

Tajikistan

Reinvigorating Growth in the Khatlon Oblast



Poverty Reduction and
Economic Management Unit
Europe and Central Asia



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Acronyms and Abbreviations

NATO	North Atlantic Treaty Organization	SMEs	Small and Medium Enterprises
IFC	International Finance Corporation	VAT	Value Added Tax
GDP	Gross Domestic Product	IMU	Islamic Movement of Uzbekistan
GNI	Gross National Income	UN	United Nations
ECA	Europe and Central Asia	CIS	Commonwealth of Independent States
LSMS	Living Standards Measurement Survey	TALCO	Tajik Aluminum Company
RRS	Rayons of Republican Subordination	EU	European Union
RCA	Revealed Comparative Advantage	ITC	International Trade Center
SCO	Shanghai Cooperation Organization	ADB	Asian Development Bank
CAREC	Central Asia Regional Economic Cooperation	KFW	German Development Bank
PPP	Public-Private Partnership	WFP	World Food Program
HPP	Hydro Power Plant	USAID	United States Agency for International Development
UAE	United Arab Emirates	UNDP	United National Development Program

CURRENCY AND EQUIVALENTS

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US\$1 = 4.75

WEIGHTS AND MEASURES

(Metric system)

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Executive Summary

This report assesses the challenges and opportunities for the development of the Khatlon oblast in Tajikistan. In response to a request from the Governor of the Khatlon oblast, the report examines the economic growth prospects for Khatlon and proposes a private-sector-driven strategy for accelerating growth over the medium term. Research conducted for the purposes of this report also considered the competitiveness of selected activities and sectors based on their revealed comparative advantages in order to identify prospective directions for private investments in the oblast. One of the main objectives of such analysis was to explore the possibility of strengthening the development of the private sector in the oblast through favorable policies, supported by the public sector through the identification of major obstacles to private sector development and the required public policy reforms needed to improve development conditions in the region. Given the relative strategic importance of Khatlon, the analysis is also intended to inform the design of reform policies and to offer insights to the governments of Tajikistan and those of other oblasts.

The report argues that the rise in the strategic significance of Khatlon must be matched by responses in public policy and a strong upturn in private investment to strengthen economic prospects. The report postulates that the emphasis of public policy must be placed on facilitating private investment and on using public resources wisely to avoid waste and corruption. The report also calls attention to important risks that cannot be overlooked. It argues that the nexus of regional insecurity, the narcotics trade, and poor standards of governance threatens the realization of the oblast's potential.

The report identifies four key reform imperatives for stimulating growth in the oblast. These are: (i) promoting cities and internal connectivity to build labor

skills, realize scale economies, and diversify output; (ii) harnessing the potential of agriculture for exports; (iii) reshaping public policies to encourage entrepreneurship and reduce corruption; and (iv) retooling free economic zones to build in internal supply chains and conform to modern management practices. The report also recognizes the critical importance of building security and antinarcotics defenses, but details in these areas lie outside the scope of the work. The underlying belief behind the assessment of the growth prospects of the oblast is that a rapidly prosperous Khatlon with rising private investment would itself be stabilizing.

A Strategy for Transforming Development

There has been a shift in the structure of the economy of Khatlon with a revival of industry led by light manufacturing. The oblast is largely rural; agriculture along with agriculture-based activities are dominant in production. Approximately one-third of all ginneries in Tajikistan are in Khatlon, including three new ones that began operations in 2012. It is also encouraging to note that Khatlon accounts for two-thirds of the national raw cotton output, and half of the cotton-fiber production. However, over the past three years, there has been a revival of industry, aided by an upturn in construction and real estate.

Since Khatlon accounts for half of the country's agricultural land and pastures, both the agriculture and livestock sectors could provide additional exports. An export-based potential for growth is revealed by the pattern of growing intra-industry trade, particularly in fruit and vegetable juices, fertilizers, spare parts, and dried nuts and fruits. The analysis of Khatlon's revealed comparative advantages (RCA) shows that existing advantages lie in farming (horticulture) as well as potentially in some first-level-specific

processing industries (fruits and vegetables, juices/beverages, skins, wool and cotton yarn).

Political economy constraints, shortcomings in the business climate, lack of skills, and a narrow production base constitute the main barriers to rapid economic growth. These impediments can be addressed only through a partnership between rising private investment and reformist public policies to invigorate growth and raise social indicators. Policies should be reoriented to (i) promote cities as the locus for building labor skills, realizing scale economies, and diversifying output; (ii) harness the potential of agriculture as the driver of exports; (iii) reshape public policies to encourage entrepreneurship and reduce corruption; and (iv) amplify outward-orientation by re-tooling free economic zones to build in internal supply chains. These policies need to be implemented both at the national and at the oblast level and there must be a clear commitment by the authorities to design a comprehensive reform package where policy actions at different levels of government are complementary and reinforce each other and facilitate the development of the private sector in the region.

The diversification potential of Khatlon together with the sparseness of the current population and economic activity densities calls for efforts to promote economic agglomeration. In particular, the effects of agglomeration could be magnified if connectivity were to be developed within the two free economic zones being established in the oblast, in Dangara and Nizhni Panj. These zones could stimulate growth in production and exports by reducing the governance, economic, tax, and regulatory costs of doing business and, through supply chain linkages with the rest of the oblast, could help accelerate overall economic growth. Growing production would seek to exploit the transport links with Dushanbe and beyond, as well as with northern Afghanistan, that could offer access to the huge south Asian markets.

It will be necessary to clarify the purpose of zones and strengthen zone institutions to attract more investments. The main barriers to investment in Khatlon are weak governance, corruption, weak property rights, and energy shortages. In view of this, the legal regime and the application of laws in the zones regarding property rights and governance over

businesses, the leadership and administration of the zones, and the supply of infrastructure will have to be of a wholly different order than in the rest of the country. Also, the management of the zones should be independent and professional. Decisions on entry into the zone will need to be made on objective grounds. The management authority also needs the capacity, resources, and ability to exercise independent judgment in promoting and regulating the zone.

Joint public and private investments in transport will help achieve a major presidential goal of improving links. All major transport corridors (current or planned) being supported by CAREC or projects being considered with SCO (Shanghai Cooperation Organization) go through the Khatlon oblast. With the construction of the 46 km long railroad connecting Kurgan-Tube to Dushanbe via Vahdat and Yovon both Kurgan-Tube and Kulyab will be connected directly to Dushanbe bypassing the territory of Uzbekistan. With the road connecting Dushanbe and Nijni Pyanj as well as the bridge over the river Pyanj funded by the U.S. already completed, there are much better opportunities to connect to the southern markets and networks that serve as an alternative to the routes north via Uzbekistan and the Kyrgyz Republic.

There is plentiful air capacity, but liberalization in civil aviation will be needed to attract additional private investment. Khatlon's comparative advantage is bolstered by access to three international airports within close proximity to production sites in Khatlon.¹ There are flights at various times throughout the year from Dushanbe with 22 airlines to 14 Russian cities² and 10 other international destinations including the Middle East.³ There are also flights to various Russian cities from Kurgan-Tube and Kulyab. Airport capacity appears to be plentiful and there is no commercial or economic case for the construction of a new airport in the oblast. However, the liberalization of air services

¹ Airports in Kurgan-Tube, Kulyab, and Dushanbe.

² These cities include Moscow, Saint Petersburg, Novosibirsk, Irkutsk, Tyumen, Chelyabinsk, Samara, Nizhnevartovsk, Surgut, Yekaterinburg, Orenburg, Khanty-Mansiysk, Krasnodar, Krasnoyarsk, Kazan, Sochi.

³ Wulumuqi (China), New Delhi, Kiev, Istanbul, Tehran, Frankfurt, Dubai, Bishkek, Almaty, Sharjah (UAE).

and provision of third-freedom rights is necessary to attract private investment especially if rapid transport of perishable, high-value agricultural products is to be facilitated.

There will be no progress in developing the participation of the private sector in the oblast without improved safeguards for property rights and contracts. Private investments require complementary public investments in infrastructure and in human capital. Indeed, such private investments may be facilitated by progress in legislation on public-private partnerships; but experience shows that successful and durable PPP transactions take place only when supporting public institutions enjoy high credibility, and private confidence in the security of property rights and the sanctity of contracts is high.

For Khatlon, it is also particularly important to reform border procedures and practices with respect to Afghanistan and Uzbekistan. The absence of a system of payments guarantees forces the use of conveying at high fees and generally large logistical and time costs as convoys must be formed, transported, and cleared as a bunch. To realize the full potential for food and agribusiness exports as well as those in new light manufacturing industries, road and freight logistics constraints would need to be addressed. Also, a number of steps in customs practices reform and trade facilitation are necessary. Corruption in customs, long government-imposed delays at borders (especially at the Uzbek border), and near-obligatory inspections, regardless of risk considerations, are impediments to formal and informal trade.

Urban development would be assisted by improved marketability of rural land. Rural land should now be freely marketable and transferable because the new code provides a firm legal basis for land transactions, a system of registered titles, and also the framework for the use of land as collateral for credit. The process of urbanization could be accelerated if potential migrants were easily able to relinquish land or able to rent land out. Because all land is state owned there is scope for better management of reserve lands (unused) in a more effective manner.

Labor migration into the cities could transform the shape of growth. With the number of labor migrants constantly on the rise, an unofficial unemployment

rate at around 30 percent (especially among the youth), and modest job creation in Khatlon, labor migration is there to stay. Exacerbated by a very low level of investments to the region (including FDI), remittances are by far the largest source of foreign exchange and income compared to exports, official development assistance, FDI, and public expenditures. Coupled with a stubbornly high fertility rate during the last 20 years and a large share of youth (15–29) that is primarily unemployed or self-employed in agriculture and/or petty trade, labor migration should be treated as a labor market pressure relief strategy. The key policy consideration should be around giving the young generation “employment alternatives” rather than being worried about “labor export.”

Greater predictability in revenues and rising standards in public services will complement private investment. The reform agenda outlined for the oblast authorities in various parts of this report will require resources and technical knowledge for successful implementation. It will be essential to bolster oblast and raion revenues, reduce volatility in revenues, and attain greater predictability in both transfers from the central budget as well as in donor inflows. A medium-term program towards raising capacity to raise local revenues and strengthen sub-national autonomy would improve the prospects for the success of reforms.

Five Risks that Could Hold Back Growth in Khatlon

First, narrow political participation as a legacy of a fragile polity remains as a latent threat. The Khatlon oblast was the cockpit of the civil war that took place during 1992 and 1993 and continued with lower intensity until 1997. The war ended through a peace agreement with protocols on military unification, where progress has been made with a national army but fair political participation and division of power remain highly contentious. Despite post-conflict reconciliation, parts of the country (Garm and Rasht in the center of the country; parts of the Pamirs) remain beyond central control, with occasional outbreaks of violent challenges to the authority of the state from warlords and insurgents.

Second, the geopolitics of security and the narcotics trade represent serious threats. The importance of the Khatlon oblast as the front line against extremism and the war on drug trafficking grows with the planned withdrawal of NATO forces from Afghanistan in 2014. The Afghan-Tajik border—which is 850 miles long—is highly porous, with minimal, stretched police and border guard presence. Attaining firm control over the border will require infrastructure investments, electronics and detection equipment, but most of all improvements in human capacity and skills in all aspects of border control.

Third, heavy bureaucracy, underdeveloped institutions and pervasive corruption hamper efforts to improve competitiveness and limit growth prospects in the country, including Khatlon. In Khatlon, a centralized corrupt network deprives the oblast of resources. Corruption is a product of state capture by a highly centralized, unitary administration that exercises discretion over wide-ranging decisions with few checks and balances. A patronage system and clan-based hiring weaken institutions and sap competence in public administration by deterring the truly meritocratic from seeking jobs. If Khatlon's institutions are to be strengthened, a major donor-assisted effort should be considered for building up the demand side of governance.

Fourth, entrepreneurship is constrained by rising informality. Over the past five years, there has been a significant rise—by an annual average of six percent per year—in the number of small enterprises or businesses as measured by the number of patents issued. As the number of functioning SMEs has risen only slightly over this period, it appears that the degree

of informality has grown. Informality may reduce tax and other burdens but at the cost of efficiency and long-term growth. Moreover, informality may also reflect business conditions prevailing in the oblast. If entrepreneurship in Khatlon is to prosper such a trend must be arrested. Formal enterprises make possible economies of scale, are better able to take advantage of logistical advantages, and are poised to trade more.

Fifth, Khatlon can be the energy power battery of the country, but continuing energy shortages restrict growth. Tajikistan has large hydro potential estimated at 264 TWh/year or over half of all hydro potential of Central Asia. Much of this potential lies in Khatlon, but unfortunately only about six percent of this potential is developed. Paradoxically, in a country with abundant hydro-power potential and a strong inherited Soviet tradition of engineering in the sector, electricity supplies are notoriously deficient and unreliable. Energy shortages are exacerbated by privileged access accorded to a large aluminum smelter. With too-low tariffs and large energy losses, the sector runs deficits, with consequences of inadequate operations, maintenance, and capital spending, and arrears in taxes and payments to suppliers. Both infrastructure improvements and management reforms including transparency in accounts and financial controls, paid for partly by rational tariffs, are essential.

A summary of the main reform areas that will need the attention of the authorities at the central and local levels is presented in Box E.1. The proposals for reform reiterate the view that the rise in the strategic significance of Khatlon has to be matched by responses in public policy and a strong upturn in private investment to strengthen economic prospects.

Box E.1 | Summary of Major Policy Recommendations

Reforms to Attract and Retain Private Investments	Reforms to Boost the Potential of Free Economic Zones	Risk Mitigating Measures
<ul style="list-style-type: none"> • Focus on institutions and markets. Attention should be given to land use, public services, and infrastructure quality. • Improve safeguards for property rights and contracts. • Rehabilitate roads and feeder roads connecting cities to the hinterland. • Simplify customs and borders procedures. • Increase public investments in energy generation to raise energy efficiency and thermal generation investments. • Stimulate marketability of land following the reform of the land code to unlock the potential of the rural land bank. • Ease urban zoning transactions. • Adopt measures to raise labor skills to facilitate migration to new urban opportunities. 	<ul style="list-style-type: none"> • Clarify the purpose of zones and strengthen zone institutions to improve governance, reduce corruption, strengthen property rights, and reduce energy shortages. • Make the management of the zones independent and professional. • Improve transport, and telecom connectivity within the two free economic zones. • Develop a strategic, inter-linked approach to infrastructure needs in the zones. • Build stronger links between the zones and the cities in the oblast. • Allow the free movement of labor across the oblast and zones. • Invest in training and skills development. • Create and develop labor migration support infrastructure • Strengthen local executive capacity in the oblast to manage migration. 	<ul style="list-style-type: none"> • Prepare a medium-term reform program to bolster oblast and raion revenues, reduce volatility in revenues, and attain greater predictability in both transfers from the central budget as well as in donor inflows. • Deepen post-conflict reconciliation and broaden representation in government and civil service in support of stability • Enhance security control at the border with Afghanistan with better equipment and better human capital

Khatlon at a Glance

Strategic Importance amidst Poverty and Vulnerability

The end of the civil conflict in Tajikistan in 1997 ushered in an unbroken period of strong growth in output in the country from a deep post-Soviet, post-conflict trough. The global crisis in 2008–2009 led to a temporary slowdown in growth. Growth was aided by stability won through the peace agreement ending the civil war, favorable regional and world trade conditions, rising exports that reflected improvements in terms of trade, and some internal reforms promoting private markets. Of great significance was the migration of Tajik labor to Russia and to a lesser extent to Kazakhstan. Remittances account today for over 40 percent of GDP—a large stabilizing influence in an economy with high unemployment, and the primary coping mechanism for impoverished households. Over this period, agriculture shrank as a share of total output as the share of services rose.

