and non-profit research and policy center. It has offices in Washington and Stockholm and is affiliated with the Paul H. Nitze School of Advanced International Studies of Johns Hopkins University and the Stockholm-based Institute for Security and Development Policy. It is the first institution of its kind in Europe and North America, and is firmly established as a leading research and policy center, serving a large and diverse community of analysts, scholars, policy-watchers, business leaders, and journalists. The Joint Center is at the forefront of research on issues of conflict, security, and development in the region. Through its applied research, publications, research cooperation, public lectures, and seminars, it functions as a focal point for academic, policy, and public discussion regarding the region.

The opinions and conclusions expressed in this study are those of the authors only, and do not necessarily reflect those of the Joint Center or its sponsors.

© Central Asia-Caucasus Institute & Silk Road Studies Program, 2012

ISBN: 978-91-86635-45-9

Printed in Singapore

Distributed in North America by:

The Central Asia-Caucasus Institute
Paul H. Nitze School of Advanced International Studies
1619 Massachusetts Ave. NW, Washington, D.C. 20036
Tel. +1-202-663-7723; Fax. +1-202-663-7785
E-mail: caci2@jhu.edu

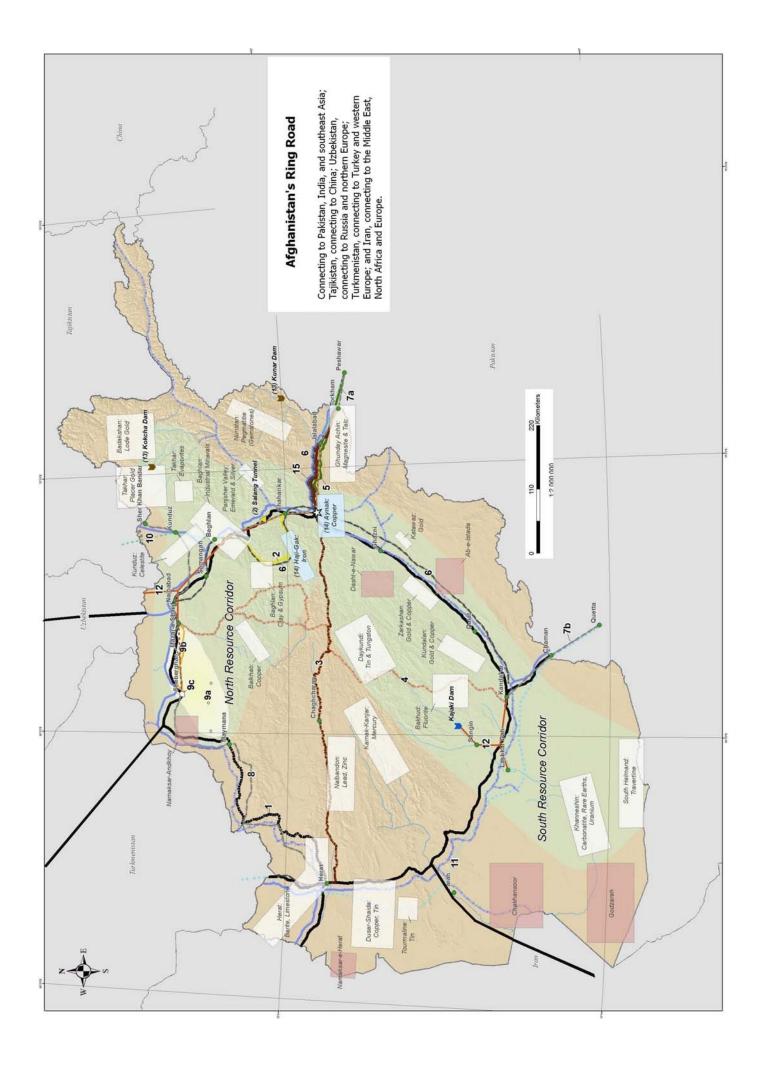
Distributed in Europe by:

The Silk Road Studies Program
Institute for Security and Development Policy
V. Finnbodavägen 2, SE-13130 Stockholm-Nacka
E-mail: info@silkroadstudies.org

Editorial correspondence should be addressed to Svante E. Cornell, Research and Publications Director, at either of the addresses above (preferably by e-mail).

Table of Contents

Executive Summary
Finish the Job: Jump-Start Afghanistan's Economy
Why the Economy Can't Wait10
Afghanistan's Surprising Long-Term Prospects
The United States' Role: To What extent is it Elective?
The Threat that Looms Immediately1
Immediate and Urgent Measures:1
Implementing Urgent Measures20
Beyond the Looming Crisis: Awash in Programs
Beyond "Projectitis": Ranking and Prioritizing2
What About Agriculture, Mining, Oil and Gas?22
Reorganizing the U.S. Government to Act Effectively on These Issues. 26
A Program of Fundamental Measures:27
Concise Listing of Phased and Prioritized Projects to Rebuild the Afghan Economy, 2012-202529
Short Term Measures (by 2015):20
Mid-Term Measures (by 2020):
Long- Term Measures (by 2025):3
A Handbook of Projects to Build the Afghan Economy3
Short-Term Projects:32
Mid-Term Projects:40
Long- Term Measures:49
Authors' Bio



A Fox was boasting to a cat of his many clever ways to escape from enemies. "I have a whole bag of tricks," he claimed.

"I have only one," said the cat; "but it serves me well."

Just at that moment they heard the cry of a pack of hounds coming towards them. The cat immediately scampered up a tree and hid in the branches. "This is my way of escaping," said the cat. "What are you going to do?" The fox considered many of his clever tricks. But while he was pondering the hounds cornered him. Then the huntsman arrived and shot him. The cat, who had been looking on, said:

"Better one sure plan than a hundred on which you can't depend."

Aesop's Fables, ca. 630 BC

Executive Summary

This paper begins by acknowledging the dire political and security situation facing Afghanistan as the U.S. and NATO draw down their forces there. However, it sees the key driver of change not in these spheres, important as they are, but in the economy, which could plummet with the sudden loss of orders for goods and services resulting from the military drawdown. Unless the economic crisis is addressed, the political and security situations will not improve. However, if the economy stabilizes and resumes a path of sustainable growth, levels of political and security tensions will subside. Thus, economic development in Afghanistan is not something to be pursued after political stability and security have been established; rather, it is what must be achieved in order to forge political stability and communal peace.

To this end, seven urgent and immediate measures are proposed to soften the economic impact of the military drawdown. These include the establishment of a few key border crossings where Afghan goods can be quickly processed for export; free economic zones at those crossings to foster trade; an air hub at Kabul; and the immediate full implementation of the signed trade and transport agreement with Pakistan.

These immediate near-term initiatives cannot be successfully implemented without explicit support at the highest levels of the U.S. government, and without a focused interagency group led by a cabinet-level official to oversee it. In addition, a "New Silk Road Ambassador-at-Large" should be established at the Department of State to facilitate, on a full-time basis, regional economic integration vis-à-vis Afghanistan.

Beyond this looming crisis, the authors see positive prospects for Afghanistan's economic future, driven by its favorable geographical position, abundant natural resources, and industrious population. Improved truck, rail, and air transport, coupled with fast border regimens, are the keys to tapping

these natural and human assets, and to moving Afghanistan from an aiddependent to a trade-led model of economic development.

Afghanistan is awash with programs to develop its economy. But the U.S., other foreign partners, and major international institutions have advanced these without due attention either to ranking them in terms of priority or to phasing their implementation. As a result, essential measures are mixed capricious with useful but less urgent projects.

As an alternative, the paper enumerates nine short-term measures, to be completed by 2015; eight mid-term measures, to be completed by 2020; and five long-term measures, to be completed by 2025. These are detailed in "A Handbook of Projects to Build the Afghan Economy," appended to the report.

The main thrust of these projects is to overcome the geographical isolation from regional and world trade and commerce that was the cause of Afghanistan's poverty and under-development in the first place and remains so today. This means opening internal, regional and continent-wide channels of transport and trade. Without them, neither the country's agricultural wealth nor rich natural resource can reach the best markets abroad.

The transport of natural gas and oil from Afghanistan to neighboring countries and across Afghanistan, especially through the TAPI gas pipeline, is a priority. The production and transport of electric power within Afghanistan, into Afghanistan's from neighbors, and across Afghanistan to Pakistan, also figure prominently in the program.

Skeptics will argue that such proposals for roads, railroads, and energy transmission make no sense until the security situation improves. But to protect the route of a road or pipeline is far less difficult than securing an entire province. This suggests that the deployment of more security forces to protect transport corridors may be a more effective use of Afghanistan's military than many current activities to which they are assigned, especially since the transport corridors generate wealth.

The U.S., other donor countries, and international financial institutions have viewed Afghan development mainly in terms of urgently needed infrastructure. However, there are important programs that can be realized

only with the exercise of leadership, convening power, and effective diplomacy. Unless the U.S. and its partners exercise such leadership, which requires engagement at the highest levels of government, Afghan development will be needlessly delayed stunted, and flawed.

Bureaucrats the world over see economic development largely as the work of bureaucrats like themselves. If Afghanistan is to emerge from its crisis, the private sector must be engaged far more directly and deeply than has heretofore been the case. America and other donor countries must embrace this principle, or accept the consequences of not doing so, including the further bureaucratization and politicization of Afghanistan's economic and civic life.

Finish the Job: Jump-Start Afghanistan's Economy

Americans are sick of the war in Afghanistan. Down through 2007, according to an ABC/Washington Post poll, 57% of Americans thought the war was worth the cost. In a striking reverse, the Chicago Council on Global Affairs now finds that two in three Americans oppose the war. For every American who thinks the war has been worth fighting there are two who believe it was not worth it. Most do not believe it has made the U.S. safer.

Accordingly, as the *New York Times* reports, the U.S. government has redefined success sharply downward. In March, NATO cut funding for forces there by two thirds and the U.S. pushed forward the schedule for its drawdown even before its unconditional withdrawal of troops by 2014. Earlier, Americans spoke of "draining the swamp" in which extremism bred: i.e., removing the long-term threat posed by a deeply impoverished, insecure, and under-governed land. Will that, at least, have been accomplished? Or will the U.S. simply leave, turning the swamp back to the alligators?

Most recent discussion in the U.S. and Europe has focused on the eroding state of security in Afghanistan and the seemingly chaotic political situation there. Many observers bluntly predict that the U.S. drawdown will lead to the collapse of the government and the re-establishment of Taliban rule. Some, giving up on the constitution adopted after the 2003 Loya Jirga, call for a new Loya Jirga to redefine the country's governing compact. Others fear that the Loya Jirga itself cannot restore legitimacy, as that institution, too, has been debased in the eyes of many Afghans.

The situation is indeed dire. Insider attacks have claimed the lives of scores of Americans and coalition partners, and Taliban forces operate freely in large regions that had been safe during the surge. At the national political level, the administrative structures are widely perceived to be riddled with corruption and unable to deliver essential services to many provinces. Meanwhile, the decision to withdraw American and other international

forces from Afghanistan in the same year in which a presidential election is scheduled there only further complicates the transition. Basic questions of future leadership remain unresolved, as centrifugal forces once more make themselves felt in the country.

Why the Economy Can't Wait

Underlying nearly all discussion of these matters are two closely related assumptions: first, that the level of political stability or instability in post-Karzai Afghanistan will determine the security situation; and, second, that the level of security will in turn determine the chances for economic progress. These assumptions give rise to an extremely important corollary which, rarely articulated, has nonetheless defined the phasing of U.S. and NATO strategy in Afghanistan for a decade. This holds that: (a) the first task is to establish political stability; (b) that then, and only then, will it be possible to address the problem of physical security; and, (c) that only with the establishment of physical security and peace will it be possible to address the problem of the economy.

It is undeniable that this formulation is partially valid, and that in an ideal world strategy would be built around precisely such a phasing. But a decade's experience has shown that people with no economic prospects can easily be recruited by insurgent forces, especially if those forces offer better pay than the poor can earn on their own or even as members of the Afghan National Army. And experience has shown that under these circumstances it is difficult, if not impossible, for a newly established government to rule effectively, or even to establish its legitimacy. Anyone seeking to build political stability and peace in Afghanistan must therefore figure out how to spark the economy while at the same time undertaking these tasks. The economy cannot wait. Of course, this creates formidable challenges. But the phased strategy outlined above has failed not because it is illogical but because it ignores the human factor. Given the extreme poverty in which most Afghans live, signs of economic progress have become the essential condition for political progress and social peace.

The recent establishment of a coalition of national political parties and coalitions, neither of which was encouraged in the years after 9/11, may yet provide the basis for a peaceful political transition and presidential elections

in 2014. But even if this occurs, economic development is not something to be pursued after political stability and security have been established; rather, it is what must be achieved in order to forge political stability and communal peace.

Bombarded with grim reports of military clashes and political confusion, many observers outside Afghanistan, especially those who consider themselves to be practical people, may dismiss this proposition as hopelessly naive. In fact, it is these observers and experts who are deceived. They wrongly assume that political and military conflicts are ubiquitous though every region of the country. This is by no means the case. Even as we are bombarded with news of horrific conflicts in some parts of the country, most of the thirty million Afghans are busy not with politics and guerrilla war but with surviving and earning a living. They judge the country's contending powers in terms of their ability, or inability, to improve the economic lot of ordinary people. If they discern progress in a neighboring region, they will immediately seek to identify its causes and work to apply them on their own territory as well. An awareness of economic progress will do more than anything else to advance political stability. Economics, in other words, while not an independent variable, shape the prospects for political stability and military security at least as much as they shape the economy.

Afghanistan's Surprising Long-Term Prospects

While Americans and others abroad debate these questions, Afghanistan's long-term economic prospects have improved far beyond what anyone could have imagined a decade ago. However counter-intuitive it may seem, Afghanistan today is positioned—or can soon be positioned—in such a way as to sustain its economic recovery beyond the period of transition and even launch an economic boom thereafter. Economic progress will do more than anything else to transform expectations in that forlorn land. It will truly "drain the swamp" of despair that has threatened Afghanistan's own people, its neighbors, and the world.

Three new factors are opening this vista. First, it turns out that Afghanistan is extremely rich in oil, gas, and minerals. The U.S. Geodetic Survey, on the basis of careful study, has announced the presence there of more than \$1

trillion in natural resources—fifty times Afghanistan's current GDP. These riches include gas, oil, copper, iron, other minerals, and rare earths. Related to these are the concession payments that will result from extraction, and the many jobs that task will create. Resource specialists speak of Afghanistan as a "mineral Kuwait." When South Korea launched its rapid development nearly a half century ago, it could boast no such assets.

Second, Afghanistan's central but landlocked location, seen until recently as an unmitigated liability, turns out to be a major plus, for it will enable the country to take full advantage of the transport revolution that globalization is creating across all Eurasia. Much has been said of the "Silk Road" that connected China and Europe, and which is rapidly reopening. Equally important over the millennia was Eurasia's great "Southern Corridor" that connected India, Europe and the Middle East, and which passed directly through Afghanistan. On the territory of Afghanistan, this great thoroughfare linked with north-south routes connecting to China, Russia, and northern Europe. The closed borders of the USSR long throttled these corridors of continental commerce. Now, since 9/11, they are rapidly reopening. In the long run, this unanticipated and unheralded development may prove to be the most lasting impact of Operation Enduring Freedom. However, if the U.S. accompanies its military drawdown with a less-than intensive engagement with the economy, and one that is publicly supported at the highest levels, the benefits of this could accrue to hostile interests and parties.

Quite independent of Afghanistan, NATO or the U.S., tens of billions of dollars are being invested in these routes by countries as diverse as India, Pakistan, China, Bangladesh, Turkmenistan, Uzbekistan, Azerbaijan, Georgia, Turkey, and Iran, and by such international financial institutions as the World Bank, Asian Development Bank (through its Central Asia Regional Cooperation Program, CAREC), and Islamic Development Bank. Moreover, in additional to national governments and international financial institutions, such entities as the Economic Cooperation Organization (ECO), Shanghai Cooperation Organization (SCO), and South Asian Association for Regional Cooperation (SAARC) are all actively engaged in fostering trade and transport throughout the Greater Central Asia region.

Afghanistan is the inevitable hub of all these transport projects. As they are completed, that cash-starved country will gain a reliable and long-term income stream. European freight forwarders and Indian firms are already planning how they will take advantage of this new/old corridor of trade through Afghanistan. India estimates that if the political economy of the region improves and as little as 20% of western trade is sent by roads, \$100 billion dollars worth of goods will pass through Afghanistan as early as 2015-16. Significantly, this enormous engine of wealth creation is being driven mainly by the private sector, not by governments.

Third, Afghanistan is not the same country it was on 9/11. GDP, still miserably low, has risen seven-fold, which places Afghanistan above sixteen other countries on the UN's Human Poverty Index. In 2001 the national treasury was non-existent; eleven years later domestic revenues have reached \$2 billion and are growing steadily. Both maternal and infant mortality have plummeted, while life expectancy has risen by six years. When the Taliban ruled the country, 1.2 million children attended school; now the number has risen to 8.2 million. And there are now two girls in school for every three boys. The number of students at public and private universities has also grown: from 4,000 to 75,000. The number of motor vehicles per thousand population has multiplied six-fold and rapid urbanization is breaking down old tribal patterns. Eighty women sit in the National Assembly. Cell phones are everywhere, and Afghanistan is one of the world's hottest telecom markets. Driven mainly by private foreign investment, the communications sector has fundamentally changed the way Afghans go about their work and lives. It is no surprise that the millions of beneficiaries of these and other recent gains want to preserve them, and not have them taken from them.

Together, these and other developments have generated new expectations among millions of ordinary Afghans that no government, even one dominated by the Taliban, can long ignore. All Afghans expect to reap benefits from their heretofore unknown energy and mineral resources; they want to be able to export their produce to more lucrative markets, and to participate in the new transit trade; they expect their hard-earned social and economic gains to continue; and they all want to do so as a single country. Like citizens of other countries,

they debate how to divide the pie. But no one proposes to take his or her slice and withdraw.

If these expectations are realized, will the swamp that nurtured 9/11 not have been drained?

The United States' Role: To What Extent Is It Elective?

It is important to stress that the initiatives discussed above will go forward with or without the United States or any other single international actor, including other major powers and the international financial institutions. The United States, both before 2014 and during the decade thereafter, has the power to make these transformational changes occur faster and better, but not to thwart the continent-wide forces of integration that are so powerful today.

The question, then, is whether it makes sense for the U.S., given its many other needs at home and abroad, to make a serious ten-year commitment to Afghan economic development. The answer is really very simple. Political stability and basic security in Afghanistan are impossible without economic growth. The alternative, then, is to slip back into the conditions that gave rise to 9/11 in the first place. In fact, the resulting situation would be far worse than on the eve of 9/11. By leaving Afghanistan to face its economic fate alone, the U.S. would gravely damage its credibility as an ally and partner, and undermine all trust in the seriousness of its actions and commitments. Countries in Central and South Asia will be quick to draw this conclusion, but so will many governments far distant from the region. Further, it would vindicate all those who suspect that America acts abroad only in response to the domestic politics of the moment. And, in the end, it would undermine the security of the U.S.. In short, it would confirm the view of those who view the Afghan project as a defeat.

To a far greater extent than most Americans realize, the commitment to Afghanistan's economic future has already been made. In May 2010, Presidents Karzai and Obama signed an "Enduring Strategic Partnership Agreement," far the longest section of which is devoted to "Social and Economic Development." Specifically, it calls for the U.S. to help develop Afghanistan's mineral and natural resources, trade, and the private sector,

and to "safeguard and enhance" its financial system. It also commits the U.S. to support education, anti-corruption, and the capacities of institutions providing basic social and economic services. Further, at a UN conference in Tokyo in July 2012, the U.S., along with the entire international community, committed itself to support a "decade of transformation" in Afghanistan, including a combined pledge of \$16 billion over the next four years. As we shall see, even this sum (which remains a pledge and not hard cash) will leave many of the most urgent programs unfunded. But it is a positive step nonetheless. And it will be reinforced by a major "Bilateral Security Agreement" between Washington and Kabul that should be signed sometime in the coming months. Whether or not one calls this nation building, or whether the program of "social and economic development" it envisions is the right one, it represents a major commitment, and one that the U.S. has already made.

The Threat that Looms Immediately

With or without these various commitments, formidable obstacles lie immediately ahead in Afghanistan. Far the most urgent of these arise from the fact that the withdrawal of U.S. and NATO forces will leave a massive hole in the Afghan economy. It will put an end to thousands of Afghan jobs and the purchase of goods and services from Afghan firms. Added to this is the inevitable reduction of aid money, which in 2010 reached the astonishing sum of \$15.7 billion, about the same as Afghanistan's gross domestic product. In the best case these changes will produce a drop of under 10%. But analyses of the worst case suggest that GDP could plummet by 40% and fundamentally destabilize the Afghan currency. Separate from this, the failure of the U.S. and its international partners to focus serious attention on the economy has resulted in the contraction of Afghan exports from \$545 million dollars in 2008-2009 to \$388 million dollars. In the same years, imports have soared.

¹ Afghanistan in Transition: Looking Beyond 2014, The World Bank, 2012, p.16.

Anthony H. Cordesman points out that these cuts "threaten to derail [the] Transition." In fact, the damage could be worse yet. One should note the comparison between Afghanistan's possible fate and that of East Timor, where the economy severely contracted after the sudden withdrawal of 10,000 UN peacekeepers and international advisors in 2005. Aggregate demand plummeted overnight, with fatal consequences that severely damaged the private sector, thus crippling the best engine for the country's recovery. Paul Cleary wrote in The Wall Street Journal that the collapse was "a sufficient condition for sending any post-conflict country back into conflict." The situation in East Timor was reversed only when foreign companies were brought in to exploit the country's hydrocarbon resources.

Are there preventive steps that can be taken immediately to ameliorate this looming crisis? Many promising avenues exist, but these must be pursued quickly if they are to address the looming crisis. There are two common denominators among all of them: first, they focus overwhelmingly on the private sector and open the measures that government can take to boost it. Second, they enable Afghan producers, whether farmers, village craftsmen, home-based producers, and manufacturers, to get their products to more lucrative markets both within Afghanistan and, more important, in countries beyond Afghanistan's borders.

To now, the U.S. government has largely ignored immediate steps necessary to avoid the economic crisis created by the rapid withdrawal of foreign troops from the country. Moreover, in spite of initiatives from the Department of Defense's Task Force for Business and Stability Operations (TFBSO), USAID, and the Department of Commerce, it has focused more on governmental actions and on creating what development professionals call an "enabling regulatory environment" than on directly targeting the specific needs of the private sector. But unless the economic crisis that looms in the short term is addressed, we will never get to these broader initiatives. The following urgent steps hold great promise for bridging the gap between the

² Anthony H. Cordesman, "The Afghan War: Creating the Economic Conditions and Civil-Military Aid Efforts Needed for Transition," Third working draft, 18 September, CSIS, 2012, p. 2.

³ Paul Cleary, "It's the Economy, Stupid," The Wall Street Journal, 23 May 2007.

end of dependence on income from the foreign military presence and the rise of the local and regional economy.