Robust economic growth during the past decade contributed to progress in reducing poverty. Income

per capita grew by more than five percent per annum during the past decade, while official government estimates indicate that the incidence of poverty halved during this period (Figure 1). However, despite a threefold rise in income per capita over the past decade, the level of productivity remains low and Tajikistan's GNI per capita of \$870 is the lowest in Europe and Central Asia (Figure 2).

Prospects for sustained growth, now that catch-up effects are exhausted, will depend greatly on improved public policy and raising private investment. That will require strong market-oriented reforms in governance, property rights and the rule of law, and the business environment, together with smart policies and investments to reduce economic distance and improve connectivity in order to maximize the potential of economic agglomeration.

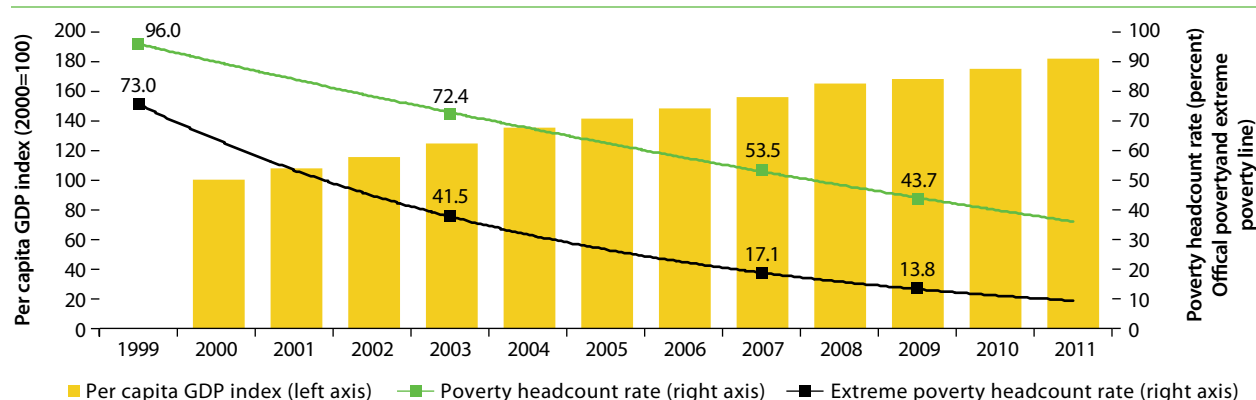
The fragile political and security foundations of the country and the remnants of challenges to central authority compounded by terrorism across its borders affect private confidence and, therefore, the ability to pursue reforms. The economy is highly dependent on labor demand in Russia and hence on the state of the Russian economy, and, more broadly, on world demand and prices for aluminum and cotton. A high proportion of the population is vulnerable to food price shocks. The energy shortages especially during cold winters, given the limitations on generation capacity and the poor state of infrastructure, are a heavy constraint to production and investment. Thus, the economy faces many-sided, profound risks. It is critical that the authorities develop strategies to mitigate and face such risks by building in fiscal adjustment as required, ensuring access to contingent finance, but, above all, pursuing reforms.

The oblast of Khatlon is even more exposed to such risks. It borders Afghanistan and lies on the path of major drug-smuggling routes; its poor,

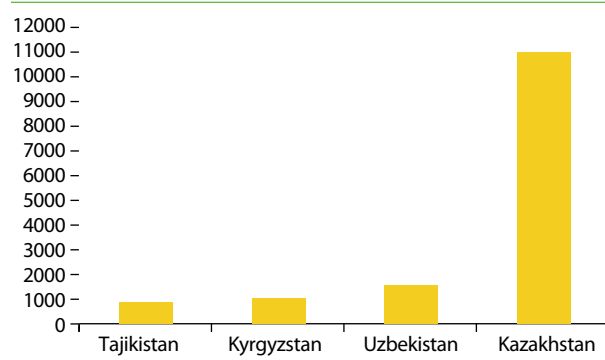
Table 1 | Tajikistan: Key Economic Data
(As percent of GDP, unless otherwise specified)

	2008	2009	2010	2011
Real GDP growth (per percent change)	7.9	3.9	6.5	7.4
CPI inflation (end-of-period percent change)	11.9	5.0	9.8	9.3
Public Sector Balance				
Overall revenues and grants	22.1	23.4	23.2	24.9
Expenditures and net lending	27.6	28.9	26.9	27.0
Fiscal balance (including the public investment program, PIP)	–5.5	–5.4	–3.7	–2.5
Fiscal balance (excluding PIP)	1.4	–0.5	–0.4	0.5
Total public	29.2	34.0	34.4	32.5
Current account balance	–7.6	–5.9	2.2	–1.4

Source: Tajikistan Economic Report (World Bank, 2012).

Figure 1 | Robust Growth Contributed to Good Progress with Poverty Reduction

Source: State Statistical Committee.

Figure 2 | Tajikistan Remains the Poorest Country in Central Asia

Source: World Bank (Per-capita GDP, 2011).

agriculture-based economy is highly dependent on export of labor to Russia; its population is heavily reliant on remittances from migrant workers; and it faces severe winter energy constraints despite its large energy generation potential. Indeed, this report advances the view that private sector investments in energy generation offer a promising path for growth if supported by public sector reforms.

With almost 2.7 million people in 2011, the oblast of Khatlon is the most populous of the four administrative regions of Tajikistan (Sogd, Khatlon, Gorno-Badakhshan and Republican territory) and Dushanbe city; and contains over one-third of the total country population. The population is overwhelmingly rural (83 percent) and is engaged predominantly in primary agriculture, with less than three percent of the

Map 1 | Khatlon: Administrative Raions

Source: Khatlon – mapping of donor supported projects in agriculture (World Bank, 2012).

population is employed in the industrial sector.⁴ In 2011 334 enterprises were recorded in official statistics in Khatlon.

The region is situated between the Gissar Range in the north and the Panj River in the south and borders Afghanistan in the southeast and Uzbekistan in the west. It is potentially well connected by road and rail and air (where appropriate) to export markets

⁴ In 2009, there were more people listed in official national statistics as being employed in “education” (178,000) than in “construction and industry” (164,000). The same statistics show employment in “agriculture and forestry” as 1.468 million. Total employment in all sectors in Tajikistan was approximately 2.2 million. Source: *Tajikistan in figures 2010*. Tajstat, 2010.

Table 2 | Key Selected Khatlon Data

	2006	2007	2008	2009	2010
Key Administrative Data					
Year established			1992		
Area (thousand sq.km)			24,8		
Population, mln people (%), o/w:	2.463	2.519	2.579	2.642	2.7
Urban o/w					0.465 (17%)
Kurgan-Tube (in th.)	72.1	71	69.9	68.8	72.9
Kulyab (in th)	90.1	91.9	93.9	96.3	97.5
Rural					2.235 (83%)
Center of the oblast					Kurgan-Tube
Population density (per 1 sq. km)					108.9
Distance from Kurgan-Tube to Dushanbe					100 km (60 miles)
Administrative composition					4 cities; 24 rural rayons, 133 jamoats
Economy					
Number of enterprises					334
Share in total industrial output (%)	29.9	28.4	29.9	29.7	29.7
Industrial production (bln somoni)	1.859	1.862	2.153	2.067	1.934
Kurgan-Tube	0.021	0.029	0.032	0.033	0.041
Kulyab	0.035	0.036	0.041	0.047	0.048
Employment (thousand people)	380.6	380.7	381.7	364.3	365.3
Kurgan-Tube	11.1	10.6	11	12.1	11.7
Kulyab	20.1	18.6	18.8	18.2	17.9
Industry	17.5	19	18	15.1	15.3
Construction	8.1	8.7	9.9	8.6	8.2
Kolhoz	109	108.7	100.8	46.7	24.4
Agriculture	154	152.1	159.5	200.4	220.9
Transport	4.3	4.1	4.3	4	4.3
Electricity generated (bln Kw/h)	16,160	15,808	16,214	15,106	15,195
Cotton-fiber production (thousand tons)					59.2
Raw cotton (thousand tons)	240.8	258	259.6	241.1	197.8
Agriculture:					
Cereal production (tons)					774,000
Potato production					197,000
Vegetable production					461,900
Melons/watermelons					360,500
Cattle (number of heads) o/w					756,400
Cows					394,700
Sheep					172, 060

(continued on next page)

Table 2 | Key Selected Khatlon Data (*continued*)

	2006	2007	2008	2009	2010
Capital investments, bln somoni	0.22	0.52	1.469	1.815	1.02
(% of total investments))					–26
Services to population, bln somoni	0.679	0.813	0.952	1.067	1.194
(% of total)	–18	–19.4	–21.3	–21.5	–21.4
Key Social Indicators					
Number of schools					1303
Number of students					643,600
Number of professional schools					11
Number of students					8,500
Number of universities					5
Number of students					23,600
Number of health facilities					144
Net migration (incoming-outgoing)	–6,503	–6,161	–7,469	–5,906	–6,064
Access to telephone (per 1000)	16	17	17	17	17

Source: State Statistical Agency.

to the south and north and to the Dushanbe urban market. Khatlon has an area of 24,800 square kilometers (around 17 percent of the country's area) and consists of 24 administrative districts, four towns and 133 rural jamoats.⁵ The region is informally split into Western Khatlon (comprising Kurgan-Tube and the Kofarnihon and Vakhsh river valleys) and Eastern Khatlon (Kulyob and the Kyzylsu and Yakhsu river valleys). Kurgan-Tube is located only 100 kilometers from Dushanbe (see Map 2).

Khatlon is more vulnerable to economic shocks than the other two major regions in Tajikistan (RRS

and Sugd) because there has been relatively very little investment in non-agricultural activities since the end of the Soviet Union. Kurgan-Tube, the regional capital, has a population of approximately 73,000 people (est. 2009). The second major city, Kulyob, is slightly larger with a population of approximately 97,000.⁶ Only about seven percent of the region's population lives in the two major urban centers, leaving the oblast predominantly rural. Urban economic opportunities are, therefore, severely restricted. Although no statistics exist, it is doubtful whether many new jobs of any significant numbers have been created during the past two decades.

Table 3 | Tajikistan: Population of the Oblasts

Region	Population	Urban %	Rural %
Khatlon	2,700,200	17.2	82.8
Sugd	2,216,900	25.3	74.7
RRS	1,685,800	12.5	87.5
Gbao	220,600	13.3	86.7
Dushanbe	706,100	100	—
Total	7,529,600	26.4	73.6

Source: Food Security and Poverty No 1/2011. Statistical Agency under the President of the Republic of Tajikistan.

⁵ 14 districts in Western Khatlon and 10 districts in Eastern Khatlon.

⁶ Source: *Food Security and Poverty No 1/2011*. Statistical Agency under the President of the Republic of Tajikistan. The other two centers listed as "towns" are Nurek (pop. 24,000)—built to service Nurek Dam and Hydroelectric Plant—and Sarband (pop. 14,000)—Sarband is home to Tajikistan's only fertilizer manufacturing plant, Tajik Azot. Population in the other two major urban centers in Tajikistan is as follows: Dushanbe 706,000 and Khujand 158,000.

Table 4 | Key Social Indicators

LSMS 2009	Total	Khatlon
Poverty		
Poverty headcount rate	47.3	53.9
Gini	30.4	26.8
Average monthly consumption per capita	196	172
Demographics		
Total population	7,370,026	2,640,760
Average household size	8.0	8.5
Labor Force		
Number of unemployed	220,993	62,775
Number of employed	1,914,160	821,320
Unemployment rate	10.4	7.1
Employment rate	42.9	52.7
Labor force participation rate	47.9	56.8
Participation rate for males	65.3	69.7
Participation for females	32.1	45.0
Median monthly wage (somon)	200	185
Migration		
Share of households with migrants	35.7	38.9

Source: LSMS 2009, WB.

The region remains predominantly dependent upon primary agriculture; most farms and enterprises remain at or slightly above subsistence level. There is little or no capital formation (as evidenced by the hand-to-mouth nature of capital investment in existing enterprises) and the production base is, for the most part, aging and decaying.

Social indicators tell a story of vulnerability. According to the 2009 LSMS, Khatlon has become the poorest region in the country with a 54 percent poverty rate. Being the largest region in the country (36 percent of the total population), Khatlon has a higher rate of population growth than the national average. The average size of the household is at a staggering 8.5 people. Given the high share of the youth in the total population (almost 40 percent below 14), Khatlon accounts for only approximately 14 percent of the labor force and at the same time is characterized by a very high unofficial unemployment rate (35 percent) and official unemployment rate of seven

percent. While the labor participation rate in Khatlon is higher than the country average (for both men and women), the median monthly wage remains one of lowest in the country forcing large migration abroad with close to 40 percent of households reporting at least one migrant.

In comparison to the country as a whole, males in Khatlon tend to be less educated and participate less in the labor force, but the data for females is broadly similar to that of Tajikistan as a whole. The share of female-headed households in the oblast is 13.3 percent, but in the lowest income quintile of the population this share rises to 20.5 percent. Primary education enrollment is 100 percent, but female enrollment in secondary education is significantly higher, and even more so in the lowest quintile. Female labor force participation is significantly lower than that of males but rises for the post-secondary cohort. Female earnings overall are one-quarter of male earnings, with a particularly large gap in the services sector.

The Kyrgyz Republic and the Khatlon province share some characteristics. Khatlon's GDP and population represent half of that for the Kyrgyz Republic, but GDP per capita is similar as is the remittance flow per capita from migrants. Migrants as a share of the population in Khatlon greatly exceed those of the Kyrgyz Republic and of much richer countries such as Armenia and Moldova or even Tajikistan as a whole. Yet the remittance flow per capita in Khatlon is much lower, largely reflecting the lower skill level of its migrants. Khatlon enjoys lower official development aid than the Kyrgyz Republic as a whole by around 20 percent. Foreign direct investment on a per capita basis is a fraction of the Kyrgyz Republic and also very much lower than in Armenia or Moldova. Thus, policy changes towards attracting much higher volumes of both official and private external flows would be important. Finally, Khatlon has a higher share of its population below the poverty line than Tajikistan as a whole, despite a somewhat higher per capita income, suggesting that inequality is sharper in the oblast than in the country as a whole. The Kyrgyz Republic and Moldova have both made much stronger inroads against poverty than Khatlon.