Immediate and Urgent Measures:

- Implement the Afghanistan-Pakistan Transit Trade Agreement, engaging as necessary the assistance of appropriate national and international partners as, for example, the United Nations' Assistance Mission in Afghanistan. This excellent agreement, reached with active U.S. encouragement and signed in 2010, will enable trucks of both countries to deliver goods to the other, greatly boosting exports and trade. There are limitations, to be sure, but these can be addressed over time. To date, however, APPTA has not been implemented. The U.S. must exercise leadership to assure its immediate implementation.
- Establish an air cargo hub at Kabul and assist Afghan and other airlines to expand air freight services and market them to small producers. This means constructing general and cold storage facilities at the airport, improvement of services, etc. This will enable small and medium sized businesses to leapfrog over border bottlenecks and get their product to lucrative new markets abroad.

 Much air traffic already flows between Kabul- Dubai, Kabul- Delhi and Kabul-Islamabad, both on public and private airlines from Afghanistan and the region. However, traffic on other routes in the region is extremely limited. Suffice it to note that a traveler from Dushanbe to Kabul, a trip requiring less than two hours by direct flight, is forced to fly first to Istanbul and then to Kabul—a total of twelve hours.

On the basis of its Civil Aviation Master Plan, the Afghanistan government is already working with international partners on the rehabilitation, organization and management of its airspace. Airspace authority will soon be transferred from ISAF to the Afghan administration. The liberalization and expansion of regional connectivity, and the linking of regional airports with major international routes, are a priority of the more than eight governments

and international organizations participating in the Regional Economic Cooperation Conference on Afghanistan (RECCA-V). However, without a solid push, the opening of new routes to Kabul may take a decade. Suffice it to say that at the moment all four carriers certified in Afghanistan are still banned by the European Commission. Germany and other donors are assisting in setting up of civil aviation training institute, but the expansion of new flights and routes cannot wait.

- Quick borders. Slow processing of documents at borders and corrupt management are the biggest impediments to the fast expansion of Afghan exports. Even though these are the subject of more fundamental initiatives by the World Bank and others, the U.S. and Government of Afghanistan should institute a temporary Emergency Border Regimen (EBR) at 3-4 key border crossings to hasten exports and cross-border trade until a permanent regimen is in place. International assistance and favorable trade terms should be extended to those neighboring countries that participate in the EBR. Meanwhile, the World Bank and others should greatly speed their customs modernization projects.
- Establish 3-4 Cross-Border Free Economic Zones. The establishment of border economic zones at Torkham, Hairaton, and Islam Qala has long been discussed by USAID, the Canadian government, and others, with no results. The Afghan government has objected to "Free Economic Zones" because they will deny it income from tariffs. But without a jump start, trade, and tariffs, will not revive and the shift from "aid to trade" will be indefinitely postponed. ⁴ The opening of border trade and border trading zones is therefore the single most urgent priority to prevent a near-term economic meltdown in Afghanistan. The international community should be prepared to pay the Afghan government the lost revenue for two or three years, after which a normal tariff regimen would be instituted.
- Open vocational training courses for industries with high potential to create jobs and produce for export. Departing U.S. and ISAF forces are

⁴ Bartolomiej Kaminski, Saumya Mitra, *Bazaars and Regional Integration in Central Asia*, The World Bank, 2012.

abandoning the bases of Provincial Reconstruction Teams (PRTs) in provinces across Afghanistan and terminating employment for tens of thousands of Afghans.. PRT facilities, along with their tens of billions of dollars worth of "Excess Defense Articles," including bulldozers and equipment of all sorts, should be turned over to the Afghan government in a responsible manner or, if it is not prepared to assume responsibility for them, to the United Nations or even the private sector. Their activity should then be focused in two areas: first, vocational training courses for industries with high potential to create jobs and produce for export, and, second, the execution of urgent public works projects identified by local and provincial governments.

- Immediately assist Afghanistan's Export Promotion Agency (EPAA) and Afghanistan Investment Support Agency (AISA) in attracting foreign direct investment and penetrating lucrative markets in India, China, UAE, etc. Then fund and restart export support programs that were terminated due to lack of funding. Use these programs to promote small- and medium-sized firms in the areas of fresh and dried fruit processing; marble and gemstone extraction and processing; adding value in carpet production; cashmere processing facilities; raisin processing facilities; and pomegranate processing facilities. Also, rehabilitate the Mazar (Kod-Barq) Fertilizer Plant and the Ghouri Cement Plant.
- Implement post-harvest "Cotton Caravans" from Central Asia to ports on the Arabian Sea. Together, Uzbekistan, Tajikistan, and Turkmenistan are the world's third largest cotton producers, after the U.S. and China. But two decades after the fall of the USSR they are still exporting their crop mainly through Baltic ports, thousands of miles distant. If they could access Karachi, Gwadar, and Chabahar more easily, they could save millions of dollars each year in transport costs and fill Afghanistan's coffers with transit fees and duties. Afghanistan insists it can assure the safety of trucks transiting its territory. Central Asians remain skeptical. The "Cotton Caravan" would bring together trucks of cotton from all three countries on Afghanistan's Ring Road, whence half would proceed to the southeast

and the other to the southwest. Documented by journalists and industry experts, the Caravan will open up this mutually productive trade.

Implementing Urgent Measures

The U.S. Secretary of State and Afghan authorities must quickly reach agreement on these and other urgent measures. The U.S. National Security Council should convene a meeting to apportion responsibility for the above measures and to establish a strict timetable for their implementation. U.S. government participants should include senior officials from the departments of the Treasury, Commerce, Defense, and State and other relevant stakeholders (USAID, USTR, etc.) It is imperative that the group be chaired by a cabinet-level officer. The two existing NSC interagency policy committees on Afghanistan and Pakistan and on Central Asia might continue as an executive arm for this group or be folded into it. If relevant governmental entities are unable to mobilize with the necessary speed, a major government services provider should be brought in to help implement the program.

Beyond the Looming Crisis: Awash in Programs

Once Afghanistan finds a way through the immediate crisis created by the unconditioned departure of most U.S. forces in 2014 and the presidential elections in Afghanistan, what can be done to grow its economy? What are the most promising directions for future policy, and who will adopt and implement them?

The government of Afghanistan, in updating its 2008 Afghanistan National Development Strategy (ANDS), introduced twenty-two National Priority Programs at the 2010 Kabul International Conference on Afghanistan. At present, nineteen of these have been accepted by the Joint Coordination and Monitoring Board (JMB), a 50-plus member board of senior Afghan officials and donor partners and international forces in Afghanistan, which oversees the implementation of the Afghanistan National Development Strategy. The

"Regional Economic Cooperation Conference on Afghanistan" (RECCA) has identified what it terms "Seventeen Regional Investment Projects and Priorities", largely from initiatives defined earlier by USAID, in such areas as trade, transport, energy, and private sector development; Afghanistan uses RECCA as a key policy platform for advancing its regional economic priorities and for mobilizing donor support. Besides its support for RECCA, the United States has other projects in hand through USAID and other agencies. Following Secretary Clinton's Chennai speech in July, 2011, it launched the "New Silk Road" initiative as a means of focusing on trade and transport, and other forms of regional economic cooperation focusing on Afghanistan. In addition, many other governments, including Germany, India, Japan, Saudi Arabia, and Turkey have undertaken specific projects, many in support of private sector and transport development; the Asian Development Bank oversees a Central Asia Regional Cooperation (CAREC) initiative on transport and trade, including in the energy sector; the World Bank has a series of projects in hand, including "borderless bazaars," and regional hydroelectric power development and transmission. Both of these banks, along with many other donors, including the Islamic Development Bank, support the Afghanistan Reconstruction Trust Fund.

Together, these and other institutions have advanced a rich smorgasbord of projects intended to foster economic development in Afghanistan and the region of which it is the heart. Indeed, we are awash in proposals and projects to build the Afghan and regional economies. All are being pursued simultaneously, some seriously and others with indifference or for show. There exists little or no coordination among them. More serious, as a group they are neither prioritized nor phased. As a result, marginal initiatives claim the same level of international attention and resources as cornerstone programs. To be sure, many of them are not only useful but essential to the advancement of Afghanistan's economic development and trade. But others are not. Neither the one nor the other is being developed in a way that enables them to complement each other, let alone to be mutually reinforcing.

No less serious is the monomaniacal concentration on infrastructure projects, to the neglect of what can be achieved through leadership and organization. This pathology affects all international financial institutions and national donors,

but the U.S. and Asia Development Bank have allowed it fundamentally to distort what are otherwise laudable efforts. The State Department found it easier to define its "New Silk Road" initiative largely in terms of pre-existing big-ticket infrastructure projects than of initiatives that require the U.S. to exercise its convening power and "soft power" leadership.

In an effort to give some coherence to this welter of projects, the governments of Japan and Afghanistan organized a Tokyo Conference on Afghanistan in July 2012. Dismissed by some observers as "largely symbolic,"5 the conference at least took a longer-term perspective stretching to 2025—the conclusion of what it termed the "Transformation Decade" in Afghanistan. It elicited an impressive \$16 billion in assistance over four years and a handful of commitments extending to 2025. It remains to be seen, of course, how many of these commitments will actually be honored. The conference also made clear that the key to success lies in the increase of Afghanistan's international trade and closer commercial links with its neighbors. Unfortunately, the Tokyo conferees spoke only of Afghanistan's trade with its immediate neighbors ("regional market integration") and not the continental trade ("Hamburg to Hanoi") through Afghanistan that will generate the greatest revenues. The U.S. government has persisted in this same mistake, focusing its main initiatives on Afghanistan's immediate neighborhood rather than on continent-wide corridors of transit and trade. Beyond this, Tokyo did little to prioritize or phase the myriad of projects mentioned, the one exception being to emphasize certain "anchor" mining projects like the Aynak copper and Hajigak iron-ore mines, both of which will take many years to develop. This left the same confusion over phasing and priorities that prevailed before the UN's Tokyo meeting.

Yet another flaw that pervades the thinking of most international financial institutions and donor countries, and especially the United States' current efforts, is to undervalue the role of the private sector. Public sector bureaucrats sometimes justify this approach by arguing that their task is to build the mill and that this will attract the water. But unless the private sector is engaged from the outset, the bureaucrats are likely to build the wrong mill, while someone elsewhere will build the right one. To be specific,

⁵ Cordesman, p.4.

truck drivers and freight forwarders have long pointed out that the chief impediment to trade between Afghanistan and its neighbors is not bad infrastructure or insecurity but the slow and corrupt processing of papers at national borders. Yet donors plod away on their infrastructure projects, and even well-funded international projects to modernize and speed customs (for instance, the effort of the World Bank and ADB) advance at barely a snail's pace.

Looming over this general confusion are two decisive factors: first, the near-universal but erroneous conviction—discussed above—that economic development can occur only after the cessation of armed conflict and the transition in Kabul to a post-Karzai government; and second, the absence of strong and coordinated leadership from the international community and notably the United States. As a consequence, we are awash in "projects" to rebuild the Afghan economy but totally lacking in a strategy to accomplish this, let alone in specific tactics to bring it about.

Beyond "Projectitis": Ranking and Prioritizing

Faced with this confused and dangerous situation, the Central Asia-Caucasus Institute at Johns Hopkins University's School of Advanced International Studies (SAIS) undertook what might be called a "ranking and phasing" exercise within the general framework of the Afghanistan National Development Strategy. The goal was to demonstrate that there exist at least a few extremely promising initiatives which, pursued in the right way, have a realistic chance of transforming the Afghan economy and hence creating a more constructive social and political environment in Afghanistan and the wider region. To this end it assembled an informal and thoroughly international group of economists and independent analysts for what turned out to be an extended series of discussions and communications. Many highly qualified experts and officials from the U.S. and Afghan governments and international financial institutions also participated through the various consultations, roundtables, forums and other events. In the end, more than 30 people contributed their insights on the most appropriate and effective projects.

The goal of our many discussions was to identify projects with the greatest potential for maximizing rates of return, revenues, and jobs through exports, trade, and transit. This is about regional and continental economic integration, not as ends in themselves, but as part of a strategic narrative that focuses on the expansion of economic opportunity in Afghanistan and of legitimate revenue for the Afghan government. All initiatives that could advance this goal were examined and weighed. More than any previous effort, this one evaluated carefully both infrastructure and non-infrastructure initiatives. It turned out that many of the latter hold particular promise.

What About Agriculture, Mining, Oil and Gas?

Some readers may wonder at the outset why the following lists do not provide more initiatives to stimulate agriculture and the exploitation of minerals. Agriculture, after all, accounts for 90% of Afghanistan's current exports, and the trillion dollars' worth of Afghan minerals identified by the U.S. Geodetic Survey are surely a major source of the country's future prosperity. The authors fully accept this. However, unlike many enthusiasts of Afghan agriculture and mining, they also appreciate that agricultural produce and minerals, gas, and oil gain value only when they are transported to markets where they are in demand. After all, those trillion dollars' worth of minerals are in demand globally, but for now available only locally. This demands a supply side push to build value chain infrastructure and governance to allow the supply of agricultural products and minerals to reach areas of demand. In other words, until the transport problem is solved, two of the most potent engines of economic growth will sit idle.

Unfortunately, almost all railroad planning carried out by the United States, Afghanistan, and International Financial Institutions (e.g. the Asian Development Bank) has focused exclusively on routes that facilitate the export of Afghanistan's agricultural and mineral resources. Sorely neglected in this multi-sided effort is the realization that Afghanistan's future will depend, equally, on its reclaiming its ancient status as a key transit hub for continent-wide trade stretching from Europe and the Middle East to Pakistan, India, and Southeast Asia. It is on the territory of Afghanistan, too,

that the vital north-south corridor has always crossed the east-west corridor, thus linking China, Russia, and northern Europe in the southern corridor. In other words, Afghanistan is a natural hub of transport systems that across Eurasia from the Atlantic to the Pacific, and from the Arctic Ocean to the Arabian Sea. The Department of State has undertaken a "New Silk Road" initiative but it has largely failed to define this in terms of the continental transport and trade that enabled Afghanistan to prosper for 2,000 years. Nor has the ADB done any better. Afghanistan cannot be reintegrated with the world of commerce simply by constructing roads to its borders. Equal attention must be devoted to the efficiency and cost of those more distant border crossings and ports to which those roads lead.

To the extent that U.S. and other international initiatives recognize the possibility of more far-ranging transport through Afghanistan, they have focused mainly on projects that improve access to the Iranian port of Chabahar. Current efforts from many quarters result in making this new facility Afghanistan's main window to the sea. To be sure, there are solid reasons for utilizing Chabahar, especially when current UN sanctions are lifted. But there are not solid reasons for it to become Afghanistan's sole port. As in energy pipelines, multiple ports mean choice and competition. In this case, the obvious alternatives are Pakistan's port of Karachi and its new port at Gwadar, both of which are well-situated geographically to move freight efficiently to Southeast Asia. Until feasible plans are made to connect the main east-west Afghan rail line to the Pakistani ports, as well as to those of Iran, Afghanistan will be at the mercy of one country's port fees, transit rates, and terms of access. This can be prevented only by promoting railroad lines that connect Kabul with Pakistan and then with the sea, as this paper proposes. A two-port policy for railroad and road construction is not against anyone, but it will decisively benefit Afghanistan. It is long overdue.

Afghanistan's transport problem arises both from its status as a land-locked state and from the fact that Afghan leaders a century ago, pressed by the Russian, Persian, and British empires, resolved their strategic crisis by banning the construction of trunk roads and railroads. The analysts who developed the present study believe emphatically that the establishment of road, rail, and air links is the key to success for the Afghan economy and hence for the country

as a whole. Stated differently, Afghanistan will flourish as soon as its economy is integrated with the economies of the region and of the Eurasian landmass as a whole. Through a phased combination of "soft power" initiatives, direct engagement of the private sector, and infrastructure projects, the opening of such continental corridors across Afghanistan is an attainable goal.

Reorganizing the U.S. Government to Act Effectively on These Issues

The government of the United States today is poorly organized to carry out the programs and commitments discussed in this paper. The record of recent years with regard to Afghan economic development has fallen short. In spite of a number of very worthy programs carried out by USAID, the Department of Defense, Department of Commerce, and other departments and agencies, the effort as a whole has too often been fragmented, ill-coordinated, and poorly staffed. New approaches and initiatives like the New Silk Road initiative announced by Secretary of State Clinton in Chennai, India, in July, 2011, must be entrusted to senior staff with the public backing from the White House and National Security Council that has been largely absent to date. The belated creation, in September 2012, of the Interagency Policy Committee on Regional Economic Integration in Central Asia is a step in the right direction. But without stronger leadership at the highest level, such efforts will remain mired in bureaucratic delays and interdepartmental squabbling.

In 2005 the Department of State created a new Bureau of South and Central Asian Affairs, into which Afghanistan was folded. This had the advantage of enabling a single bureau to address the many issues of regional transit and trade between Afghanistan and its neighbors. But then in 2009, Afghanistan and Pakistan were carved out of this bureau and a special "Af-Pak" office established, under the direction of the late Richard C. Holbrooke. It is possible that this entity will soon be folded once more into the Bureau of South and Central Asian Affairs.

This is a laudable step but insufficient, for it leaves the entire Afghan "economic" project without top-level coordination, management, and

oversight. What is needed, then, is the creation of a special office within the Bureau of South and Central Asian Affairs that will be responsible for shaping and coordinating the "economic" program in Afghanistan down to the year 2025. This "Afghanistan Economic Development Office" would take over from the inter-agency group convened by the National Security Council to implement urgent measures. It is imperative that it be led by an ambassadorial-level appointee who reports concurrently to the secretaries of State and Commerce, as well as to the head of the Bureau of which it is a part. Without a senior official with responsibility for management and oversight, otherwise worthy efforts will be squandered.

A Program of Fundamental Measures:

The following list represents the best thinking of our entire team of experts. Together, they all bring many decades of work as economists, administrators, or expert-analysts on Afghanistan. The chief criterion for inclusion of projects is the likelihood that a given initiative will create jobs for Afghan citizens, economic growth, and income for the government. This means a rate of return greater than the discount rate of 12%. It is also assumed that projects should also share the burden of growth with the private sector. In general, the following proposals have been deliberately cast in a manner that meshes with the framework of the Afghanistan National Development Strategy. Overall, the goal is to make Afghanistan a beneficiary of globalization rather than its victim.

This list is not inclusive. In October, 2012, nine international oil companies will submit bids to explore and develop gas and oil fields in Afghanistan's North and West. Many of these projects could bear fruit quickly. But beyond mentioning them here, and stressing their importance as job creators and revenue builders, they are not included, on the grounds that they are as yet prospective.

Other highly touted projects are not included because it is not clear whether or when they will bear fruit, even if they are implemented. Accession to the World Trade Organization is a case in point. Nearly every country along the "southern corridor" across Eurasia is either a WTO member or is on a path

to becoming one. Afghanistan gained observer status to the WTO in 2004 and in 2009 started the process of accession. With vigorous backing from Washington, Afghanistan should be able to gain admission by 2015. Membership will bring obvious gains—a forum for resolving trade disputes, internationally recognized norms on which Afghanistan's commercial relations can be based, etc. But the main benefits—the removal of protective tariffs and import quotas, improved access to global markets, etc.—will not be attained until Afghanistan negotiates agreements with its neighbors and other countries along the southern corridor and with other countries further distant. This could take a long time.

The following listing places heavy emphasis on railroads and roads as the key channels for east-west and north-south transport across Eurasia. More than anything else, it is the absence of these corridors that accounts for the extreme poverty into which Afghanistan sank in the twentieth century. The total cost of the key railroad corridors is immense. Suffice it to say that only one section—Corridor 2, Segment 2 (described under long-term projects, below) – is US\$ 8-10 billion, not adjusting for inflation. Funding this down to 2025 is one of the main challenges facing the international community. Doubtless, those parts with the strongest economic potential can be financed by the private sector. However, without close coordination and high-level commitments from diverse countries and international financial institutions, the rail system will not come into being.

The temptation of all relevant entities is to pass this responsibility to the Asia Development Bank. However, as will be shown below, ADB's CAREC project is not yet organized to focus effectively on developing the "southern corridor" across Eurasia. Clearly, this is an instance where leadership and convening power are nearly as important as money. If the key Afghan railroad and road corridors are to be functioning by 2025, the U.S. must assume a leadership role today, by convening—alone or with partners—the relevant national governments and international financial institutions in order to plan a program of investment extending down to 2025.

Concise Listing of Phased and Prioritized Projects to Rebuild the Afghan Economy, 2012-2025

Short Term Measures (by 2015):

- 1. Extend APTTA to Central Asia and India. If the more comprehensive APPTA model proves politically untenable or administratively burdensome, consider the less ambitious approach adopted in the current Cross-Border Transport Agreement between Afghanistan, the Kyrgyz Republic, and Tajikistan.
- 2. Complete the Ring Road and fully operationalize the rail line from Hairaton on the border of Uzbekistan to Mazar-e-Sharif.
- 3. Bring the Sheberghan natural gas fields into full production, with functioning pipelines, facilities for producing compressed natural gas, electricity generation, and transmission lines. Sheberghan gas should also be used to densify iron ore from Hajigak, greatly lowering transaction costs for its export.
- 4. Working with Japan and other ADB donor countries, the U.S. will redesign CAREC to focus its energies on developing the southern route from southeast Asia/India through Afghanistan to Europe.
- 5. To improve access to credit for the development of businesses in Afghanistan:
 - a. Strengthen the role of the Overseas Private Investment Corporation (OPIC) to make credit available on a multi-lateral basis.
 - b. Increase the financing capacity of small enterprise assistance funds such as Afghan Growth Finance.
 - Increase access to credit in Afghanistan through USAID's Development Credit Authority.

- d. Increase credit extended through micro-lending institutions.
- e. To lower the cost of credit from all of the above and attract foreign direct investment, provide political risk insurance in accordance with a Risk Mitigation Strategy, which should also be used to support vital public-private partnerships.
- 6. Use soft power to consolidate existing national border management, including upgrading the Automated System for Customs Data (Asycuda++) through the World Bank and the comprehensive "Single Window" customs project of the ADB, border security, streaming procedures, harmonization of procedures with neighbors, etc. These measures will, in effect, create a single and modern National Border Management Program.
- 7. Implement the International Road Union's (IRU) Transport
 International Road (TIR) System to reduce costs of exporting goods
 through multiple countries.
- 8. Establish a Private Sector Advisory Council and Joint Bi-lateral & Regional Chambers of Commerce in South and Central Asia.
- 9. Acknowledge the existing U.S. Trade Infrastructure Framework Agreements (TIFAs) with Afghanistan and Central Asian countries as an important priority. Use their annual meetings into a regional dialogue on trade and transit, to be chaired on the U.S. side by the U.S. secretaries of State and Commerce and the Trade Representative.

Mid-Term Measures (by 2020):

- I. Rehabilitate the Salang Tunnel through the Hindu Kush Mountains, thereby re-connecting northern and southern Afghanistan.
- 2. Complete the principal East-West Road corridor across Afghanistan.
- 3. As the first phase of the development of Afghanistan's railroad network, plan and construct the secondary line on which copper and iron ore can be transported to processors and markets abroad.
- 4. Upgrade the Kabul-Jalalabad-Peshawar expressway.

- 5. Complete construction of the North-South road corridor.
- 6. Implement relevant initiatives of the South Asia Free Trade Agreement (SAFTA), South Asian Association for Regional Cooperation (SAARC), and Economic Cooperation Organization Trade Agreement (ECOTA).
- 7. Complete Afghanistan's fiber optic network and integrate it with regional fiber optic networks.
- 8. Revise and update riparian watershed agreement between Afghanistan and its northern neighbors.