Table 5 | Selected Economic Indicators

	Afghanistan		Armenia		Moldova		Kyrgyz Republic		Tajikistan		Khatlon
	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011 ^a	2001 ^a
Key Economic Indicators											
Gross Domestic Product (in US\$ bln)	2.5	20.3	2.1	10.2	1.5	7.0	1.5	4.8	1.1	6.5	2.1
GDP per capita (US\$)	92	576	691	3306	408	1966	308	881	173	853	778
Foreign Direct Investments (in US\$ bln)	0.001	0.075	0.070	0.707	0.102	0.197	0.005	0.438	0.009	0.016	0.004
Estimated stock of labor migrants (in mln)	—	2.35	—	0.87	—	0.77	—	0.62	—	1.00	0.425
Official development aid (in US\$ bln)	0.410	6.400	—	0.528	—	0.245	—	0.315	0.218	0.436	0.128
Official development aid (USD\$ per capita) ^b	15	181	—	170	—	69	—	58	—	57	47
Remittance inflow (US\$ per capita)			31	405	67	439	2	234	13	352	259
Total remittances, incoming (in US\$ bln)	—	—	0.095	1.254	0.243	1.562	0.011	1.275	0.079	2.68	0.7
Remittance (% of ODA) ^b			—	238	—	638	—	405	36	615	547
Remittance (% of GDP) ^b			4	12	16	22	1	27	7	41	33
Remittances (% of exports)			18	65	33	68	2	52	12	224	519
Remittances (in % of FDI)			136	177	238	793	220	291	878	16962	17500
Total exports (in bln US\$)	—	—	0.540	1.940	0.736	2.290	0.563	2.470	0.652	1.195	0.135
Key Demographic Indicators											
Total population, mln (Jan 1)	26.70	35.32	3.07	3.10	3.63	3.56	4.95	5.45	6.23	7.62	2.7
Total fertility rate	7.60	6.29	1.68	1.74	1.54	1.31	2.40	3.10	3.94	3.58	3.16
Key Labor Market Indicators											
Working age population, mln (as of Jan 1)	13.27	17.64	1.98	2.12	2.43	2.57	2.97	3.57	3.40	4.51	1.55
Labor Force (in % all population)	25.1	25.6	48.2	46.3	44.8	34.2	42.5	46.4	38.6	37.4	13.8
Official unemployment rate (in % of total population)	—	—	35.9	19	7.3	7.4	7.8	8.6	—	2.9	0.78
Unemployment rate of 15–29 year old (% of total)	—	—	48.2	38.8	—	13.9	—	16.7	—	15.4	35.7
Key Social Indicators											
School enrollment, primary (% of gross)	19	97	102	103	101	94	96	100	97	102	—
Maternal mortality rate (per 100,000)	—	460.0	—	30.0	—	41.0	—	71.0	—	65.0	—
Mortality rate under 5 (per 1000 live births)	132.8	103.9	28.3	18.3	22.9	16.6	45.3	31.7	91.6	62.6	—
Life expectancy (at birth)		48.0		74.0		69.0		69.0		67.2	—
Population below poverty rate (% of total) ^c	—	36	—	35.8	—	21.9	—	33.7	—	47.2	53.9

Source: Statistical agencies of CIS countries.

^a some data is preliminary. ^b own calculations. ^c based on national poverty lines (with exception of Tajikistan — WB Poverty Assessment, 2010).

Economic Structure and Comparative Advantage

The oblast is largely rural, and agriculture as well as agriculture-based activities are dominant in production. The oblast accounts for half of the agriculture output of the country, with a population of one-third of the country, and for 65 percent of total cotton production. As shown in Table 6, the relative share of agriculture has grown in the recent past since, following a collapse in output during the civil war period, growth in agricultural output has outpaced that of the country as a whole. This has been mirrored by some deindustrialization: the collapse of industrial output during the civil war was sharper than in the country as a whole and the subsequently recovery much more muted.

There has been a revival of industry, but neglect of energy has depressed growth. Over the past three years, there has been a revival of industry, aided by an upturn in construction and real estate. Within industry, the pattern of growth reveals a steady decline of the energy sector reflecting the slowdown in public investment in the post-Soviet period. This is likely to be a move away from the oblast's comparative advantage and hence has, together with a similarly pronounced fall in machinery and chemical industry output, depressed growth. There has also been a rise of building-materials-associated industry, particularly

the production of building materials, which is in part related to the remittances sent for housing as well as a drug fueled-boom in construction. Light manufacturing has also enjoyed a revival as private sector activity has grown.

The revival of industry has been led by light manufacturing. The number of ginneries in Tajikistan is on a steady rise from slightly over 20 in 2000 to 50 in 2012. Approximately one third of all ginneries are in Khatlon, including three new ones that opened in 2012, with a total capacity to process up to 200,000 tons of raw-cotton annually. Khatlon accounts for two-thirds of the national raw cotton output, and half of the cotton-fiber production. Khatlon is largely absent at the next stage of the cotton value chain: its 24 textiles companies have a small output, using only 10 percent of all cotton-fiber produced in Tajikistan.

The shift in the composition of trade since 2005 suggests that considerable potential for growth can be unlocked if an export-led strategy were to be followed. In examining the opportunities for private market led growth, it is instructive to examine the pattern of Khatlon's trade. In 2000, cotton and cotton products accounted for over 90 percent of all exports from Khatlon. Since then the share of cotton has been

Table 6 | Khatlon: Changing Pattern of Production
(Annual average growth in real terms in percent)

	1991–1995	1996–2008	2008–2010
Industrial production (Khatlon)	–29.0	6.4	9.2
Industrial production (Tajikistan)	–18.0	23.0	1.1
Agricultural production (Khatlon)	–14.3	7.3	9.9
Agricultural production (Tajikistan)	–13.6	5.9	8.6

Source: Bank calculations based on data supplied by oblast authorities.

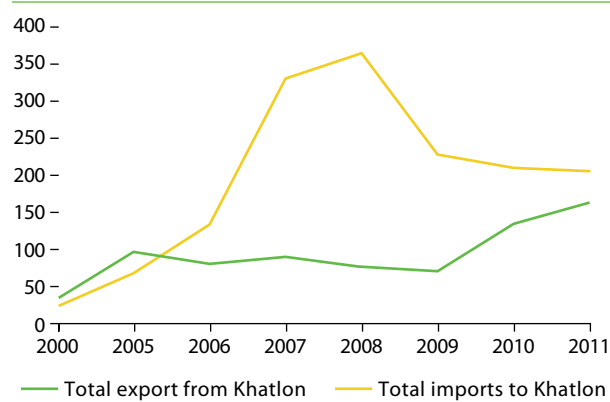
Note: (a) Core years of the civil war; (b) war winds down in 1997 and the following decade of peace and reconstruction.

slowly decreasing, reaching 77 percent in 2011 (adjusting for ballooning oil product re-exports from Khatlon to Afghanistan). Cotton is now approaching its free market equilibrium point: the forced production of cotton under state command is being wound down via the introduction of “freedom to farm” policies. Farms are being restructured into individual units, with production decisions becoming more market-based.

Over the past three years, the tradables sector has expanded in the oblast. This change is a reflection of stability and reforms, occurring in parallel with the growth in industrial output; the current trade deficit is the equivalent of 25 percent of exports (Figure 3). Before 2005, Khatlon enjoyed a trade surplus equivalent to 30 percent of its exports. Exports of agricultural products and raw materials have been stimulated by rising output and major improvements in road and bridge infrastructure.

An export-based growth strategy must focus on regional markets. A regional strategy would help expand agriculture production and agro-processing as well as basic industrial processing, particularly given the largely untapped (and rapidly expanding) markets in the bordering regions of Afghanistan. As Khatlon accounts for half of the country’s agricultural land and pastures, agriculture and livestock are sectors for potential diversification provided that complementary measures for fodder conservation, animal health and hygiene are appropriately taken.

Figure 3 | Khatlon: Exports and Imports
(In millions of US dollars)



Source: Customs Committee of Tajikistan, authors estimates.

An export-based potential for growth is also revealed by the pattern of growing intra-industry trade. This is particularly evident in goods such as fruit and vegetable juices, fertilizers, spare parts and dried nuts/dried fruits. Export-led growth requires working with the grain of factor endowment and skill endowment of the exporter and, therefore, with comparative advantage. The technique of revealed comparative advantage (RCA)⁷ measures how intensely a country is exporting a given product compared to other trading partners in the world. It reflects both a country’s resource endowment and any trade policy that affects exports.

Khatlon’s existing advantages lie in farming (horticulture) as well as potentially in some first level specific processing industries (fruits and vegetables, juices/beverages, skins, and wool and cotton yarn). Between 2005 and 2011, comparative advantage shifted towards agriculture (Table 7). Specifically, Khatlon has a clear advantage in such product as onions, fresh and dried grapes, and stone fruits. The picture is less clear for wool, which seems to have a cyclical nature. Cotton yarn’s, RCA has been continuously declining since 2005. It is, however still at a respectable level, suggesting either declining actual production or declining demand. One product group clearly gaining weight in the overall picture is hides and skins, which primarily go to Afghanistan

⁷ RCA measures how intensely a country is exporting a given product compared to other trading partners in the world. It reflects both a country’s resource endowment and any trade policy that has shaped its export capacity. The RCA of country i in product j in year t is defined as:

$$RCA_{ijt} = \frac{E_{ijt} / E_{it}}{E_{jt} / E_t} = \frac{c_{ijt}}{c_{jt}}$$

where E_{ijt} is country i export of product j in year t , E_{it} is country i total export in year t , E_{jt} is world export of product j , and E_t is world total export in year t . If $RCA_{ijt} > 1$, country i is said to have a revealed comparative advantage in product j in year t . The larger the RCA, the more the country has a comparative advantage in this product or industry. However, the RCA has an important limitation as it could be affected by anything that distorts (or provides wrong incentives to) trade patterns, i.e., trade barriers.

Table 7 | RCA in Key Products in Tajikistan and Khatlon

STIC product code	Name of the product	Tajikistan						
		2005	2006	2007	2008	2009	2010	2011
p04231	Rise, semi-mulled or whole	3	1	1	3	2	2	
P05799	Dried fruit not elsewhere specified	189	210	192	391	564	500	
P05423	Dried beans	9	6	4	24	27	12	
P05451	Onions/shallot, fresh/chilled	54	53	119	110	83	156	
p05673	Tomatoes	15	17	7	5	7	3	
p05751	Grapes, fresh	8	21	10	8	6	1	
P05752	Grapes dried (raisins)	27	22	29	46	54	29	
P05776	Walnuts fresh/dried	34	44	72	105	110	55	
P05793	Stone fruit (apricots, cherries,peaches)	3	6	3	9	7	8	
p05798	Fruit, fresh	14	17	21	11	9	9	
p05992	Tomato juice	152	77	59	60	38	4	
p05995	Juice, of any fruit or vegetable	23	17	11	11	10	1	
P22212	Groundnuts shelled	23	38	19	25	54	24	
p28799	Base metal ores	491	629	675	815	800	376	
p28823	Aluminium scap	1	0	4	2	0	2	
p57112	Polyethylene	2	1	2	2	1	1	
P65133	Cotton yarn	14	11	9	11	6	4	
p65221	Cotton woven fabrics (not over 200 g)	22	14	11	5	15	16	
p65222	Cotton woven fabrics (over 200g)	62	72	24	9	2	1	
p67159	Ferro alloys	17	1	10	14	1	1	
p68411	Aluminium, unwrought	247	235	214	223	229	221	
P68422	Alumimium/alloy wire	1	1	4	3	5	32	
P68412	Alumimium alloys, unwrought	13	8	10	24	43	30	
		Khatlon						
		2005	2006	2007	2008	2009	2010	2011
P05451	Onions/shallot, fresh/chilled	11	12	50	38	70	18	
p05751	Grapes, fresh	1	3	2	2	54	1	
P05752	Grapes dried (raisins)	7	7	7	7	6	6	
P05793	Stone fruit (apricots, cherries,peaches)	1	1	0	0	7	1	
p21111	Hides and skins of animals	13	1	49	257	5676	8216	
p26811	Shorn wool	4	0	12	0	12	0	
p65133	Cotton yarn	83	43	41	57	14	17	
P66183	Articles of asbestos-cement, cement with cellulose fibers or similar materials:	3	3	2	2	2	2	
P05451	Onions/shallot, fresh/chilled	6	50	263	16	53	202	
p05751	Grapes, fresh	2	52	2	10	11	12	
p21111	Hides and skins of animals	12	4	626	2288	8078	9508	

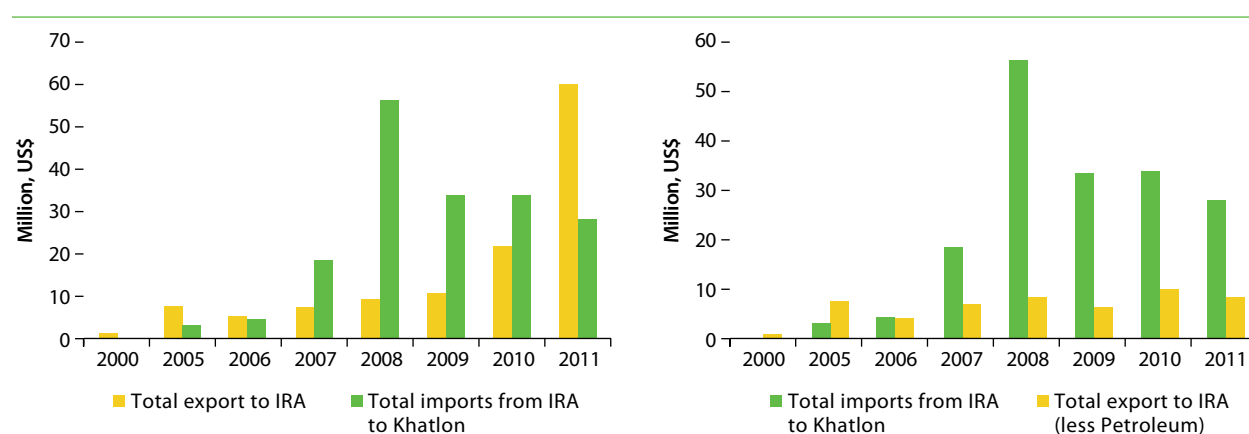
Source: Author's calculations, raw data comes from Customs Committee of Tajikistan.

for onward re-sale to China, Pakistan and Turkey. This suggests a significant opportunity for value added products in this sector, but requires further investigation as the entire value chain needs improvements to address losses from damaged hides.