Long- Term Measures (by 2025):

- 1. Complete financing and construction of the Turkmenistan-Afghanistan-Pakistan-India gas pipeline (TAPI).
- 2. Complete construction of railroad lines across Afghanistan linking Central Asia to Pakistan and India, and also to the southern ports of Gwadar (via Chaman), Karachi (via Torkham), and Chabahar.
- 3. Help develop financing for construction of power generation projects in the southern/eastern regions (of Afghanistan (the so-called NEPS and SEPS, including the Kajaki Multi-Purpose Dam).
- 4. Working with the World Bank and with the agreement of all of Afghanistan's regional neighbors, carry out the Central Asia-South Asia Electricity Transmission and Trade Project (CASA-1000) to generate electricity in Tajikistan and deliver it to customers in Afghanistan and Pakistan.
- 5. Construct the two Kunar (Kabul) Basin Hydropower plants. And, after revising and updating the agreement on the management of the Amu-Darya watershed and gaining the assent of partner countries, construct the Kokcha Multi-Purpose Dam on that river.

A Handbook of Projects to Build the Afghan Economy

This section provides fuller information on each of the short-, mid-, and long-term projects listed in the "Concise Listing", above. These entries are intended merely as general introductions to the various projects. Many of the following initiatives have been the subject of detailed studies and technical analyses carried out by the international financial institutions, national governments, banks, and private industrial groups or think-tanks. Those wishing to explore any project in greater detail should consult this rich analytic literature.

Short-Term Projects:

1. Expansion of APPTA to include Tajikistan, Turkmenistan, Uzbekistan and, eventually, India.

Despite its limitations and the unresolved problem of its implementation, APPTA is a landmark development in regional economic cooperation. It has generated interest beyond Afghanistan and Pakistan. Recently, both Pakistan and Afghanistan have decided, in principle, to include Tajikistan in APTTA. To make this initial small project into a serious regional economic force, it is imperative to include Turkmenistan, and Uzbekistan into the broader agreement. However, the project will be of very limited interest to Central Asian countries if traffic to India is not also covered by a similar agreement. Once Central Asians and India are included in the expanded APTTA, the former will be able forge links with the economies of Pakistan and India via Afghanistan, much to the benefit of Afghanistan's long-term sustainability.

If APPTA is implemented early in 2013, Tajikistan, Uzbekistan and Turkmenistan should join by the end of the year. As the participants' confidence grows, India should be in line to join in 2014 or 2015.

2. Complete the Ring Road and fully operationalize the rail line from Hairaton on the border of Uzbekistan to Mazar-e-Sharif.

The Ring Road, the hub of "the New Silk Road," is the essential element for building truck-based trade within Afghanistan, between Afghan and its neighbors, and across the belt of Eurasia from Europe to Vietnam. The rail line to Mazar-e-Sharif is the first major railroad line in Afghanistan, and an essential building block for the future system of rail corridors.

All but 233km stretch in the country's northwest of the ring road has been completed. The rail line from Hairaton to Naibabad along the Northern Rail line was completed December, 2011, but is yet to be fully operationalized due to lack of support infrastructure.

The Ring Road can be completed at a cost of \$477 million (Qaisar to Laman) and an additional \$35for expanding the road from Kabul to the Jabul Sirai highway. Support facilities for the rail line can be built by private investors. The government will have to provide security for construction crews, as it did for earlier phases of the project.

The Ring Road is being financed by the Asia Development Bank, Afghanistan's Ministry of Public Works and Ministry of Transportation and Civil Aviation and the U.S. Agency for International Development (USAID) and carried out with assistance from the U.S. Army Corps of Engineers (USACE). Work can be completed on both projects within two years.

3. Development of Sheberghan Natural Gas Fields

Afghanistan will face an acute energy shortage in the immediate future. Demand for electricity in Afghanistan is growing rapidly as new customers and communities are hooked up to the electricity grid in northern and eastern Afghanistan. Towns that previously relied on diesel generation, such as Aybak and Charikar, are being added to the grid, and the Ministry of Energy and Water is connecting thousands of new customers in Kabul.

There has been a significant increase of electricity from Central Asia, and also improvements in the grid due to donor-funded rehabilitation projects. But more will be required to meet pent-up demand. While varying due to seasonal dips in the amount of hydro-power, currently installed capacity is around 500 megawatts, with demand growing monthly. For the northern and eastern areas of Afghanistan (which do not utilize diesel generation) the anticipated

shortfalls will be severe and will likely cause political and operational difficulties as those accustomed to electricity will be forced to face rationing. Providing new, affordable, base-load generation capacity that can serve the north, east and south of Afghanistan is strategically important for stability, economic growth, and to convince people that the government can deliver basic services.

Fortunately, the U.S. Geological Survey estimates that 16 trillion cubic feet of gas will be available in the region, far more than is needed by a 200 MW power plant over its useful life.

This project will rehabilitate the Sheberghan gas fields and install gas-fired power generation capacity of up to 200 megawatts within 3 years, which will fire the North East Power System (NETS). The expected life span of the plant is 20 years, and considerably longer for the gas fields. The principal benefit of this project will be to lower energy prices and increase its availability in the northeast of the country. The project will also provide the government a stable source of royalties from the extraction of natural gas, mining royalties and land use fees; together these revenues are projected at \$75 million annually. 3,pooo jobs will be created.

A Sheberghan gas fired generation plant appears to be the quickest and lowest cost option to develop a large increment of affordable base load generation capacity for the east and south. Lower cost alternatives, such as storage hydro generation plants, will take many years to build and will have to deal with population relocation and riparian rights issues. Electricity from Turkmenistan has thus far been offered at prices that would be too high for DABS. Additional Uzbek and Tajik electricity is potentially an option, but Sheberghan enables Afghanistan to diversify its base load electricity supply, thus mitigating the risk that Central Asia is unable or unwilling to continue supply.

The estimated cost of this project is \$282 million, which can be covered by existing commitments from USAID (\$150), OPIC, and ADB. ADB has already provided \$24 to the Afghan Ministry of Mines to undertake the well work-over for the production of "sweet gas" for residential purposes. The WB has also made available an additional \$44 million to confirm the gas reserves.

Impediments to this project include cost recovery challenges, lank of technically-trained Afghan staff to manage the power plant, and security concerns.

4. Redefine Asia Development Bank's CAREC Program to Embrace Continental Transport Through Afghanistan.

Over the past decade ADB's Central Asia Regional Economic Cooperation program has achieved major success in linking China and Europe. It is now time to extend or reconfigure that it program so that it devotes serious attention to developing continental transport routes to connect Southeast Asia with Central Asia and Europe via Afghanistan. Such routes should include roads and railroads. This is not possible under current arrangements. India is not a member of CAREC, nor are other transit countries to the East and West. As a result, the corridors that CAREC is currently developing only partially address this urgent and fundamental need. This program seeks to redefine and redirect ADB's transport work and to prioritize the proposed East-West "southern corridor."

East-West transport through Afghanistan has immense financial benefit for Afghanistan and all its neighbors. Tariffs, duties will generate governmental revenues while the provision of services in many fields offers great potential to private entrepreneurs.

The United States and Japan, as major sponsors of ADB, must propose this transformation to ADB'S director and ruling bodies. India, Bangladesh, Azerbaijan, and other non-CAREC members on the east-west route through Afghanistan should be immediately recruited as members or observers.

The decision to proceed in this direction can be taken before the end of 2014. ADB should put implementation on a fast track, with planning for major routes to be completed within three years and infrastructure development to begin thereafter.

The first step—reorienting CAREC and the prioritizing of the east-west corridor through Afghanistan—is without cost. Costs of concrete implementation will be defined in budgets to be developed by ADB staff.

5. To improve access to credit for the development of businesses in Afghanistan

A key recommendation of the Tokyo Conference on July 7, 2012 and the Delhi Investment Summit on Afghanistan, held on 28 June 2012, called for the establishment of an "International Fund for Afghan SMEs." A "Regional Risk Capital Fund (RRCF) should be established to provide seed money to unlock

private funding, insure against political risk, and increase access to investors encouraged by lenders such as Overseas Private Investment Corporation (OPIC) and the World Bank's Multilateral Investment Guarantee Agency (MIGA). Underpinning this recommendation is the belief that expanded investment support to the private sector will foster an expansion in private investment across the region, including Afghanistan.

In particular, the April discussion centered around increasing the regional focus on small and medium-sized enterprises (SMEs), which have the potential to create innovation, new employment opportunities, and economic growth. It should be constituted with the active support of international development agencies, governments, and industry bodies. The fund will support critical private sector investments by providing risk financing and mitigation. The aim is to provide easy and timely credit to SMEs that otherwise find it difficult to finance their businesses due to insufficient collateral.

The international community should be called upon to set up such a fund under the aegis of a suitable international development institution, such as the ADB. The International Finance Corporation has successfully used similar mechanisms, most notably sovereign wealth funds, to support development in the Middle East and Africa. Another model is in South-East Asia, where ASEAN member countries and the ADB have provided initial equity of USD \$485 million for the establishment of the ASEAN Infrastructure Fund (AIF).

6. Establish a National Border and Port Management Program

Fast and honest border management is the key to Afghanistan's economic reintegration with the region of which it is the heart. To this end, a National Border & Port Management Program (NBP-MP) is urgently needed. Besides coordinating efforts by the Afghan government and international supporters, such a program will improve and speed security measures and reduce the flow of narcotics and other contraband, while greatly facilitating legal trade by Afghans and others extending from Europe to Asia. Relevant corridor crossings will include those at Torkham and Weesch-Chaman, Spin Boldak, Gulam Khan and Bahram Chah, as well as the crossings to Turkmenistan, Uzbekistan, and Tajikistan. The program should also include support for the new Advanced Border Management Academy in Sheberghan.

Institutional participants should include the Afghan Ministry of Interior (Border Police), Ministry of Defense, and the National Directorate for Security, and the ministries of interior, finances, and security of neighboring

countries. Besides the U.S., international partners will include Canada and Japan, which has particular experience in this area.

The U.S. Department of Defense is providing \$35 million to establish and build the Afghan National Customs Academy (ANCA) and \$85.45 million for construction and support costs of the Advanced Border Management Academy; while Canada has committed \$35 U.S. million for border security training, infrastructure, equipment, and a new border police faculty at the police academy in Kabul. The World Bank has provided \$31.2 million in credit and a \$6.81 million grant in support of related border management projects.

7. Implement the International Road Transport Union's (IRU) Transport International Road System (TIR) to reduce costs of exporting goods through multiple countries.

The Transport International Road System (TIR) is an internationally harmonized system of customs control that effectively protects the revenue of each country through which goods are carried. TIR allows goods to transit from the country of origin to their destination country in sealed compartments with full customs control along the way. The TIR system will alleviate serious problems that now delay the transit of Afghan goods to neighbouring countries and continent-wide transport across Afghanistan. The implementation of TIR will dramatically improve Afghanistan's connectivity with regional and international markets. TIR reactivation will help move Afghanistan from "Aid to Trade."

Four of Afghanistan's six neighbors have already joined the 57 TIR countries and are full participants in the program: Iran, Tajikistan, Turkmenistan, and Uzbekistan. This gives Afghan products access to European and Middle Eastern markets via multiple routes, and allows goods from those markets to pass to, but not yet through, Afghanistan. With both Pakistan and China now considering accession to the TIR Convention, transit corridors to Southeast Asian market may open up soon, benefitting both Afghan producers and western and Asian shippers. As this happens, Afghanistan will once again assert its central role as a link between East and West on the path of a revitalized Silk Road.