There are striking differences in the RCA of Tajikistan and Khatlon. Out of 23 products where Tajikistan as a country has a known comparative

advantage, Khatlon accounts for only a third (8 out of 23) (Table 7). Concerning trade with Afghanistan, this number goes down to three. This suggests that efforts to promote a greater degree of freedom to farm, creating hard and soft infrastructure that supports exports of both fresh/dried and processed fruits and vegetables, are pre-requisites for increasing exports from Khatlon.

Figure 4 | Khatlon-Afghanistan Trade
(Left chart: total; right chart: without petrol; in millions of US dollars)



Source: Bank calculations based on official data.

Note: IRA refers to the Islamic Republic of Afghanistan.

A Strategy for Transforming Development

Political economy constraints, shortcomings in the business climate, lack of skills, and a narrow production base constitute the main barriers to rapid economic growth. These impediments can be addressed only through a partnership between rising private investment and reformist public policies to invigorate growth and raise social indicators. Policies need to be reoriented to (i) promoting cities as the locus for building labor skills, realizing scale economies, and diversifying output; (ii) harnessing the potential of agriculture as the driver of exports; (iii) reshaping public policies to encourage entrepreneurship and reduce corruption; and (iv) amplifying outward-orientation by retooling free economic zones to build in internal supply chains. These issues are discussed further in this Chapter.

Leveraging Economic Geography

Theme I: Cities as the Locus of Development

Building economic density and facilitating urban growth would go a long way toward promoting further economic development in Khatlon. The Khatlon province is geographically remote from the main markets of Europe and Asian Russia, and is separated from China by largely impassable terrain, but is, however, promisingly well located for the markets of south Asia. Although it is well connected by road to Dushanbe and to the border with Afghanistan, and has two functioning airports, overall connectivity within the oblast is poor, with dilapidated infrastructure, poor roads, and energy shortages. The oblast is predominantly rural, but contains two major cities, Kurgan-Tube and Kulab, and a few others such as Nurek, Sarband, and Dangara.

Policies that promote urbanization with the objective of export diversification offer a promising

approach. This conclusion is founded on the key insights of recent Bank work (*World Development Report*, 2009)⁸ on the role of economic geography in urban-rural transformations and the complementary roles of public policy and private investments. In areas of incipient urbanization, (urban shares of 25 percent) which are predominantly agricultural or resource based areas with low economic densities, the priority in public policy should be to facilitate agglomeration forces and encourage internal economies of scale for plants, mills, and factories in towns.

At early stages of urbanization, it would not be clear which places would be favored by markets, and for what purposes. Therefore, the need for neutrality between places should govern policymakers. The conclusion for Khatlon is that a policy directed at developing the two key cities as centers for growth in an incentive-neutral (spatially-blind) manner may offer the best promise for reinvigorating the growth of the entire oblast.

The diversification potential of Khatlon, together with the sparseness of the current population and economic activity densities, leads to the policy conclusion that it would be optimal to build economic agglomeration. This would require development of two major urban centers, thereby raising density, thickening markets, and utilizing economies of scale—all of which would benefit productivity. This could be achieved via a thickening of supply chains with low transport and other costs, access to a growing reservoir of more mobile and skilled human capital, growing use and sharing of information, and technology that is typical of growth through urbanization. Growing production would seek to exploit the transport links with Dushanbe and beyond, as well as with northern

⁸ *Reshaping Economic Geography*.

Afghanistan, and could therefore offer access to the huge South Asian markets.

Economic development will not happen if there are no credible efforts to reform incentives and institutions to support cities. Public policy will have the task of promoting urban growth in line with market forces and encouraging internal economies of scale for plants and firms, whilst contending with the costs. Public policy can facilitate inclusive urbanization through reforms in institutions and markets (e.g. land use, public services, schools, streets, and sanitation) in a neutral way, such that economic agents transact in those cities that are most profitable for them.

The effects of agglomeration could be magnified if connectivity were to be developed between the two free economic zones being established in the oblast: Dangara and Nizhni Panj. These zones could stimulate growth in production and exports by reducing the governance, economic, tax and regulatory costs of doing business. Through supply chain linkages the rest of the oblast could help accelerate overall economic growth. The policies required to ensure such positive linkages are discussed in a subsequent section of the report.

Theme II: Improving Connectivity, Logistics, and Energy Security

Reducing economic distance by building up density in an oblast like Khatlon will require connective infrastructure that is affordable. This requires links between villages and towns and Khatlon has strong transport linkages. The oblast has a highway to Dushanbe and through it to Sugd and Districts of Republican Subordination (Map 3). This highway also provides access to Uzbekistan and Kyrgyzstan. In contrast to the Dushanbe highway, the road that leads to Sugd passes through an area of high altitude (3,100 meters above sea level). In this regard, the construction of two road tunnels has been started to provide year-round communications with the region. A highway connecting Khatlon province with Badakhshan, and by extension China, and a highway connecting Kurgan-Tube, Dusti, and lower Panj are currently under reconstruction. The Khatlon region is connected to Afghanistan by a motorway, and

through the bridge in lower Panj. This motorway has strategic importance because of transport connections with Pakistan.

The key export routes connect Khatlon with Sugd and Dushanbe. Agricultural exports through rail will fall as the rail spur from Khatlon to Uzbekistan has been closed. Exports from Khatlon have been severely impeded by this border closure. Consequently production costs have risen as trade has had to be conducted through Khojent. Conversely, the opening of a major bridge across the Panj River has opened significant potential for markets in south Asia.⁹

Khatlon's weaknesses in infrastructure lie in the poor quality of roads, deficiencies in other infrastructure (telecommunications, financial), distribution and storage, and logistics supporting commerce and trade. In Tajikistan, nearly 75 percent of all republican roads have lost completely or partially their pavement and about three-quarters of the road network cannot be maintained without expensive rehabilitation. On nearly half of the roads the average driving speed may not exceed 35km/h. It is the roads connecting cities to the hinterland and feeder roads that require major upgrades.

The public policy support for cities should go hand in hand with investments in the regions. This should be principally in support of private agriculture, as discussed later in this document, but strictly on the principle that investments would strengthen the connectivity with cities and go with the grain of the emerging comparative advantage in private sector led production. Thus, the aims of policy are to promote economic concentration in the two principal cities by private investments, to improve regional to city transport and other infrastructure linkages, and to reduce the regulatory and other barriers to investment and commerce

⁹ The bridge at Nizhny Panj was completed in August 2007. *"Together they might not merely improve access, but undo the trends of history. During Soviet times, Central Asia faced north and west toward the Kremlin, moving goods to and from Moscow and Soviet cities along the line. Afghanistan faced toward Pakistan or Iran, feeling more affinity to Islamic traders than to the Slavic-led Communists to the north."* Source: *Seeking Trade to Bridge a Political North-South Divide*. The New York Times. June 2, 2007.

Map 2 | Khatlon: Railway and Road Links

Source: Central Asia Regional Economic Cooperation, CAREC (ADB).

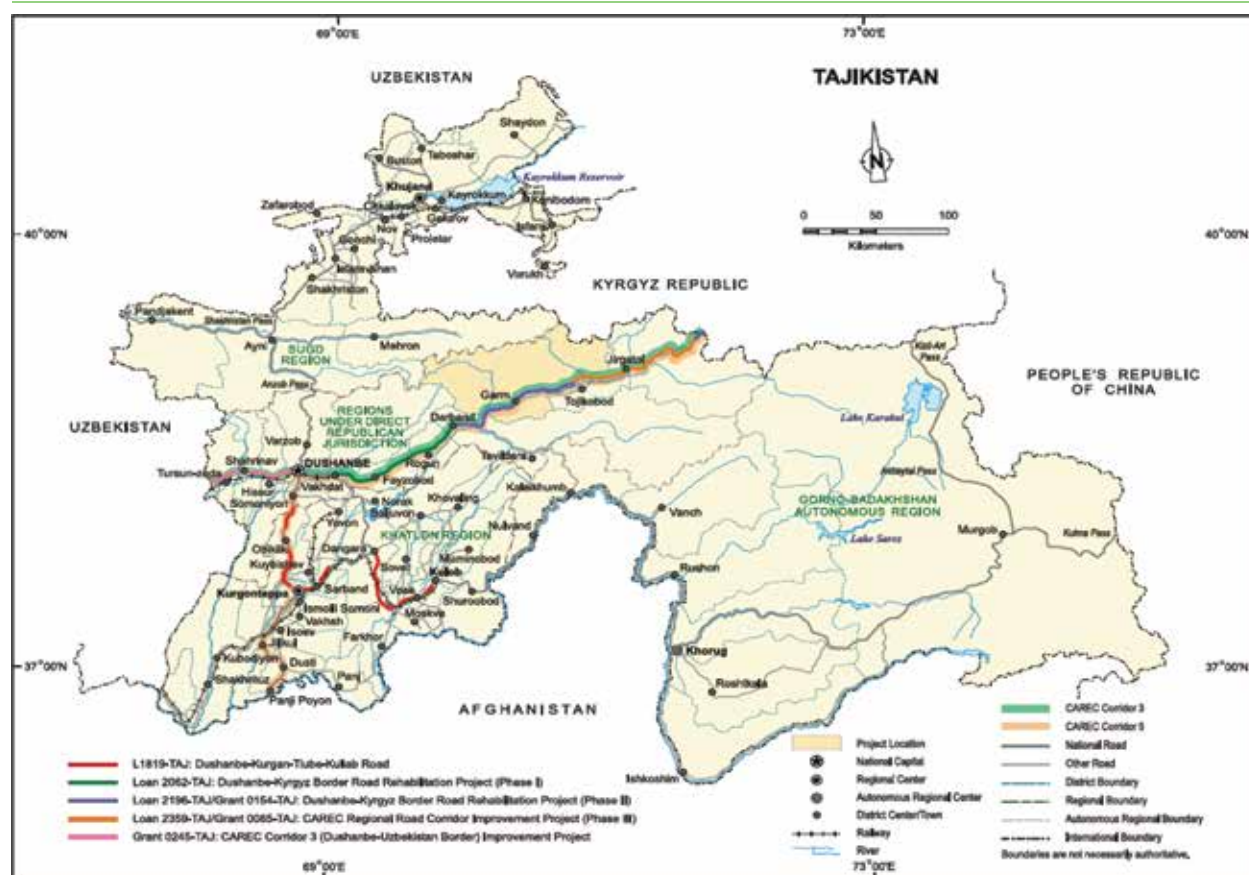
within the country (as well as exports to Afghanistan and other neighboring countries).

Joint public and private investments in transport will help to achieve a major presidential goal of improving links. All of the major transport corridors (current or planned) being supported by CAREC and all of the projects being considered with SCO (Shanghai Cooperation Organization) go through Khatlon oblast. With the construction of the 46 km long rail road connecting Kurgan-Tube to Dushanbe via Vahdat and Yovon both Kurgan-Tube and Kulyab will be connected directly to Dushanbe, bypassing the territory of Uzbekistan. With the road connecting Dushanbe and Nijni Pyanj as well as the bridge over the river Pyanj funded by the U.S. (already completed), there are much better opportunities to connect to the southern markets and networks than the routes north via Uzbekistan and Kyrgyz Republic. The intention to open a passenger route between the cities of Kurgan-Tube and Kunduz will improve international linkages.

The attraction of private investments will require improved safeguards for property rights and contracts. Private investments require complementary public investments in infrastructure and in human capital. Indeed, while they may be facilitated by progress in legislation on public-private partnerships, experience shows that successful and durable PPP transactions take place only when supporting public institutions enjoy high credibility and private confidence in the security of property rights and the sanctity of contracts is high.

The improvement of connectivity will require reformation of freight, trade and transport. Improved connectivity has an important private sector dimension: the freight industry, transport and trade facilitation, both within the country and across borders. These are likely to be promising areas for private investments and for subnational public-private partnerships, once the pre-conditions for successful PPPs identified above are met. A transformation of the oblast must involve the rural-urban link, related

Map 3 | Selected CAREC Transport Corridors



Source: Central Asia Regional Economic Cooperation, CAREC (ADB).

to the economic interdependence between cities and settlements. Thus, analysis at the oblast level should be based on an area of different types of settlements, each with its economic function, but with strong inter relationships, to shape urbanization strategies and priorities.

Difficulties in transport and associated high transport costs restrict private sector expansion. This is partly a reflection of an absence of integrated logistical services: firms are forced into using fragmented suppliers and agents, each too small-scale to reap economy gains and each with potential for corruption. Thus transactions costs and informal payments weigh heavily, exacerbated by inadequate competition in trucking. Inappropriate actions by the regulators and the road police are also impediments to expansion. A number of detailed logistical and trade facilitation studies over the years have pointed to high costs

imposed by the poor business environment. Charges imposed by middlemen such as the trucker's association restrict volumes and competition. Today, a modern trucking industry that can engage in international freight operations exists side by side with an antiquated industry that uses old models of trucks with outdated management and logistical practices. The more antiquated industry charges lowers tariffs and offers a lower standard of services, but it also imposes much higher environmental and safety costs.

There is plentiful air capacity, but liberalization in civil aviation will be needed to attract private investment. Khatlon's comparative advantage is bolstered by access to three international airports within close proximity to production sites.¹⁰ There are flights at various times throughout the year from Dushanbe,

¹⁰ Airports in Kurgan-Tube, Kulyob, and Dushanbe.

Table 8 | Selected Air-Traffic Indicators

	Tajikistan	Khatlon	Share (percent)
Main airports	4	2	50
Aerodroms	34	14	41
Functional	13	2	15
Non-functional	21	12	57
Domestic flights (annual number)	3300	60	2
number of passengers (annual)	144000	300	0
freight (annual K, tn)	1200	0	0
International flights (annual number)	3700	860	23
number of passengers (annual)	450000	110000	24
freight (annual K, tn)	3700	3	0

Source: State Statistical Agency.

with 22 airlines to 14 Russian cities¹¹ and 10 other international destinations including the Middle East.¹² There are also flights to various Russian cities from Kurgan-Tube and Kulyab. Airport capacity appears to be high and there is unlikely to be any commercial or economic case for the construction of a further airport in the oblast. A liberalization of air services and provision of third-freedom rights is necessary to attract private investment, which will be required if rapid transport of perishable, high-value agricultural products is to be facilitated. There may be a need for advisory support in the future to assist the relevant bodies in structuring competitive access to airport cargo facilities.

Border trade, intermediated through lightly-regulated bazaars, plays a large role in boosting economic activity and employment, and in countering poverty.¹³ However, this potential is under-exploited in Khatlon, and so a number of steps in reforming practices in customs and in facilitating trade need to be taken. Corruption in customs, long (government-imposed) delays at borders (especially at the Uzbek border), and near-obligatory inspections-performed regardless of risk considerations—are impediments to formal and informal trade.