Afghanistan first joined the International Road Transport Union (IRU) in 1976, but decades of war and a lack of infrastructure have prevented the country from benefiting from IRU's TIR system. On October 18, 2010, the government of Afghanistan and the IRU signed a Memorandum of Understanding on

developing Euro-Asian trade and goods transport across the territory of Afghanistan, and on re-activating the TIR System in Afghanistan.

It is hoped that Afghanistan will issue permits for the first TIR-compliant containers before the end of 2013. This will require significant improvements in customs computerization and in the standardization and synchronization of trade and transit processes. This in turn will require the training of personnel to manage such a system. Border crossings must also be modernized and harmonized, if TIR is to be successfully implemented.

TIR is being implemented by the International Road Transit Union and the Economic Cooperation Organization, with the participation of the Afghanistan Chamber of Commerce. The cost of modernizing border crossings and training personnel to manage them is not great, especially compared to the inevitable boom in trade that will result. However, this will depend on Pakistan joining the TIR. The U.S. and both European and Indian/Southeast Asian shippers can encourage Pakistan to take this step, by presenting data on the potential financial payoff of doing so. To date they have remained disengaged and passive with respect to this important and low-cost project.

8. Establish a Private Sector Advisory Council and Joint Bi-lateral and Regional Chambers of Commerce in South and Central Asia.

The private sector will be the chief engine of economic growth and job creation in Afghanistan and South and Central Asia. It is also a key vehicle for accelerating economic connections and promoting stability across the region. To support Afghanistan's economic transition and integration within its regional economy, and to implement the New Silk Road across the entire southern corridor and Central Asia, a Private Sector Advisory Council and a Regional Chamber of Commerce for South and Central Asia will be of immense value.

The Private Sector Advisory Council should be drawn from a range of organizations, including the Chambers of Commerce, the investment community, private businesses, the World Bank, OPIC, and the Asian Development Bank. It would work to build consensus on key issues, present policy options to decision makers, and conduct analytic research to advance the cause of regional economic integration. The Joint Chamber of Commerce would provide links between firms in the same field regionally, and would therefore provide an impetus to the registration in Afghanistan of more of the estimated 250,000 unregistered small and medium sized enterprises. It would

make the case for better legal frameworks for SMEs and the private sector generally, and present the needs of that sector to regional governments, including the Government of Afghanistan.

The Afghan Chamber of Commerce and Industries (ACCI) has already moved to establish Joint (Bilateral) & Regional (Multilateral) Chambers of Commerce and Industries. Discussions are already underway to establish joint and regional chambers of commerce and industries with partner business associations in countries across the region, including China, India, Iran, Tajikistan, Turkey, Kazakhstan, Turkmenistan, Saudi Arabia, Japan, Russia, and the UAE.

The U.S. Department of Commerce should provide help and guidance to this effort, and should support the U.S. Chamber of Commerce to do likewise. Diplomatic leadership by the U.S. will encourage other Chambers of Commerce, including India's powerful and influential bodies like the Federation of Indian Chambers of Commerce and Industry (FICCI), the Confederation of Indian Industry (CII), the Confederation of Indian Industry, as well as Pakistan's Business Associations and like bodies elsewhere, to support Afghanistan's economic transition and integration within its regional economy.

There is already some limited interaction among South Asian business associations through the SAARC Chambers of Commerce and Industry. This is an apex body of the SAARC with its head quarters in Islamabad. Its members include Afghanistan Chamber of Commerce & Industry (ACCI), Bangladesh Chambers of Commerce & Industry (FBCCI), Bhutan Chamber of Commerce & Industry (BCCI), Federation of Indian Chambers of Commerce & Industry (MNCCI), Federation of Nepalese Chambers of Commerce & Industry (FNCCI), Federation of Pakistan Chambers of Commerce & Industry (FNCCI), Federation of Chambers of Commerce and Industry of Sri Lanka (FCCISL). These activities need to be energized and expanded.

To concretize these various initiatives, the U.S. and partner countries, especially India, should push to establish Joint Central & South Asia Regional Chambers of Commerce and Industries, to build up their institutional structures, and assist them in developing a private sector agenda for promoting regional trade and investment involving Afghanistan. Under the Istanbul process, India has already taken responsibility to lead Chamber of Commerce "confidence building measures" (CBMs) as well as commercial opportunities CBMs.

The joint and regional chambers could be created with a two-year budget of as little as \$800,000, while a similar sum would suffice to establish the Private sector Advisory Council and provide initial support for its offices.

9. Elevate the importance of existing U.S. Trade Infrastructure Framework Agreements (TIFAs) with Afghanistan and Central Asian countries and use their annual meetings as a regional dialogue on trade and transit.

Regional partners have long urged the U.S. to take its TIFAs and TIFA meetings more seriously, but the U.S. has failed to respond. Senior U.S. officials have rarely participated, and agendas have wandered far afield. It is time to elevate these to a much higher level of priority and to have them chaired by the U.S. secretaries of State and Commerce and the Trade Representative. By this means they will become an important regular venue for addressing common concerns in the area of transit and trade, and in a context that includes Afghanistan.

It should be noted that the U.S. is the only major external power besides India that has not organized a periodic consultative group to facilitate interaction with the region on common economic concerns. China and Russia have the Shanghai Cooperation Organization, Japan and the European hold annual consultations with national leaders on a region-wide basis, as does Korea. Since Central Asian states have long suggested TIFA as such an entity, it is time to act upon it, and include Afghanistan as well.

Mid-Term Projects:

1. Rehabilitate the Salang Tunnel through the Hindukush Mountains, thereby re-connecting northern and southern Afghanistan.

The Salang Tunnel is the only north-south route across the Hindukush that remains operational throughout the year. When rehabilitated, this Soviet-era tunnel and tunnel by-pass from Pul-e-Matak to Shibar to Dushi will support expanded national and regional trade, increased transit trade, and better management of flooding, blizzards, and mud-slides. The rehabilitation of the tunnel is critical for land transportation within and outside of Afghanistan, as it

connects Kabul to eight northern provinces and Afghanistan as a whole to Uzbekistan and Tajikistan.

The rehabilitation of the Salang Tunnel and construction of the Salang tunnel by-pass will require thousands of unskilled laborers and will generate millions of additional labor days. A rapid start-up phase and low-skilled, labor-intensive construction methodologies will further the reintegration of alienated or dissident elements into society. Economic growth and additional employment are anticipated as small, medium, and large-scale enterprises gain access to national and international markets. Expanded regional and continental trade via the tunnel will generate an increase of USD \$1.8 million annually in public revenues. As part of the emerging continental transport system, the tunnel will link regional economies closer together and encourage end users in Europe, India, and southeast Asia to maintain a commitment to peace and development in Afghanistan and Central Asia.

Partners to date include the Afghanistan Ministry of Public Works and Ministry of Transportation & Civil Aviation, the World Bank, Asian Development Bank, and the United States. Future beneficiaries of continental transport in Europe and Asia should be approached to contribute to the project.

Planned to commence in 2014/15, the full rehabilitation of the tunnel will take an estimated three years, but the Bamiyan-Dushi by-pass road must be completed before full rehabilitation can begin. In anticipation of this effort, a feasibility study will be completed in late 2012.

The cost of the full project is estimated at USD \$1.6 billion, with further sums required annually for maintenance. Some of the latter can come from future duties on goods passing through the tunnel.

2. Complete the principal East-West Road corridor across Afghanistan and connecting to Pakistan and Afghanistan's northern and western neighbors.

The East-West road corridor and its related branches in western Afghanistan will link Kabul to Herat and also to the border of Turkmenistan, thus providing continental transport to the West via both Iran and the Caucasus. It also connects to routes to Uzbekistan and Tajikistan and beyond. The route of the corridor, which runs through areas rich in natural resources and hence in future business activity, covers 750 km from Herat to Kabul via Chaghcharan and Gardandewal. A northwestern link will be necessary to link the Ring Road with the Turkmenistan border, whence both roads and railroads proceed to the

Caspian and thence to Europe. To the east, this corridor will link with the Kabul-Jalalabad-Peshawar expressway, thus forming a continuous highway from the borders of Turkmenistan and Iran to the border of Pakistan. By shortening the distance from Kabul to Herat by 300 km and by linking the system with three neighboring countries (and thus supplementing existing links to both Uzbekistan and Tajikistan) this highway is among the most important measures for the development of the Afghan economy and its integration with neighbors in all directions.

Construction of this highway will create approximately 42,000 jobs. If the development of the National Road Authority proceeds on schedule, it will be able to collect revenues of approximately \$200 million a year thereafter, a sum which is bound to increase as continental shipping gets under way.

The main project consists of three sections: from Herat to Chest-e Sharif (160 km); from Chest-e Sharif to Chaghcharan (175 km); and from Chaghcharan to Gardandewal (330 km). An additional component is a road to link the Ring Road with the Turkmenistan border.

Construction was originally slated to be launched in 2008 but was delayed due to problems of security. The Asian Development Bank, Italy, Japan, the European Union, Pakistan, and Iran have all contributed to this project, as has USAID. Now it is projected to be completed in five years at a further cost of U.S. \$733 million. Insecurity in some of the central zones is bound to increase total costs, but should not prevent the road from being successfully completed.

3. As the first phase of the development of Afghanistan's railroad network, plan and construct the secondary line on which copper and iron ore can be transported to processors and markets abroad.

The main mission of Afghanistan's rail system should be to provide continental connectivity to the west, north, and east. By so doing, it will reopen the great corridors of trade between Europe, India, East Asia, Russia, China, and the Middle East. In addition, spur lines will enable the system to move minerals from mines to processors and consumers in all three directions.

For the mid-term, Afghanistan must develop those parts of the national system that provide the most viable and cheapest route to transport its minerals. For the long-term Afghanistan must develop the East-West and North South rail to lines so as to position the country as a trade and transit hub linking the various economic centers across Eurasia. Thus, rail transport will be at the core of the New Silk Road.

Rail Corridor I consists of a rail line from Kunduz to Islam Qala via Herat. It includes spurs/connections from Kunduz - Sherkhan Bandar connecting to Tajikistan, spurs/connection to the already build Hairaton - Mazar line to Uzbekistan and a spur/connection to Aqina through Sheberghan connecting to Turkmenistan's railroad system.

Rail Corridor 2, Segment 1, consists of a south-north line from Logar (accessing the Aynak copper mine) northward via Kabul and Bamiyan (accessing the Hajigak iron mine and the Syadara coal mine to the existing railroad line at Mazar, where it connects to Corridor 1.

Rail Corridor 2, Segment 2, consists of rail line southeast from Logar through Jalalabad to Torkham border crossing to Pakistan, whence it connects to Pashawar. Pakistan must build the line between Peshawar and Torkham.

Initial feasibility studies by the ADB argue that rail corridor 1 and rail corridor 2, segment 1, comprise the optimal route for exporting copper from the Chinese mine at Aynak and iron ore from India's Hajigak concession. They would be transported north to an interchange at Mazar and then westward via Herat to the Iranian border and then southward to Iran's seaport at Chabahar. Clearly, this presents Washington with a problem that has yet to be addressed. It should be noted, though, that the only mid-term alternative now under consideration would be to transport these minerals northward through Hairaton to Uzbekistan or to the northwest via Aquina to Turkmenistan. A far more obvious (and politically realistic) alternative—to construct a railroad through the Khyber Pass—is discussed under long-term measures, below.

Afghanistan's Rail Plan will create 64,000 new jobs directly and up to 225.000 indirect or secondary jobs over the short- and mid-term.

The construction of Corridor 1 (Kunduz via Mazar to Aqina) should start by 2013, with ADB funding. Iran has funded the line from Islam Qala to Herat, which will be completed by the first half of 2013.