For Khatlon, it is particularly important to reform the border procedures and practices with respect to Afghanistan and Uzbekistan. The

absence of a payments guarantees system necessitates the use of conveying at high fees and generally large logistical and time costs—as convoys have to be formed, transported, and cleared in a bunch. The bulk of food products are transported today by rail. To realize the full potential for food and agribusiness exports as well as those in new light manufacturing industries, road and freight logistics constraints would need to be addressed. For example, trucks tend to flow into Khatlon filled with goods (especially from China), but leave with sparse loads in the other direction. Freight logistical service agents could consolidate cargoes, but such skills are insufficient on the ground.

There is a large potential for captive power which, if well exploited, could boost economic activity in the oblast. Captive power is defined as privately owned power generation for use by the same, or another, private party. The most viable captive power options would involve industrial power users such as mining companies, free economic zones, tourism areas, and larger production firms building and operating their own small hydro power plants. The seasonal nature of hydro power, however, could be a limitation for winter power needs of these captive users.

Legislation favors private investment in power and allows any business entity to construct its own power plant for serving its own power needs. In practice, however, there are few examples of captive power for industrial use. Micro hydro plants have been built for off-grid community use and some firms have built hydro plants with the intention of selling the power to the national utility. As noted, the national utility is not a reliable partner in paying for power; thus, a captive off taker would be necessary to support private investments in power generation.

¹¹ These cities include Moscow, Saint Petersburg, Novosibirsk, Irkutsk, Tyumen, Chelyabinsk, Samara, Nizhnevartovsk, Surgut, Yekaterinburg, Orenburg, Khanty-Mansiysk, Krasnodar, Krasnoyarsk, Kazan, and Sochi.

¹² Wulumuqi (China), New Delhi, Kiev, Istanbul, Tehran, Frankfurt, Dubai, Bishkek, Almaty, and Sharjah (UAE).

¹³ Borderless Bazaars and Regional Trade in Central Asia, by Bart Kaminski and Saumya Mitra (World Bank, 2012).

Box 1 | Possible Pilot HPP Project

Tajikistan's Inter-ministerial Working Group on hydro energy has developed an idea for a pilot project to demonstrate commercial viability of HPPs. The Tajik-Chinese Joint Venture "Zarafshon" was suggested as a commercial buyer of hydroelectricity in such a pilot project. JV Zarafshon is a gold mining and processing company, in which the Chinese Zijin Mining Group holds a controlling stake. "Zarafshon" owns the license for exploration activities on a 300,000 hectare territory located near the town of Panjakent in the Sughd region (area of "Seven Lakes"). Estimated reserves are over 158 tons. According to press reports, Zijin plans to increase gold mining in Zarafshon by 5 tons until 2016. For the last four years, Zijin invested \$68 million in Zarafshon and over the next 4.5 years total investment in the modernization of the enterprise will reportedly be \$100 million. For its expansion plans, the company will need a larger supply of electricity. At present, the company faces power shortages in winter which lead to interruptions in its activities. According to the Tajik-Norwegian Hydro Power Development Center, the company is ready to pay lucrative prices to obtain power supply. Two possible options of HPPs are being considered to increase power supply to Zarafshon: Option 1: a cascade of two HPPs, each with a 3 MW capacity. Option 2: The construction of 2 additional 4 MW HPPs at lower-altitude lakes, with a substation at the lowest HPP.

Source: Tajik – Norwegian Small Hydro Power Development Center <http://www.tajhydro.tj/>.

There is encouraging potential for small HPPs in Khatlon, with captive power. Besides industrial uses, small HPPs represent an attractive option for rural electrification, thus driving local development and job creation. Thus far, there is no single small HPP built by a private investor on a fully commercial basis. The interministerial working group on hydro power has a plan to attract a private investor to a first pilot project; this could serve as an option for industrial development in Khatlon. Streamlining of procedures for constructing small HPPs would be necessary.

IFC has a technical assistance project on captive power which is pursuing pilot captive power projects to test and improve the regulatory regime for these investments and demonstrate the viability of captive power as an energy solution for firms. If there is potential for captive power in the regional development strategy for Khatlon, IFC resources can support the pilot development of these projects.

Theme III: Land and Labor Reforms to Support Urbanization

The new land code will promote efficient growth. A reform of land markets has been central to promoting growth. Comprehensive amendments to the land code passed into law in August 2012 laid the foundations for a land-use market, provided security to land tenure through modern registers and lead to efficient resource allocations with stronger incentives to improve land and make possible the use of land as collateral for credit. Supporting regulations are now

required however, and new institutions and practices will need to be created and made effective. It will be important to move away from past practices where land was not subject to sale and purchase, meaning the land users could only use the land on lease basis.

Urban development would be assisted by improved marketability of rural land. Rural land should now be freely marketable and transferable as the new code provides a firm legal basis for land transactions, a system of registered titles, and also the framework for the use of land as collateral for credit. The reforms on "freedom to farm" should be followed up by such reforms in the land market so that agriculture is truly freed and that agri-business possibilities can be fully exploited. The process of urbanization would be speeded up if potential migrants were able to easily relinquish land or rent land out.

Unlocking the missed potential of the rural land bank would provide an additional boost to economic activity. As all land is state owned (a land user could rent land for 49 years) there is scope for better, more effective management of reserve lands (unused). Reserve land (about one-third of total land in Khatlon or 850 ha of 2470ha) is managed by the Land Management and Geodesy Agency and partially by local jamoats (unused, personal plots and non-irrigated land) but the process of allocation is not clear. Additionally, only slightly over 10 percent of the total land which is irrigated produces close to 90 percent of all agricultural production. Thus, the optimum use of such land is inhibited, investments into land improvement and irrigation

Table 9 | Land Tenure Typology in Tajikistan Khatlon

Type of Land	Area (K ha)	Population (K people)	Potential Issues	Overall Legal recognition and Characteristics
Urban land	4,800	464	(i) Non-transparent, complex and confusing procedures for obtaining permission to land and construction; (ii) high risks of changes in terms of the lease from the state at any time (i.e. protection of land right is very limited in such cases); (iii) high rates of population growth and lack of agricultural lands leading to urbanization, but area for urban growth is limited.	According to the Law, all the land in the Republic of Tajikistan is an exclusive property of the state, and the reclamation of land formerly belonging to the ancestors is not allowed. All land in the Republic of Tajikistan constitute a single State Land Fund in accordance with the purpose divided into the following categories:
Rural land: Incl State farms lands	563,873	989.3	Decisions related of management of the farm, in particular, the structure of crops and range of products are made by individual managers and the state.	1. Agricultural land; 2. Settlement land (cities and rural areas); 3. Industrial, transportation, communications, defense and other purpose; 4. Land conservation, recreation, recreation and research-analysis and cultural facilities;
Dehkan farms lands	863,099	415.9	(i) high cost and complicated procedures to obtain certificates for the use of land; (ii) numerous violations in the distribution of land due to inadequate legislation and lack of legal aid; (iii) lack of information on procedures, ignorance and misunderstanding of land use rights by farmers; (iv) transfer of debts of restructured collective and state farms on the shoulders of the newly emerging dehkan farms.	5. Ground state forest fund 6. The ground state of water resources; 7. The state land reserve. Land users in the Republic of Tajikistan shall be individuals and legal persons. Individuals and legal persons can be primary or secondary land users. The primary land users are the legal persons and individuals using the land in perpetuity, futures, or lifetime inheritable use. The secondary land users are individuals or legal persons using the land under lease in the lifetime inheritable use of land provided to individuals or collectives, citizens to organize dehkan farms and traditional crafts as well as to the citizens of household plot. In an emergency, use of land may be transferred to individuals and legal persons for a specified period. Immediate use of the land may be short—up to three years and long-term, three—twenty years. Primary land user may transfer land in lease contract. The lease of land should not change the purpose of the use of the land. Plots of land are leased for a period of 20 years. State registration of rights to land use is the responsibility of state body on land and its local branches covering all individuals and legal persons in the use of land.
Households lands (private plots)	113,495	2210.3	(i) population owns most of the livestock, but all pastures are in the balance of state and private farms; (ii) significant part of the lands allocated to the population (households) away from their homes and is arable lands and with low productivity; (iii) in recent years there is a tendency to build housing on households lands due to population growth potentially creating possible legal complications.	
State Lands Fund	571,833	15.2		
Lands not suitable for use	351,100	2669.7		
Total within the administrative boundaries of the Khatlon Oblast	2,468,200			

Sources: Statistics Agency and State Land Fund.

do not take place, and revenues to the local budgets are foregone. Ownership restrictions for such land and ability to collateralize land are also important inhibiting factors.

Urban land transactions should be smooth, and property and use rights should be adequately protected through registers. Zoning governing land

use in cities and peri-urban areas needs to be revisited. The general plan of Kurgan-Tube (developed in 2011) governs zoning but much will depend on rules-based implementation and on flexibility to take account of rapidly changing economic conditions. Between 1990–2005 massive zoning violations occurred, e.g. residential housing being built

on land not suitable for residential development. Examples include construction in the water protection zones of city channels Dzhaybor and Hanim, and also on the site of a former quarry. Now planning is in place to demolish all buildings in these areas. Zoning restrictions do not appear to be a significant barrier to business at present, but it would be important to create a firm framework going forwards.

Reforms in land taxation will improve efficiency and bolster local revenues. Land taxes appear to be low, regardless of land use categories. The rent of agricultural land is determined by the quality and location of the land, taking into account the inventory estimate. On average in Khatlon province the annual tax is 25–50 Somoni (between \$5–10) per irrigated hectare and 16–19 Somoni per hectare of dry land.

Tax rates for the use of other types of land are defined according to their location, nature of use, environmental and socio-economic characteristics. The rates are subject to change depending on soil-site index (bonitet) and respective appraisal by points—after any reclamation work land valuation may rise, for example. This leads to an increase in payment rates, and vice versa, the rate may drop with a decrease in scores in soil-site index. A rational system of differentiated taxation driven purely by criteria of land quality and land use would promote greater efficiency in the use of land.

Labor migration into the cities can transform the shape of growth. With the number of labor migrants

(including women) constantly on the rise, an unofficial unemployment rate at around 30 percent, especially among the youth, and modest job creation in Khatlon, labor migration is well-established and not likely decrease. Exacerbated by very low level of investments to the region (including foreign direct investment or FDI), remittances are by far the largest source of foreign exchange and income compared to exports, official development assistance, FDI, and public expenditures. Coupled with a stubbornly high fertility rate during the last 20 years and a large share of youth (15–29) that is primarily unemployed (or self-employed in agriculture and/or petty trade), the large number of labor market entrants by far exceeds the current rate of job creation on Khatlon. Hence labor migration should be treated as a labor market pressure relief strategy. The key policy considerations should be focused around giving the young generation “employment alternatives” rather than being worried about “labor export.” The imperative of raising labor skills to bolster urban output is clear and is linked to reforms in education (discussed later in this paper). A supply of skilled labor into cities is critical in underpinning a successful urbanization strategy.

Given the urgency, scope, and scale of migration, and its importance for Khatlon, a number of urgent local-level initiatives could be undertaken by the oblast government and development partners to address the immediate needs of labor migrants and strengthen the benefits of migration to the cities (see Table 10).

Table 10 | Proposed Migration Related Policy Recommendations and Actions

Institutional Development	Creating And Developing Labor Migration Support Infrastructure	Strengthen Local Executive Capacity to Manage Migration
<ul style="list-style-type: none"> • Develop and connect Khatlon oblast infrastructure in support of organized recruitment (as opposed to ad hoc) with the central government, especially when it comes to information campaigns (risks and challenges of migration), access to jobs. • Establish a sub-national LM Advisory group consisting of all key ministries in efforts to better coordinate migration related issues (including policy, statistics and coordinated actions). 	<ul style="list-style-type: none"> • Introducing youth employment programs and providing a package of services, life-skills, technical skills in most demand, job-search, marketability. • Develop and expand coverage of pre-employment training for potential migrants. • Enhance infrastructure of vocational and technical training for youth, unemployed and potential migrants, including working with secondary and tertiary educational establishments to pay special attention to skill development. 	<ul style="list-style-type: none"> • Starting from Oblast, City and rayon management, conduct rapid training, needs assessment, and initial trainings on the role of migration in socio-economic development of the region. • Link with the local or central Civil service training institute and include a module on migration policy agenda into the learning programs of civil service.

Source: Bank staff based on research into migration.

Harnessing the Potential of Agriculture

Khatlon enjoys a strong advantage in agriculture exports, but this will only be maintained if policy reforms are undertaken. Compared to such large and efficient agricultural producers as Argentina or the Ukraine, Tajikistan is not well endowed in agricultural potential, neither in scope nor scale, nor in the inherent fertility of its soils. The country's landlocked, isolated status presents logistical challenges. It is also a food-deficit country and imports a substantial part of its staple foods, notably wheat, sugar and vegetable oils. Food imports¹⁴ exceed food exports by a factor of more than three. Only seven percent of the land area of 14.3 million hectares is arable. Additionally, most farming is dependent upon irrigation, and approximately 70 percent, or 724,000 hectares, is irrigated.

Nevertheless, agriculture is arguably the most important sector of the economy, employing about 67 percent of the economically active population. Agriculture also accounts for 22 percent of GDP and 15 percent of official exports (in 2009).¹⁵ Agricultural development is consequently not only a question of food security, it is also critical to stable development and social stability in Tajikistan.

The viability of agriculture is affected by very low levels of productivity, weakly structured supply chains, lack of skills, outdated technologies, and deteriorating irrigation and other infrastructure, as well as other issues. However, under competent management and appropriate investment in technology and inputs, production at acceptable yields and profitability is possible. Furthermore, the proximity to such large markets as Afghanistan, Kazakhstan and Russia, and potentially to Iran, Pakistan, the UAE and Uzbekistan, offers significant export possibilities.

In Khatlon, the irrigated river valleys around Kurgan Turbe and Kulyob were reportedly "among the most productive agricultural regions in the Soviet Union."¹⁶ This was principally due to the extensive irrigation infrastructure, which supplies water to up to 320,000 ha of arable land in the region.¹⁷ The oblast has good climatic conditions for growing a wide range of crops. It has a continental climate, with hot dry summers in the lowland areas, yet cooler and wetter weather in the mountain valleys and

Table 11 | Agricultural Output by Region in 2011

Region	Somoni (millions)	USD (millions)	Percent of National Agri. GDP
Khatlon	7223,8	1,505	48.7
Sugd	4609,9	960	31.0
RRS	2568,2	535	17.3
Gbao	451,4	94	3.0
Tajikistan (Total)	14853,3	3,094	100.0

Sources: Social-economic indicators in Tajikistan (January-December). TajStats – May 2012.

foothills. Soils are reasonably good in the south and in the upland valley areas, but low precipitation levels limit the scope for rain-fed agriculture and necessitate a reliance on irrigation for crop production. However, water resources are abundant. Approximately 71 percent of arable land is listed as irrigated.¹⁸ Agriculture contributes to about 80 percent of the GDP of the region and 40 percent to exports.