The spurs from Kunduz to Sharh Khan Bandar and Aqina to Herat have yet to find funding.. The rail connection to Turkmenistan is essential not only as an alternative to the fast-emerging connection through Iran, but also as a guarantor of the viability of Azerbaijan and Georgia as transport corridors to Europe. Azerbaijan, Georgia, Turkmenistan, Turkey and other countries as far distant as Lithuania (the Viking Railroad to the Black Sea) have invested heavily in this very promising East-West transport corridor. Washington can

play a timely role in completing it by partnering with Turkmenistan, which has expressed an interest in covering certain of the costs involved.

The Chinese MCC firm, which owns the rights to the Aynak mine, and the Indian Steel firm, which has rights to the Hajigak mine, will finalize their feasibility study and preliminary design for rail Corridor 2, Segment 1, by March, 2013. Together, they are expected to be completed within 4-5 years.

It is assumed the entire cost of Corridor 2, Segment 1, estimated to cost \$5 billion, will be funded by the private sector.

4. Upgrade the Kabul-Jalalabad-Peshawar expressway.

The Kabul-Jalalabad-Peshawar expressway will greatly expand trade with Pakistan and will be an essential component of trade and transport along the entire corridors connecting Europe, India, and China. The K-J-P expressway maximizes the potential of the Afghanistan Pakistan Transit and Trade Agreement (APTTA).

The project will expand the 142 km Kabul-Jalalabad highway from two to four lanes, and upgrade the 74 km Jalalabad-Peshawar expressway. The project will increase the capacity of two of Afghanistan's major highways that link the northern provinces and the key eastern city of Jalalabad to Kabul. In addition, the road is one of the two major trade routes to Pakistan. The planned road is also adjacent to light industry facilities, notably the cement factories on both sides of the border. In a regional context, the impact of the enhancement of the road capacity will be improved transport along CAREC Corridors 5 and 6-c, which start in China and continue into Kyrgyzstan and Tajikistan. The Kabul-Jalalabad-Peshawar expressway will also enable the transit of goods between Uzbekistan and Pakistan.

Construction of this road will generate 4,000 jobs over five years. The road passes in part through Nangarhar province, where insurgent attacks are frequent. The improved road will contribute to stability by facilitating the movement of police and army forces. Of course, the project will also advance security by promoting trade and economic development in the area. Success will depend on the level of security, not throughout the region but in the immediate transit area. Once this road is constructed and APPTA is fully implemented, the local population will have good reason to protect the security of the transit route.

With support from the EU, the rehabilitation of the 142 km two-lane Kabul-Jalalabad highway was completed in February, 2007. Since then, daily traffic levels have increased significantly, with around 12,000 to 15,000 light cars and heavy trucks transporting goods and military cargo. The proposed expansion is desperately needed to keep up with the growing volume of traffic. The expected completion time for the project is two years and the estimated cost is U.S. \$90 million, with increases possible if security deteriorates.

5. Complete construction of the North-South road corridor.

This corridor highway is a key component of the road network linking Afghanistan and its three northern neighbors---Tajikistan, Turkmenistan, and Uzbekistan—with Pakistan, the Arabian Sea, India, and southeast Asia. In accordance with Afghanistan's Road Master Plan (prepared with ADB assistance), the North-South corridor will run perpendicular to the proposed East-West corridor between Kabul and Herat, and both corridor road projects will connect with the Ring Road. Significantly, this north-south corridor passes through the heavily Pashtun area to Kandahar and southward from there to the Pakistani border at Spin Boldak. From that point there is a direct route to the new Pakistan port at Gwadar.

Major components of the project include new construction extending from Mazar-e-Sharif to Dara-i Suf (140 km); from Dara-I Suf to Yakawlang (182 km); from Chora to Nili (175 km); and from Nili to Yakawlang (175 km). The North-South road corridor project also calls for upgrades of two existing highways, new construction, and the rehabilitation of the Spin Boldak Customs facilities at the Pakistani border

The security challenge is particularly serious in this region, but Afghans and their international partners have come up with very promising means of addressing it. All of these involve the sharing of user-fees and duties from commercial vehicles with local authorities, and their designation solely to road maintenance and operations costs. By these various means, it is expected that key local authorities and economic interests can in time be converted into active protectors of the corridor rather than passive spectators or even enemies.

Institutional partners for this project are the Asian Development Bank, the Afghan Ministry of Public Works and Ministry of Transportation & Civil Aviation, and Japan's International Cooperation Agency (JICA).

The initial contracts were awarded in November, 2007, but insufficient donor funding and security concerns in specific areas have delayed the project. Taking

this into account, the entire project is estimated to take three years at a projected cost of U.S. \$173 million. ADB has approved a loan of U.S. \$78.2 million and a grant of U.S. \$40 million for two specific segments of the corridor. Japan has provided an additional U.S. \$20 million to finance civil works for the Bamiyan-Yakawlang segment.

The opening of the Spin Boldak border facility, and the highway to it, will enormously stimulate regional trade and will do more than anything else to convince skeptics in the crucial Pashtun regions of the real possibility of economic progress in Afghanistan. An ISAF report identified the creation of this road and a transparent border crossing at Spin Boldak is arguably the most potent way to legitimize the government in this strife-torn region. In light of this, this would appear to be a timely and productive investment for the U.S. and its NATO partners. It is, of course, deeply regrettable that this highway corridor was not built during the surge in U.S. troops levels in the Kandahar region, when it could have been constructed in relative peace.

6. Implement relevant initiatives of the South Asia Free Trade Agreement (SAFTA), South Asian Association for Regional Cooperation (SAARC), and Economic Cooperation Organization Trade Agreement (ECOTA).

Afghanistan joined the SAARC in April 2007, during the 14th SAARC Summit held in New Delhi, and ratified the SAFTA agreement in May 2011. SAFTA was signed by eight South Asian countries with a combined population of 1.8 billion. Its purpose is to create a free trade zone by eliminating custom duties by the year 2016. Afghanistan has three extra years to reduce tariffs to zero on all items not on the "sensitive" list. The objective of the agreement is to promote competition within the free trade zone and to provide equitable benefits to all the countries involved in the agreement, especially those countries like Afghanistan with low per capita GDPs..

Members of the Economic Cooperation Organization signed the Economic Cooperation Organization Trade Agreement (ECOTA) on 17 July 2003. Under ECOTA, Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Turkey, and Turkmenistan agreed to establish a common market by 2015.

The successful implementation of SAFTA and ECOTA will bring tremendous economic benefits to Afghanistan and the wider region. It would remove most barriers to trade among populous countries stretched along the south Eurasian corridor from the Bosphorus to Southeast Asia and embracing all of Central

Asia. The flow of natural resources and trade between these diverse regions will truly make Afghanistan a key hub of Eurasian trade and transit.

To date, the governments of SAARC and ECO have lacked the political will to complete their respective projects. While this may be due in part to geopolitical considerations, it is also the result of a lack of knowledge of benefits that ASEAN has provided to its ten Asian members, Mercosur to its five South American members, and NAFTA in North America. The economic case for liberalizing intra-regional trade is strong and progress can result in high regional growth. The United States, working as a friend of Afghanistan, can encourage member countries of these two entities to advance their programs and assist in various ways to removing impediments to their realization. Moreover, it can encourage both organizations to engage more actively the private sector, not only of their countries but of other major powers that might utilize the trade corridors thus opened. The Joint Chamber of Commerce discussed above will be a useful vehicle for achieving this.

7. Complete Afghanistan's fiber optic network and integrate it with regional fiber optic networks.

The opening of telecommunications links between the capital and the entire country at affordable prices will enable businesses of all sizes to gain access to national and international markets. It is also essential to establishing effective governmental administration in all spheres, including commerce, and will foster education and other social services, thus contributing to stability.

Afghanistan Telecom awarded a contract to the Chinese ZTE firm to establish a 32 km fiber optic connection between Turkmenistan and Afghanistan. Management of the fiber backbone is to be leased to an operator for a 20-year period. The project is part of a major initiative, the "Information and Communication Technologies Sector Development Program," which will cover legal and institutional aspects related to the telecommunications sector.

Major components of the project include: Phase 1, the installation of fiber optic cable around the Ring Road (3,100 km), which has now been completed. Phase 2, the installation of fiber optic cable (500 km) in the Southeast region of Afghanistan (Logar, Khost, and Paktya), is under construction. Security has been a problem from Ghazni-to-Kandahar, with recently completed sections of the fiber optic ring torn up at night. But with the deployment of additional security forces, Afghanistan Telecom believes that the sector will be functioning by the end of 2012. Phase 3 involves the installation of fiber optic

cable (1,000 km) in the Northeast and Central regions of Afghanistan (Mazar-e-Sharif to Faizabad, Charikar to Chaghcharan, and Bamiyan to Nili), and is to be completed by early 2014.

Partners will include Afghanistan's Ministry of Communications and Information Technology and corresponding bodies in Kyrgyzstan, China (ZTE), Pakistan, Tajikistan, and Turkmenistan, as well as the U.S. Department of State.

The cost of the entire project is estimated to be U.S.\$28 million. However security expenses in the south could increase the overall project cost.

8. Revise and update riparian watershed agreement between Afghanistan and its northern neighbors.

Both agricultural and urban development in Afghanistan will require far more water than is currently available. Much of Afghanistan is a dun-colored semi-desert, but when the land is irrigated, as occurred in the Helmand River Valley after the United States built an extensive water management system there in the 1960, it can sustain flourishing crops. The principal rivers can and should be used to generate electricity. Unfortunately, not a single major water project has been undertaken in Afghanistan since 1979.

A major barrier preventing Afghan water development is the absence of internationally recognized watershed agreements with its neighbors. Thus, while Afghanistan borders the Amu Darya River for a far greater distance than Tajikistan, Uzbekistan, or Tajikistan, its right of access to that river's water is not specified in the riparian watershed agreement that its three northern neighbors signed after the collapse of the USSR. Similarly, the old 1956 Helmand River water agreement with Iran urgently needs updating if it is to reflect current realities.

To prepare for a new riparian agreement with its neighbors, Afghanistan urgently needs to estimate its likely demand for water for agriculture and hydroelectric generation over the coming twenty years. It cannot prepare such estimates without international assistance. Only with such data at hand will it be in a position to renegotiate the Amu Darya Basin agreement. The revised agreement must cover water to be used for Afghan agriculture and also for generating electricity. It must also address such sensitive issues as the proposed Koksha hydroelectric project on the Amu Darya.

It is unlikely that such an agreement can be reached without assistance and mediation from the international community, including the key financial institutions (ADB, WB, UN). The United States can and should play a major facilitating role. The signing of a new agreement will open broad new horizons for the private sector in Afghanistan and neighboring countries, as well as entrepreneurs from the U.S., India, China, etc. Provided the U.S. provides strong and early leadership in bringing the sides to agreement, tens of thousands of new jobs in construction and emerging agricultural areas will result.

Long- Term Measures:

I. Investing in the Turkmenistan, Afghanistan, Pakistan, India natural gas pipeline (TAPI)

Signed on April 25, 2008, the TAPI Gas Pipeline Framework Agreement calls for the construction of a 1,080-mile pipeline that would follow the ancient trade route from Turkmenistan through Afghanistan to Pakistan and then to India. Since that date significant progress has been achieved among the projects four major parties in the areas of pricing agreements and transit fees. The pipeline will deliver 33 billion cubic meters (bcm) of gas a year from Turkmenistan through Afghanistan to both Pakistan and India. Current plans call for the pipeline to be built and operated by a consortium of national oil and gas companies from the four countries. However, a major international firm will be needed to plan and manage so large and complex a project.

Government backers of the plan have yet to secure financing for construction or, in the case of Afghanistan, to finalize the commercial terms for transport and sale of the gas. The project still requires a commercial champion.

In 2012 India and Pakistan agreed on the principle of a "Uniform Transit Fee," which means that Pakistan will accept whatever transit fee India and Afghanistan agree upon. Further, in May the Indian government approved the payment of 50 cents per million metric British thermal units as the transit fee to Pakistan and Afghanistan.

The net governmental revenue from transport fees could amount to USD \$300 million per annum. In addition, this anchor project is capable of generating an estimated rate of return of 16.8%.

The governments of Turkmenistan, Afghanistan, Pakistan, and India are the principal parties to the TAPI project, with the ADB providing technical

assistance. It has been asked by the parties to prepare an initial plan covering finance, construction, and operational issues of the pipeline. While it is expected that ADB will be a central participant, other financing, mainly from the private sector, will be required for implementation.

The agreement between Turkmenistan and Afghanistan on the commercial terms for transport and sale of the gas is expected to be completed within the next 6-12 months. At the same time, a consortium of private investors in the pipeline is being developed. It is expected that the TAPI natural gas pipeline will take between five and eight years to construct.

The United States' role has varied from passive to active, ignoring the project for years on end and then engaging the Secretary of State directly. As in the case of the Baku-Ceyhan pipeline in the Caucasus, this project will probably not be build without steady, high-level U.S. attention. Whether a U.S. firm becomes the lead developer remains to be seen, but U.S. support will be essential if the necessary U.S. \$8 to \$15 billion is to be raised.

2. Complete construction of railroad lines across Afghanistan linking Central Asia to Pakistan and India, and also to the southern ports of Gwadar (via Chaman), Karachi (via Torkham), and Chabahar.

This key project for the development of Afghanistan as a hub of continental transport and trade consists of several component parts, all of which must be initiated soon if they are to be realized by 2025. Among these elements are Rail Corridor 2, Segment 2, which consists of a rail line from Logar to Torkham via Jalalabad and then connecting to Peshawar, Pakistan, and the Pakistani rail network. Rail Corridor 3 consists of 2 main segments. The first runs from Herat to Kandahar, with a spur connection to Spin Boldak/Chaman, whence it links to Quetta, Pakistan, and the Pakistani rail network. The second runs from Kabul to Kandahar.

The construction of Corridor 2, Segment 2, and Corridor 3 will establish Afghanistan as a true entrepot for north-south and east-west transport and trade. Moreover, by opening the two lines to Pakistan, Afghanistan will gain a second "window to the sea," which in turn will generate a healthy competition between Pakistani and Iranian ports and hence market-based efficiencies and savings for Afghanistan and all Central Asia. Provided that Karachi and Gwadar upgrade their port facilities to handle the expected increase in volume, these same rail lines will provide an efficient alternative to exporting minerals solely through Iran.

Detailed feasibilities studies of Corridor 2, Segment 2, and Corridor 3 must start immediately to determine actual costs and timeframes. If Corridor 2, Segment 2, is to be a viable, Pakistan must immediately commence construction of the line from Peshawar to Torkham.

Afghanistan's Ministry of Public Works estimates that it will take 6-7 years to complete Corridor 2 Segment 2; 7-10 years to complete the entire corridor 3, but only 4-5 years to complete Corridor 3, Segment 1, from Herat to Kandahar, which will establish this more southerly trans-Afghan corridor.

Further, the Ministry of Public Works projects a cost for Corridor 2, Segment 2, of U.S. \$8-10 billion. This high figure is based both on considerations of terrain and security. The cost of Corridor 3, Segment 1, is estimated at \$U.S. 6-7 billion, and Corridor, 3 Segment 2, is estimated at \$U.S. 8-9 billion.

3. Help develop financing for the construction of power generation projects in the southern/eastern regions of Afghanistan (the so-called NEPS, including the Sheberghan gas field, and SEPS, including the Kajaki Multi-Purpose Dam).

To support the delivery of cost-effective energy to industries and communities through the completion of power generation and distributional systems in the Northern, Eastern, and Southern Regions of Afghanistan, within a broader emerging regional electric grid. The construction of the North Eastern Power System (NEPS) and South Eastern Power System (SEPS) will create a robust and sustainable power generation system that taps Afghanistan's abundant natural resources, including hydro-electric power, and enhances the absorptive capacity of the national network.

Institutional leaders of these related projects are Afghanistan's Ministry of Energy and Water, Ministry of Mines, and Da Afghanistan Breshna Sherkat (DABS); the United States Agency for International Development (USAID); the U.S. Army Corps of Engineers (USACE); and the U.S. Afghanistan Infrastructure Fund (U.S. AIF).

NEPS consists of seven components that will deliver electrical power to the city of Kabul and 14 provinces in eastern Afghanistan. SEPS consists of five components that will provide up to 52 MW of additional power to the Kandahar City region once the hydropower plant at the Kajaki Dam is rendered operational by the installation of the third turbine. 20 MW will be provided to Kandahar City itself. The project will supplant the Kandahar City Bridging

Solution, which is currently providing power to the Kandahar City region until the new generators are operational. NEPS will also connect to SEPS, thus creating the backbone of a national power grid.

The stable provision of 210 MW of electricity will greatly stimulate economic activity of all sorts and will also stand as a symbol of competent economic management on the part of the government. The construction and maintenance of the facilities themselves will create thousands of new jobs. In addition, user fees and taxes from these power facilities will produce an estimated \$180 million per annum of revenue for the Afghan government. Each mega-watthour of power produced by the NEPS and SEPS power plants is projected to provide 7,200 Afghans with electrical power, for a total of 1.7 million beneficiaries.

The biggest challenge to implementing these projects lies in the south, where security at the Kajaki Dam site remains problematic. This in turn has discouraged investors and donors. However, when the population discerns that the project may in fact become a reality, many who have heretofore opposed the project or watched passively from the sideline will become its defenders.

Both NEPS and SEPS are progressing slowly, but funding for the Kataki Dam has been cut and future funding is in jeopardy. With the expenditure of U.S. \$1.267 billion for SEPS and U.S. \$3.239 billion for NEPS, these core components of a national energy grid for Afghanistan will be in place by 2024. Diversified funding for this project is possible but it will require international leadership that is currently lacking.

4. Working with the World Bank and with the agreement of all of Afghanistan's regional neighbors, carry out the so-called CASA-1000 project to generate electricity in Tajikistan and deliver it to customers in Afghanistan and Pakistan.

With an estimated 30-year project life span, the Central Asia-South Asia Hydropower Project, or CASA-1000, will transmit 1,300 MW of electricity from the Kyrgyz Republic and Tajikistan to Afghanistan (300 MW) and Pakistan (1,000 MW). Power from this source will stabilize and reduce the cost of electricity in Kabul and can also serve the Mes Aynak copper mine and the Hajigak iron mine. Fees for the transmission of electricity across Afghanistan to Pakistan will also provide a stable and potentially increasing source of revenue to the government of Afghanistan.

The project calls for the construction of transmission lines between the Kyrgyz Republic and Tajikistan (HVAC - 477 kms) and from Tajikistan through Afghanistan to Pakistan (HVDC - 750 kms),. A 300 MW converter to will supply users in Afghanistan but most of the electricity (1,000 MW) will be sent on to Pakistan.

This project has the potential to catalyze economic growth and employment in the politically crucial Kabul area, while transit fees will bring the Afghan government from \$88 to \$175 million annually, contributing to fiscal self-reliance.

The World Bank has championed this project, with partners including Afghanistan, Tajikistan, the Kyrgyz Republic, and Pakistan. Since the project potentially affects the seasonal supply of water to downstream states on the Amu-Darya River, it will be essential to work out acceptable understandings with those governments as well, possibly bringing them in as partners. Without such an understanding, it is unlikely that CASA-1000 can proceed.. A further challenge has been to prevent any single outside power from dominating either the construction or management of the power system.

The estimated cost of the project is U.S. \$750 million, with \$350 million of that remaining to raised. Both the World Bank and Islamic Development Bank have indicated a willingness to provide substantial portions of the needed funding. The main challenge, then, is political, not economic or technical, and the solution is to engage constructively all affected parties and to maximize regional self-management of the project. Current studies by the World Bank will determine whether and how this challenge can be met. A final understanding will be encapsulated in a Regional Power Purchase Agreement between the four major parties. The life span of the project is estimated to be 30 years.

5. Construct the two Kunar (Kabul) Basin Hydropower plants. And, after revising and updating the agreement on the management of the Amu-Darya watershed and gaining the assent of partner countries, construct the Kokcha Multi-Purpose Dam on that river.

95 per cent of Afghanistan's population remains without reliable access to electricity, which thwarts the development of both industry and agriculture. Imported power from Uzbekistan and plans to import power from Kyrgyzstan, Tajikistan, and Turkmenistan will help fill this gap, but these sources must be balanced by domestically generated power.

The north of Afghanistan is expected to undergo rapid economic development over the coming decade, and to need far more electricity than is currently available, even including electricity imported from Uzbekistan, Tajikistan, and Kyrgyzstan. The World Bank in 2011 assessed the prospects for developing the hydroelectric potential of the Kunar (Kabul) River. The production of electricity from this undeveloped resource is estimated to reach 250-300MW.

Similarly, both agricultural and industrial development will concentrate far more people in northern Afghanistan than at present, and their need for electricity and water for production and daily life will soar. After signing a revised riparian watershed agreement with Tajikistan, Turkmenistan, and Uzbekistan, Afghanistan should become an active partner, with its neighbors, in the Kokcha Irrigation and Hydropower Project. For Afghanistan alone this will put under irrigation some 140,000ha of new land and produce 450MW of electricity.

Studies of other countries in Asia indicate that reliable access to electricity has powerful spillover effects in other areas of the economy. The impact of electrification on the development of small and medium sized businesses is obvious. The main effect will be in agriculture. Thanks to irrigation, northern farmers will be able to open additional land to market-based farming, which will create jobs in rural regions where there are none at present. The expansion of market-based agriculture will help feed the population and stimulate the raising of export crops. In addition, it will reduce the severe current pressure on land, which gives rise to frequent conflicts. The growth of normal agriculture will also reduce the need to resort to the seasonally unpredictable poppy crop.

A pre-feasibility study for a Kokcha Irrigation and Hydropower Plant has been carried out to identify the technical, social, environmental, and economic viability of the project. A further study has refined the design parameters. The ADB initially committed U.S. \$600,000 for seven years to construct the Lower Kokcha Irrigation and Hydropower Project, but due to lack of a watershed agreement between Afghanistan, Uzbekistan and Tajikistan the funding was diverted to the other projects.

The Lower Kokcha Irrigation and Hydropower Project will require U.S. \$600,000 million to construct, while the Upper Kokcha Hydropower Project calls for the sum of U.S.\$1.8 billion. The Kunar Hydropower Project will require \$1.6 billion. Both the Kokcha and Kunar Dams can be constructed in seven years.

⁶ Scoping Strategic Options for Development of the Kabul River Basin, The World Bank, 2011.

Authors' Bio

S. Frederick Starr is Founding Chairman of the Central Asia-Caucasus Institute & Silk Road Studies Program, a Joint Research and Policy Center affiliated with Johns Hopkins University-SAIS, Washington D.C. and the Stockholm-based Institute for Security and Development Policy (ISDP). A Research Professor at SAIS and former President of Oberlin College, Starr is the author of over twenty-two books and 200 published articles. He is the author of The New Silk Roads: Transport and Trade in Greater Central Asia (2007); The Key to Success in Afghanistan: A Modern Silk Road Strategy 2010, with Andrew Kuchins); and Afghanistan Beyond the Fog of Nation-Building: Giving Economic Strategy a Chance (2011).

Adib Farhadi is a Visiting Scholar at the Central Asia-Caucasus Institute. He was the former Head of Afghanistan Reconstruction and Development Services (ARDS), Afghanistan National Development Strategy (ANDS), Director of Joint Coordination and Monitoring Board (JCMB) Secretariat, and Deputy Minister of Commerce and Trade. Mr. Farhadi also served as Afghanistan's Chief Negotiator for WTO accession and Afghanistan-Pakistan Transit and Trade Agreement (APTTA). He is currently a senior advisor to the New Silk Road economic cooperation.