Khatlon produces half of the country's total agricultural output (Table 11). Total national agricultural GDP was \$3.1 billion in 2011, or 23.8 percent of total GDP.¹⁹

Cotton is still the major crop in the region and Khatlon produces approximately 60 percent of the national crop. There is some degree of diversification with other crops such as wheat, vegetables, rice, alfalfa,

¹⁴ Food imports are currently approximately \$350–400 million per annum. Source: TAJSTATS Annual Statistics Publication 2011.

¹⁵ *Comparative advantage and external competitiveness of the Tajik agro-food sector*. Gilles Walter. EBRD TAFF research paper. August 2010.

¹⁶ *New Opportunities for the international cotton trade*. Government of Tajikistan. April 2007

¹⁷ Tajikistan has a total area of 14.3 million hectares, of which 4.3 million ha is classed as agricultural land—of this, only 0.8 million ha is arable. Khatlon has approximately 232,000 hectares of irrigated arable land, which is approximately 50 percent of the total irrigated land in Tajikistan.

¹⁸ TajStats 2010.

¹⁹ In comparison, official remittances from migrant workers in 2011 were \$3 billion.

Box 2 | Classification by Livelihood Zones

Khatlon can be divided into four zones on the basis of water availability, soil fertility, altitude and topography and according to the classification developed by the Famine Early Warning Systems Network.^a

- **The north-west** is a mountainous, agro-pastoral zone that includes Baljuvon, Muminobod, Khovaling, Shurobod and Norek districts. There is some gravity flow irrigation but the majority of households rely on 400 to 600 mm of rainfall per annum. The main crops grown are wheat, legumes (lentils, peas, beans) and fruits (apples, grapes, pears, apricots). Animal traction is the main form of land preparation, though better-off households may use tractors if their fields are flat enough. Pastures and crop residues are the main source of fodder for livestock. Average holdings are between 2 and 10 hectares per household. Livestock sales represent the main source of income for most households.
- **The southern cotton, vegetable and wheat zone** is a fertile zone, where rainfall averages 150–250 mm per annum. Agriculture and, to a lesser degree, animal husbandry are the dominant livelihood activities. Irrigation infrastructure is found throughout the zone, albeit in disrepair in many areas. Most households in the zone are part of the dekhani land tenure system and still grow cotton. In addition to cotton, households also produce wheat, fruits and vegetables—mostly onions, potatoes, carrots, cabbage. Some households also produce fruits such as lemon, grapes, apricots, peaches and pomegranates. Better-off households cultivate larger areas of land, can afford tractor and thresher rental and hire agricultural laborers.
- **The rainfed wheat and livestock zone.** This mixed-agriculture zone includes all hilly, rain-fed wheat areas in Khatlon Region and the southern areas of Rudaki district. The zone receives 350–500 mm of precipitation annually, providing wheat, beans, lentils, sesame, and sunflower crops with enough moisture to mature. A minority of those living in the zone may also produce fruits and pistachios.
- **The agro-industrial peri-urban zone.** This small, densely populated zone is peri-urban, with proximity to Kurgan-Tube and Djililikul, and features intensive agricultural production encouraged by the nearby urban markets. The zone includes southern parts of Jomi and Sarband districts, all of Bokhtar, and western parts of Rumi and Vakhsh districts. The zone's agro-ecology and the crops produced (cotton, vegetables and wheat) are similar to the Southwest zone. As in all other zones, poor households earn a significant amount of their cash from remittances sent by family members working in Russia, Kazakhstan and Dushanbe. Better-off households may also receive remittances but will mostly rely on crop and livestock sales. The zone's proximity to regional markets ensures a steady in/out flow of commodities. Good road networks and affordable transportation allows unhindered access to markets throughout the year.

^a Livelihoods zoning “plus” activity in Tajikistan. Famine Early Warning Systems Network. January 2011.

and potatoes. Cotton however, provides an element of stability to both income and employment on many farms. Fruits include apricots, apples, and sub-tropical fruits such as lemons and oranges. There are extensive numbers of livestock (cattle, sheep, and goats) most of which are managed at a subsistence level of production. Agro-processing consists of cotton ginning and limited processing of fruits, vegetables and livestock, most of which occurs in small to medium sized enterprises. Apart from cotton ginning and yarn production, there are no modern “flagship” agro-processing enterprises and no foreign investment of any significance.

The combination of land, water, labor, and favorable climate means that Khatlon should, with modern management and technologies, be able to improve yields and productivity and export significant surpluses.

There is a strong potential for export-led growth in the oblast. The detailed results of a preliminary value chain analysis conducted for fruits and vegetables (in depth) are provided in Annex B. Textiles and clothing, honey, logistics activities, packing and some

summary observations for aromatic and culinary herbs, citrus, construction materials, dairy products, meat, silk and tourism are also covered.

Khatlon offers several comparative advantages: the ability to produce early season crops, access to abundant water resources, low labor costs, the potential for air freight from local airports, and growing access to the South Asian markets. Agro-processing (fruit and vegetables) and textiles and clothing offer the most promise for development in terms of potential scale of impact and numbers in employment. There is no regional or national strategy for agro-processing,²⁰ and so a strategy should be developed to provide a framework for policy and other reforms. The full exploitation of early season crops requires much closer attention to logistics factors.

²⁰ There is a “State Program on Strengthening Fruit and Vegetable Processing Sector Export capacity for the years of 2010–2012”. However, this program was not referred to in discussions during the mission. This pro-

Box 3 | Agro Processing

Agro-Industrialization Is Key To Growth

The Soviet system, functioning essentially like an agricultural co-operative, under a single marketing channel coupled with financing and extension support from the State, made it possible for farms to access the three prerequisites of markets, skills and finance. However, since independence and, latterly, greater market liberalization, farms have struggled to access these features. Very few farms are successful in this regard under the current deregulated market regime.

Agro-processing is potentially an effective tool to facilitate growth in agriculture. Khatlon has about 10–20 agro-processing enterprises (excluding cotton related enterprises), which is a small number in comparison to the potential of the region. Existing agro-processors are without exception operating with outdated and inadequate technology and production processes. Most importantly, their sources of raw material are erratic and unpredictable at best. A strong and vibrant agro-processing sector is therefore key to the development of farms as this can, if properly managed, be an institutional delivery mechanism providing market access, extension support, and potentially a conduit for finance and inputs to farms.

Key features of the agro-processing industry are:

- Processing companies were running at only 37 percent of installed capacity.
- Products most commonly produced were fruit juices, sweet products, and tomato group products (paste, puree, juice).
- Availability of raw materials competed very strongly with the fresh market where higher prices were generally received. The most significant competition for raw materials was sales into fresh markets.
- Key limitations to improved production included the lack of working capital to purchase raw materials during the planting and harvesting season, inadequate raw material quality, unattractive prices, and weaknesses in the production process (inadequate or obsolete equipment).
- Almost all processors reported the unreliable power supply as a serious limitation and over 60 percent were seriously limited by inadequate water and heating supplies.
- Transportation of both raw materials and finished products (cost and availability) were limitations for many processors.
- Average plant processing time was approximately 6 months and average capacity utilization during processing season was 66 percent.
- Average age of equipment was approximately 19 years.
- It is interesting to note that 79 percent of investments in plant and equipment were made from the enterprise's own funds and that bank loans were accessed in only one enterprise

One potential opportunity is production and export of high quality berries (for example, straw-berries, raspberries) or specialty vegetables like mange tout and baby corn. An indication of this potential is illustrated by a comparable scheme developed in Spain (visited during a recent study tour from Tajikistan) which now covers over 9,000 hectares,²¹ and comprises small scale producers producing 320,000 tons of berries at an export value of €350 million per annum (this is three to four times current total agriculture exports from Tajikistan).

However, most enterprises in the fruit and vegetables processing sector are uncompetitive beyond captive local markets for reasons of quality. Exports (mostly dried fruit and vegetables, marinades and preserves, and juices) are competitive only in low-end regional markets and are in many instances dependent upon Soviet-era loyalties and the enterprise of the diaspora network in Russia and Kazakhstan. These markets will not be sustainable in the long term as younger consumers become accustomed to high

quality competitive products. Moreover, technology is outdated, skills are lacking, and energy supply and packaging costs²² are unreliable and/ or costly. Furthermore, most products are largely undifferentiated and probably mostly uneconomic.

An additional impediment to accessing project finance from institutional lenders is the low levels of revenue reporting (“revenue transparency”) in most companies. These levels are reportedly still only at “about 10–15 percent”. There is clearly no viable prospect of financing investments at bank interest rates around 30 percent per annum. There

gram may be the basis for the current expansion of fruit orchards in Khatlon (and Sugd). The objective is apparently to develop 35,000 hectares in Khatlon. Source: *Status, Achievements, problems and proposals to enhance the Value Chain approach in Sogd Oblast*. Ines Weidemann. GTZ. October 2010.

²¹ Investment costs approximately €35,000 per hectare.

²² The cost and availability of suitable high quality packaging is a major risk in all agro-processing investments.

is in particular a “missing middle” of investors in agro-processing. These are entrepreneurs who have investment plans of between approximately \$200,000 and \$2.0 million, but fall under the minimum project sizes of the institutions, and/or in most cases have collateral, corporate governance, and track record issues. Experience has shown that many of these enterprises, when financed and properly supervised, have the capability to grow into larger businesses within three to four years.

A major question concerns the ability of farms to produce crops in sufficient quantity and quality. Weak structures and low sophistication of supply chains means that most agricultural products are sold on an opportunistic spot basis into markets in Dushanbe and regional centers in Khatlon region.²³ The lack of structure is also a serious impediment to accessing finance and to consistency in production and marketing. A further issue is whether the development of new processing facilities will “pull through” this production (i.e. incentivize farms to respond to the demand), and/ or compel agro-processors to invest in vertical integration.

Logistics and packaging are not product value chains *per se*. Both functions offer significant opportunity for investment but are closely dependent upon development in the underlying farming and agro-processing sectors.

Farm development is hampered by volatile and modest profitability. There is consequently little capital formation and so little renewal of capital assets or investment in new technologies. Most farms seem to be consumed with endeavors to keep their businesses afloat. The “ability to transform” among farmers is limited by the lack of financial skills, technical skills, competitively-priced capital, knowledge and access to markets, and other support.

A further key challenge in farming will be to create a nucleus of competent producers from which clusters can form. Farming needs critical mass to enable diversification to succeed and be sustainable. This will be difficult to achieve via individual farms, and will need proactive government support—the current orchards development program in Khatlon being a possible example. Recent changes in tax regulations governing leasing may encourage investment in capital assets

through leasing, and may therefore offer significant opportunity to modernize and expand agro-processing.

First, a number of policy changes are necessary, in addition to the above observations. Despite greater official support for private sector development, government presence in agriculture is still too large and dominant. Its presence needs to be re-defined to being a purely supportive role that captures externalities (extension services, information) for the common good of farmers.

Second, the range and quality of statistics available is dire. Official statistics are frequently too aggregated, and, while they may be useful to whole sectors they are of limited value in assessing single value chains. Although data is collected extensively it is not always made available in a commercially relevant way. Frequently, information that should be freely available within the public domain requires some form of official letter, which is a time consuming and uncertain process. This applies equally to public and private (donor) players.²⁴ There is an opportunity for the private sector to step in and develop a high quality data service including market analysis.²⁵

Third, a lack of skills in all functions of business is a severe limiting factor in business development—more so than access to finance on competitive terms. Local training is a long and slow process and the quality of skills developed may, in many instances, be questionable. The only solution in the short-term is attracting foreign investment, and the transfer of technology and skills that accompanies these investments. Investor perceptions are damaged by perceived and real uncertainties in regulatory and business conditions. There are further limitations to investment also

²³ EBRD see the lack of structure in value chains as a key limitation to investments in agribusiness.

²⁴ The “Business Atlas” produced this year by the Khatlon Chamber of Commerce is a very good base but will in time need refinement to highlight and explain sub-sector opportunities.

²⁵ Examples of private information providers within the agricultural sector in the CIS region include IKAR (www.ikar.ru) and SovEcon (www.ovecon.com) in Russia, and Ukrainian Agribusiness Club (www.agribusiness.kiev.ua) and UkrAgroConsult (www.blackseagrains.net) in Ukraine.

due to lack of scale,²⁶ fragmentation, corporate governance weaknesses, policy, and land right uncertainties.

One possibility may be a repayable grant fund structured in the format of the “*AgriProcessing Initiative*” developed by the Canadian Ministry of Agriculture (“Agro-Food Canada”). This initiative offers *repayable*, interest-free grants, and is designed to improve the competitiveness of agro-processors.²⁷ The Small Enterprise Agency Fund (SEAF) Georgia offers finance on a quasi-equity basis to smaller investors and this model may also provide workable solutions.²⁸ There are comparable countries to Tajikistan (many small players, relatively small domestic markets): agricultural GDP in Georgia, for example, is roughly equal to the agricultural GDP in Khatlon region (approximately \$1.5 billion per annum).

There is an emerging awareness of the value of strategic equity investment partners but relatively little or unsophisticated understanding of how to promote and structure joint venture investments.²⁹ Goskominvest currently provide the interface between investors and local business on investment promotion and incentives. However, more needs to be done to explain and promote the Khatlon investment case. Too often simple questions are caught up in a referrals process that may take days or even weeks to respond to. Hence there is a strong need to strengthen capacity within Goskominvest.³⁰

In the longer term, there is a need to create (or re-create) links between the private and public sectors, in order to re-build the capacity of research and extension institutions. This should be a public-private partnership arrangement. There is also a need to articulate the investment case for Khatlon more explicitly and effectively. Goskominvest have taken initiatives through the publication of various brochures; this is a good start but more needs to be done in terms of explaining incentives and protections, and in targeting specific strategic and/or regional investors. A way should also be found to continue the annual Agribusiness Investment Conference.

Re-shaping Fiscal Policies³¹

Greater predictability in revenues and rising standards in public services will complement private

investment. The reform agenda outlined for the oblast authorities in various parts of this report will require resources and technical knowledge for successful implementation. It would be essential to bolster oblast and raion revenues, reduce volatility in revenues, and attain greater predictability in both transfers from the central budget as well as in donor inflows. A medium-term program towards raising capacity (to raise local revenues and strengthen sub-national autonomy) would improve the prospect of successful reformation.

Sub-national units account for about one-fourth of total public expenditures, and play a major role in the provision of public services. Khatlon, together with its raions, is responsible for the provision of education (about two-fifths of total spending in 2011), health, culture and sports, and some general public services.³² Local administrations are also assigned

²⁶ IFC has, for example, yet to find a manufacturing investment in agro-processing or in any sector in Khatlon that meets minimum investment scale requirements.

²⁷ See example of a recent beneficiary of API: *Bakery improves competitiveness*: <http://www.marketwire.com/press-release/harper-government-helps-increase-bakerys-competitiveness-1674942.htm>

²⁸ SEAF website: www.seaf.com. SEAF operate a Central Asia fund in which IFC are invested. There are however no investments in Tajikistan. The fund is apparently due to be wound up. SEAF has 22 offices in frontier and emerging economies including the Balkan region, China, South America, South Asia and Central Asia. On the capital side, SEAF's funds provide equity, mezzanine capital and term credit. SEAF also has an interaction strategy with its investee companies through which it helps to develop corporate governance, financial control, operational efficiencies, and global networking.

²⁹ One recent example is the delegation from Altai Krai in Russia, which visited Khatlon in March 2012. A “forum of entrepreneurs of Altai and Khatlon” was subsequently proposed. Source: www.khovar.tj March 13, 2012.

³⁰ Goskominvest does not, for example, have a common email server.

³¹ This section draws heavily on *Tajikistan: Public Expenditure Review Policy Notes*, (World Bank, 2012).

³² The ministry of education is directly responsible for specialized secondary schools and universities, while sub-national administrations are responsible for pre-school and general schools, and finance their costs through their budgets.

responsibility for housing and communal services (about one-fourth of total spending), which includes water and sewerage, district heating, street lighting, solid waste management, and maintenance of communal property.

Under the tax code, local taxes—the real estate, motor vehicle, and retail sales taxes—are retained entirely by Khatlon and its raions. A proportion of national taxes—the value-added tax (VAT) on domestic and foreign transactions, the VAT on transport services, personal and corporate income taxes, excise taxes, and sales taxes on cotton and aluminum—are transferred to Khatlon, but this is done through political negotiations, and not on an objective criteria-based formula.

There are large shifts in tax-sharing rates from year to year, introducing a high level of uncertainty. The budget process entails considerable strategic maneuvering: overestimation of expenditures and underestimation of revenues appear to be common practice. There are several rounds of negotiations with the central authorities over the summer. Thus, intergovernmental fiscal relations are characterized by high centralization of resources. The development of a real estate and land tax on modern lines (following the adoption of the amended land code) would go a long way towards bolstering both raion/oblast revenues and autonomy. A formula-based transfer system would be an obvious improvement from both governance and medium-term reform planning perspectives.

On the expenditure side, capitation-based reforms in education to improve equity and efficiency became effective in 2010. Thus, funding for grades 1–11 is now distributed on the basis of a two-part formula: (i) a fixed amount per school and (ii) a variable amount based on enrollment. The formula further distinguishes among schools of various types, with special coefficients for certain jurisdictions and for multilingual schools. The reform is designed to have two principal benefits: First, it aims to improve the targeting of educational funds to schools by ensuring that money is allocated systematically, that is, on the basis of enrollment and other factors that directly affect the cost of education, thereby removing most of the bargaining from the funding process. Second,

it aims to improve the efficiency of spending by giving school directors more discretion over the allocation of their budgets.

Similar reforms in health financing are also planned, with primary health care being financed on the basis of the number of patients registered with individual physicians. Hospital care would be financed on a case basis (that is, on the basis of diagnostic-related groups). In principle, capitation-based financing in health would reduce the scope for bargaining in much the same way as it would for education (though, as health care accounts for only 16 percent of sub-national spending, it would have a less dramatic effect on intergovernmental relationships). Capitation financing in education and health has taken more than half of sub-national spending off the bargaining table, thereby benefitting both governance and the prospects for improvement in the quality of services. These key reforms now need to be complemented by a formula-based revenue allocation system.

Exploiting the Potential of Free Economic Zones

The nascent free economic zones offer the potential for rapid trade integration, but only if internal supply linkages are explicitly developed and modern governance arrangements put in place. Public policy plays a critical role in the success of zones. The authorities have established two free economic zones in the oblast, one in Dangara, in the central/east part of the oblast, the second at Panj, on the border with Afghanistan demarcated by the river Panj. If properly structured and administered, these zones offer the potential of stimulating growth in the oblast and promoting diversification through urban growth. Public policy is central to ensuring the success of the two zones and, in particular, to establishing production and labor linkages to the oblast as a whole to maximize overall growth. Isolated free economic zones could bring benefits of their own, but the oblast as a whole would realize maximal gains in production and employment only if the zones bought inputs and labor from the rest of the oblast. Thus, both public policy and private firms must be geared to making full use of opportunities.

Box 4 | The Dangara FEZ

Fez Dangara was founded in 2010 but it had started its operation only a year ago. It is located in Dangara district of Khatlon region and covers 520 hectares.

The zone is located in an area of rich agricultural potential, but it enjoys no advantages such as proximity to an international border, and transport links appear to be weak. The choice of Dangara as a site for a free economic zone appears to have been dictated largely by political considerations. A new airport is planned for the city, but the economic justification is weak given the existence of two other airports in close proximity within the Khatlon oblast.

The government has allocated \$650,000 to create primary infrastructure, with a connection to an industrial water supply line. Part of the funds will be used for fencing.

The government believes that the comparative advantage of Dangara could lie in chemical and petrochemical production, mechanical engineering and metal working, construction materials, production of power plants, agricultural production, automobile assembly and related equipment production, and the establishment of a transportation and logistics center. There appears to be little justification for such a belief as the zone has no comparative advantages and many disadvantages in these areas.

At present there are two significant investors in the free economic zone.

Nº	Actor's Name and Title	Investor Country	Description of Activities
1	LLC «Y & F Service»	Tajikistan	Construction material production
2	LLC «Kosmos (space)»	Tajikistan	Assembly of agricultural machinery

Source: Information supplied by the Khatlon authorities.

The two zones have differing objectives. The Dangara zone aims at fostering production and innovation, while the Panj zone focusses on trans-border trade, taking advantage of its location and the significant Afghan market for oil re-exports and consumer goods. Both zones rely on legislation dating from 2011 that permits both domestic and foreign firms to carry out activities in the zones, and provides for regulatory and tax exemptions. The zones fall under a special customs regime whereby all inflows of goods and services, whether imports or from the rest of the country, are free of duties, taxes and non-quantitative restrictions. Similarly, all exports from the zones are not subjected to any export duties and are exempt from any export bans or restrictions applicable to the rest of the country. Clearly all flows of goods and services to and from the rest of the country are subject to the usual import regime however.

All goods and services in the zones are exempt from taxation, with two exceptions: First, personal income taxes and social taxes are payable. Second, no corporate taxes are levied as earnings in the form of profits, dividends and interest on assets are not subject to taxation.

The two zones offer incentives to domestic and foreign investors to invest by possibly freeing them

of the large regulatory tax and governance barriers that affect the rest of the country. These incentives could countervail the serious disadvantages of geographical isolation and being landlocked. As such they could act as laboratories for trying out business-friendly approaches that could then be used for wider economic reforms. There is no indication that neither the central nor the Khatlon government sees developments in the zones to be possible lessons for strategic reforms as of yet. However, if the zones are to be successful and if the oblast as a whole is to benefit from them a number of policy questions will have to be considered.

The stated purpose of the zones appears to be divorced from the realities on the ground. Dangara is economically isolated, and overcoming its economic and logistical isolation will require large investments that could have been avoided had it been decided to proceed with Panj only at an initial stage. Dangara may not be able to attract the huge volumes of investment required to support its aspirations, particularly as it offers few natural advantages.

The clarification of the purposes of the zones requires a well-developed master plan with supporting institutions and investments. If the zones are seen as having export processing potential (as appears

Box 5 | The Panj FEZ

The lease tariff in the territory of FEZ is in the amount of \$1 per one square meter per year. The international highway Dushanbe-Kabul runs through the territory of FEZ “Panj”, which is a corridor connecting Tajikistan with the Middle East countries and other countries of the region. The Afghan border post across the river Panj is just 600 meters away. Panj is served by a railway that is 40 km away and an airport at Kurgan-Tube 70 kilometers away. The nearest town of Dusti is 20 km away, and has warehousing and office facilities.

Founded in 2008, the free economic zone, located in the area of 400 hectares, has an advantageous geographical location, situated at the crossroads of Eurasia, the Middle East and South Asia. Its surrounding raion is endowed with raw materials—cotton fiber, fruits and vegetables, leather and wool—and labor resources.

Current International Road Links With Logistics Center “Nizhniy Pyanj”

	From	To	Distance in km	Route Time
1	Nizhnyi Panj	Kunduz	85	1,5 hours
2	Nizhnyi Panj	Kabul	433	6 hours
3	Nizhnyi Panj	Bandar Abbas	2433	3 days
4	Nizhnyi Panj	Karachi	2211	3 days
5	Nizhnyi Panj	Istanbul	4416	5 days
6	Nizhnyi Panj	Bandar Imam	2990	3 days

The electric substation/grid “Karadum” of 110/35/6 kW of 16000 kVA is located in the free economic zone and is connected to the high-voltage electric line of 110 kV. This ensures reliable energy supply. The comparative advantage of Panj is expected to lie in food production (agro-processing), construction and chemical industries, as well as in a large variety of consumer goods in view of the proximity of the markets of Afghan provinces of Balkh and Kunduz, with a population of 3 million.

Four major enterprises operate at Panj. In addition, the FEZ is used for oil and gas transit through the terminal of Tojiron to Afghanistan, representing re-exports.

Nº	Actor’s Name and Titled	Investor Country	Description of Activities
1	LLC «Anbat-Service»	Tajikistan	International transport of passengers and goods
2	CAC «Burok»	Tajikistan	Export-import of general goods
3	OAC «Tajikhydroelectromontaj»	Tajikistan	Manufacture of parts and semi-finished products from flat and rolling material
4	LLC «Romit-Service»	Tajikistan	Construction of a factory to manufacture glass

Source: Information supplied by the Khatlon authorities.

to be the case especially in Panj but also in Dangara, given the nature of intended investments), and thus are seen to be able to replicate the huge success of countries like Bangladesh, the Dominican republic, Korea, Mauritius, and Vietnam in creating manufacturing jobs and pulling labor out of agriculture (and raising rural productivity as well), then the following issues all need to be addressed. Energy reliability and supply, and road connectivity to the rest of the oblast will need to be improved, labor skills will need to be developed to the required degree, and the zones

will need to be managed to high governance standards so that investors can have confidence in the security of their contracts.

Strengthening zone institutions will be useful, but will require substantive political commitment to change the status quo. Given that the main barriers to investment are not the trade and tax regimes—though certainly the arbitrary actions of both customs and tax administrations have a significant influence on diminishing private investment—but weak governance, corruption, weak property

rights, and energy shortages, the zones will be successful only if these fundamental problems are tackled. Therefore, the legal regime and the application of laws in the zones regarding areas such as property rights and governance over businesses, the leadership and administration of the zones, and the supply of infrastructure will have to improve. There is little evidence showing that this is taking place. Political interests are seemingly dominant in the management of the zones, and protection over competition and property rights is weak. The managers of the zones are political figures with close personal connections to the high elite of the country, and do not provide evidence of independence of action or even modern international standards of awareness and knowledge about what sophisticated management of modern zones requires. There may be legislation, but there has to be confidence in its implementation. The management authority also needs the capacity, resources, and ability to exercise independent judgment in promoting and regulating the zone.

International experience suggests the importance of aligning the structure (and hence policies) of the zones to fit with the comparative advantage of the country.³³ Looking at the list of proposed activities for the zones, especially in Dangara, it appears that the focus is misplaced. Bangladesh offers a relevant example where the decision to develop the garments industry played to its strength in plentiful, low-wage labor. Incentives, customs, and taxes were less important and were in fact modest as compared to reliability of electricity supply and the provision of serviced land infrastructure. Bank research indicates that the reliability of energy supplies and infrastructure reliability as a whole had a significant impact on the success of zones, while incentives had no measurable effect.³⁴ These lessons would appear to be important for Tajikistan.

Aligning the activities of the zones to the comparative advantage of the oblast as a whole will lead to production in Khatlon moving up the value chain. This will help the oblast to become diversified, more open in its use of inputs, and in its use of services supplied within its main urban agglomerations, but only if supporting policies are put in place. Such policies would encourage zone investors to source

labor, inputs, and services from the oblast, exploiting technology transfers (i.e., international technologies brought in by zone investors and area-specific technologies developed and used in the oblast). Oblast firms should be especially encouraged to invest in the zones on a competition-neutral manner, as linkages would then grow. This would also help to encourage the movement of skilled labor and capital between the zones and the rest of the oblast.

In support of locomotive effects from the zones to the oblast, business services would need to be developed. From the initial stages of zone formation, public policy has to encourage businesses to be pro-active partners with entrepreneurs in several ways. The promotion of industry clusters and establishing links within the cluster across the zone and the oblast is of first importance, as is the integration across the zone and the oblast of regional value chains. The analysis in Chapter II of agricultural value chains is of direct relevance here. Then the free movement of labor across the oblast and zones would be necessary, and the growth in employment would be likely to dampen the pressures for outward migration. Skill development and training in the labor force as different market needs emerge is a further requirement.

Removing fundamental impediments to productivity growth will require deep reforms, in order to bolster skills and plan strategic zone-oblast integration. International experience also suggests low labor costs and tax/trade incentives wear off after a time, and can then create pressures for further incentives. A far more sustainable, zone-based development approach requires fundamental impediments to productivity growth to be addressed. This reiterates the importance of skills development and innovation—factors that require strong linkages between the zones and the rest of the oblast. A key conclusion from Bank research is that the integration of the zone and the oblast must go beyond the physical and financial;

³³ T. Farole, *Special Economic Zones: What Have We Learned?* (World Bank, Economic Premise, No 64, 2011) is the source for these lessons.

³⁴ Farole, T. and G. Akinci, *Special Economic Zones: Progress, Emerging Challenges, and Future Directions* (World Bank, 2011).

it also has to be strategic. This requires political support combined with autonomy of management of the zones, as in China, Malaysia, and elsewhere. It requires integration of zone policies within the broader economic policy framework for the oblast, but with proper governance and management it could become the cutting-edge of the oblast's development policy, as in Mauritius.

If the proposed reforms are adopted, the prospects for the free economic zones contributing to sustainable growth of the province would be greatly enhanced. Adaptations in the policy and management of the zones could be made periodically in the light of experience and lessons learned, while ensuring that an environment of stability and predictability for private investments is safeguarded. Eventually, the concept of free economic zones could be extended to the country as a whole. Tajikistan could enjoy strong advantages as a free economic zone in central Asia, bordering on China and South Asia, with a liberal tax regime and supportive private investments. This vision can only be realized with the successful operation of the existing free economic zones.

A Proposal for Regional Cooperation: A Kurgan-Tube-Dangara-Faizabad-Kunduz Asiaregio

There are great benefits that Khatlon could capitalize on with the creation of operational cross-border cooperation arrangements with the Kunduz province of Afghanistan, similar to the Euroregio model.³⁵ Euroregios initially emerged as mechanisms to foster cooperation and stimulate economic growth in regions along internal borders of western European states. Capitalizing on prior extensive field work and research covering cross-border trade conducted by the World Bank within CAREC including Tajikistan, Afghanistan, China, Kyrgyz Republic and Kazakhstan, there are four key factors that are conducive to generate potential benefits of Asiaregio for Khatlon.

Trade and border trade with immediate neighbors have expanded greatly in the recent past, but the potential remains largely untapped, as evidenced by stubbornly low exports from Khatlon to Afghanistan at the level of USD 10 million (excluding oil exports)

during 2005–2010. Furthermore, given that the area within 25 kilometers from the border accounts for a large part of the land area (Tajikistan – 64 percent and Afghanistan – 26 percent), small-scale trade among bordering regions is widespread. Thousands of people, mostly residents of contiguous border areas, cross BCPs (border crossing points) every day to exploit differences in prices (both for goods and services), wages, and regulatory practices. For many small agricultural producers, sales at a marketplace across the border often offer the only opportunity to purchase other goods. For example, consumers can obtain fresh produce at an attractive price. For others, intermediating and supplying services to traders is their only source of income, allowing many households to stay out of poverty. Furthermore, for communities in remote areas, lacking the advantages of a well-developed road network, contacts with similar communities across the border may be the only opportunity to move beyond subsistence farming and gain access to desired services that are not available locally.

There are indications that the local demand for deeper cooperation, across a range of activities, is strong. Concerted efforts aimed at strengthening investment and trade links between two oblasts in Tajikistan (Khatlon) and Afghanistan (Kunduz) could make a large difference. Examples include joint exhibitions and fairs, facilitating the establishment of joint ventures, attracting investments in agro-processing, joint projects to develop infrastructure (roads)—which is already taking place from both sides of the border, and exchange of knowledge and information on key products.

The implementation of an Asiaregio framework might enhance the attractiveness of regions through economy of scale effects to investors, foreign and domestic alike. There are many attractive business areas on both sides of the border, and special visa arrangements might enhance their appeal to potential investors, as would convenient and accessible border crossing points, together with appropriate infrastructure on both sides of the border and governance arrangements. Two

³⁵ See Kaminski, Bart and Saumya Mitra, *Borderless Bazaars and Regional Trade in Central Asia* (World Bank, 2012) for a discussion of this concept.

Map 4 | Creating Asiaregios as a Vehicle for Boosting Khatlon Development – (Kurgan-Tube-Dangara-Faizabad-Kunduz Square)



Source: Author's own presentation.

free economic zones in Pyanj and Dangara could also provide an additional strong impetus should they be administered with high degree of transparency and rule of law, and have adequate capacity and organizational structure to facilitate investments.

There are powerful reasons related to history and geography that favor cross-border cooperation

between Tajikistan and Afghanistan. In addition to geography, common historical background and existing interdependencies (e.g. supply of oil and electricity from Tajikistan or supply of cheaper commodities from Afghanistan) can further provide a strong impulse for cross-border co-operation and more robust development of Khatlon.

Key Risks to Growth

Five strategic factors bear heavily on efforts to reinvigorate the market economy; these constitute serious risks to Khatlon's growth prospects: narrow political participation, the geopolitics of narcotics and insecurity, corruption, entrepreneurship, and the shortages of energy. In the following pages, the report discusses how important it is for the authorities to place these risk factors at a central level in the design of policies and approaches, and in strategies targeting private sector-led growth.

The Political Economy Context

The civil war legacy of a fragile polity. The Khatlon oblast was the center stage of the civil war and even today it bears the imprint of the ferocious conflict that took place between 1992 and 1993, and continued with lower intensity until 1997. The resistance to the first post-independence Tajik government was centered in the Khatlon province, which became the crucible of the civil war because of its demographic diversity and the divided allegiances of the population. The civil war left up to 100,000 people dead and 600,000 (10 percent of the total population) internally displaced; and is estimated to have cost \$7 billion.

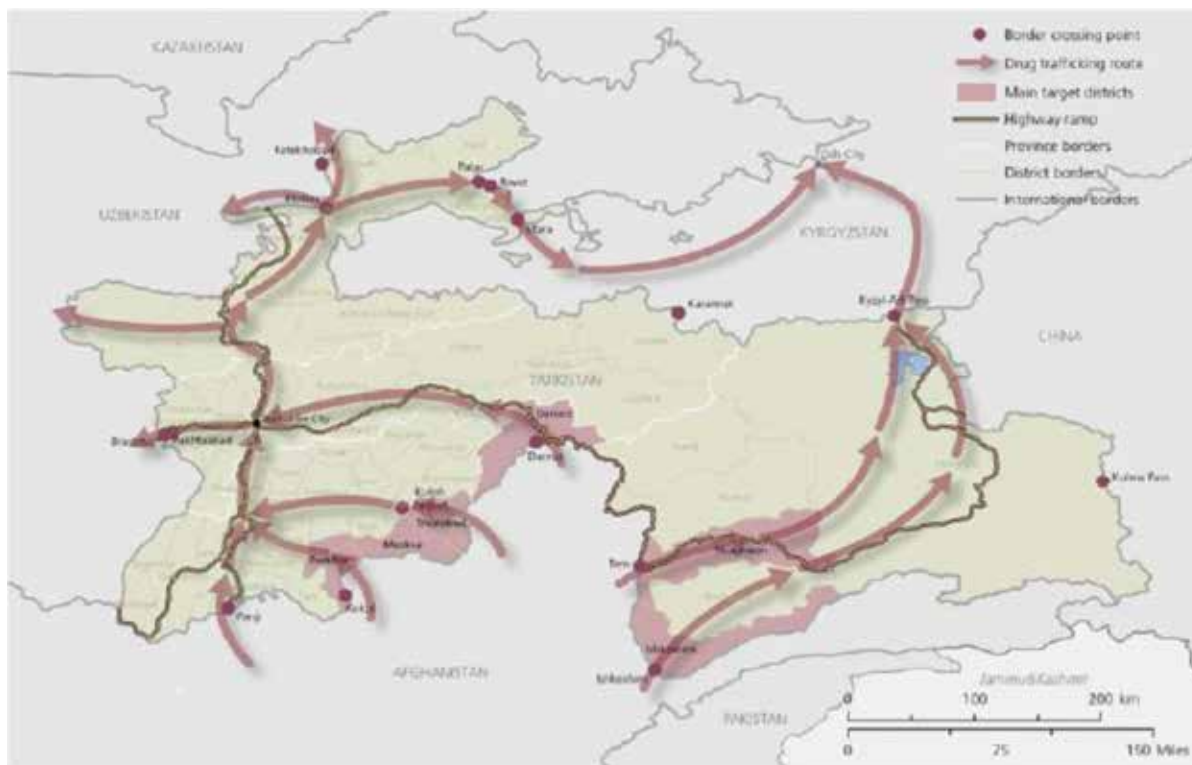
The war ended through a peace agreement with protocols on military unification, where progress has been made with a national army, but fair political participation and division of power remain highly contentious. Clearly the peace agreement has resulted in a measure of stability and security for the populace, permitting normal life to be pursued, though political conditions remain highly uncertain. Despite post-conflict reconciliation, parts of the country (Garm and Rasht in the center of the country; parts of the Pamirs) remain beyond central control, with occasional outbreaks of violent challenges from warlords and insurgents to the authority of the state.

The Geopolitics of Security and the Narcotics Trade

A porous border offers little challenge to militants. The salience of the Khatlon oblast as the front line against extremism and the war on drug trafficking grows with the planned withdrawal of NATO forces from Afghanistan in 2014. The Afghan-Tajik border—which is 850 miles long—is highly porous, with a minimal, stretched police and border guard presence. Khatlon accounts for the eastern portion of the border. A significant risk to business confidence in Khatlon arises from growing and varied insurgent threats. A strengthening Islamic Movement of Uzbekistan (IMU) is approaching the border and has central Asian guerrillas. The IMU forces are currently not strong or organized enough to mount an offensive against the state, but are likely probing the defenses and constructing infrastructure, developing support for possible future activity.³⁶ Other parts of the country that are partly havens for militants are Rasht and Isfara in the north. Today, Tajikistan has an inadequate capability to address an insurgency challenge.

Security threats could be countered by sustained economic growth. Attaining firm control over the border will require infrastructure investments, electronics and detection equipment, but most of all improvements in human capacity and skills in all aspects of border control—this is a major donor effort. Moreover, erecting a firm bulwark against the spread of instability from Afghanistan will require a dynamic, prosperous Khatlon with the presence of government and security forces, and a thriving private sector-based economy.

³⁶ Tajikistan: The Changing Insurgent Threats, International Crisis Group, 2011.

Map 5 | Major Trafficking Border Districts and Drug Routes in Tajikistan

Source: DCA of Tajikistan, CNPA.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Drug-trafficking undermines state authority. The Afghan-Khatlon border is a major route for the transport of drugs from Afghanistan to the lucrative markets of Russia, Europe, and also China and East Asia (Map 5). The trade is associated with crime and corruption, is believed to rely on the protection of the political elite, and undermines the effectiveness of the state.³⁷ The U.S. State Department notes, “Tajik law enforcement makes arrests and seizures in mid- to low-level cases. ... The Tajik enforcement authorities, however, apparently are unwilling or unable to target and prosecute major traffickers.”³⁸ The Afghan-Khatlon border is demarcated by the Panj River with a major river port at Pianj/Sher Khan Bandar. The UN Office on Drugs and Crime estimates that up to 80 tons of heroin and 20 tons of opium are trafficked annually through the Afghan-Tajik border.³⁹

The drug trade is responsible for important distorting effects on the Khatlon economy. The UN estimates that net profit of traffickers amounted to \$1.4

billion in 2010 from onward sales to Russia.⁴⁰ The price per kilogram at 70 percent purity for heroin was \$3000 in Afghanistan, \$4000 in Khatlon, \$10,000 in Kazakhstan and \$22,000 in Russia. This net profit is twice the exports of aluminum, and equivalent to about one-third of GDP of the country. Research shows that large organized criminal groups in Khatlon dominate

³⁷ *The State-Crime Nexus in Central Asia: State Weakness, Organized Crime and Corruption in Kyrgyzstan and Tajikistan* (Silk Road papers), Erica Marat, Johns Hopkins, SAIS, 2006.

³⁸ State Department (2010) *International Narcotics Control Strategy Report*, quoted in *Tajikistan: The Changing Insurgent Threats*, (International Crisis Group, 2011).

³⁹ *Opiate Flows through Northern Afghanistan and Central Asia: A Threat Assessment*, (UN Office on Drugs and Crime, 2012).

⁴⁰ Only a portion of this figure is consumed or invested in the Khatlon economy; the larger part fuels capital exports.

the trade and are linked to state power structures. The degree of state capture is illustrated by the fact that no drug kingpin has been arrested in Tajikistan. The drug trade is constituted by five major factions based loosely on clans, with the Kulyab clan being important as it is highly influential politically, especially in Dushanbe which is a major logistics center for distribution. A further faction in Khatlon, the Kurgan-Tube clan is partly integrated with the Kulyab faction. The entire Afghan-Tajik border is divided between these and the northern and central clans, sharing control, with clans permeating power structures and also being represented in key law enforcement ministries.⁴¹

The absorption of high volumes of illegal rent income severely distorts the local economy. It shifts the terms of trade to the non-tradeables sector, particularly real estate and services, and leads to a flow of resources away from productive activity in the tradeables sector. Investment in agriculture and industry is therefore discouraged. It is possible that the financial system may be contaminated by the demand for services for money laundering. The accompanying growth in criminality and corruption has not only deleterious effects on private activity, but also diverts public resources into security and away from social and productive expenditures.

Corruption

The key governance indicators for the country are not encouraging. The *democracy index*, based on civil liberties, electoral pluralism, political participation and functioning of government, leads to the classification of the country as ruled by an “authoritarian regime”

(EIU). The *doing business* indicator reflects particular difficulties with trading across borders, getting credit, dealing with construction permits, and reliability of electricity supplies. The *economic freedom* and *competitiveness* indicators suggest the country is “mostly un-free” in the areas of business freedom and labor freedom, with poor protection for property rights. In addition the poor quality of institutions and the heavy burden imposed by corruption and the bureaucracy hamper competitiveness (Table 12).

A centralized, corrupt network deprives Khatlon of resources.⁴² Corruption is a product of state capture by a highly centralized, unitary administration, and discretions occur over wide-ranging decisions, with few checks and balances.⁴³ A patronage system and clan based hiring weaken institutions and sap competence in public administration by deterring the truly meritocratic from seeking jobs. Central control has mutated into dominance over the economy. Privileged groups accumulate wealth through access to economic resources and opaque privatizations; business-governance linkages protect rents.

Corruption manifests itself in the form of unofficial payments. Evidence from the recent 2010 LITS sheds some light into perceptions of people on the need

⁴¹ UN report, op. cit.

⁴² The formal legislative framework against corruption can be found in an OECD study, “Fighting Corruption in Transition Economies: Tajikistan” (OECD, 2006).

⁴³ *The State-Crime Nexus in Central Asia: State Weakness, Organized Crime and Corruption in Kyrgyzstan and Tajikistan*, by Erica Marat, (Johns Hopkins, SAIS, 2006).

Table 12 | Tajikistan – Rankings for Key Governance Indicators
(Lower ranks indicate better performance)

	EIU Democracy Index 2011 (of 167 countries)	Doing Business Index 2012 (of 183 countries)	Transparency International Corruption Perceptions Index 2011 (of 183 countries)	Heritage Foundation Index 2012 (of 179 countries)	WEF Global Competitiveness Index 2011 (of 142 countries)
Tajikistan	151	147	152	129	105
ECA average	80.6	72.4	93.1	78.8	72.6
FSU-7 average ^a	119.9	85.9	134.4	95.6	93.2

Sources: Tajikistan, A Governance Overview, World Bank, mimeo, 2012.

^a The seven countries are: Armenia, Azerbaijan, Georgia, Kyrgyzstan, Moldova, Tajikistan and Uzbekistan.

to make unofficial payments for various public services. On judicial services (courts) and public higher education, the people of Khatlon reported a higher than average need to make informal payments or provide gifts. On all other areas, such as services of the road police, medical services, primary education, and permits, Khatlon scored lower than the country average.

The opacity in public policy processes and in budgets aids corruption. On the demand side, public participation in governance and policy formulation or implementation is weak, media independence is severely circumscribed and journalists exercise self-censorship. If Khatlon's institutions are to be strengthened, a major donor-assisted effort should be considered for building up the demand side.

Entrepreneurship

There has been a rising trend in informality in the Khatlon economy. Over the past five years, there has been a significant rise in the number of small enterprises or businesses (as measured by the number of patents issued) by an annual average of six percent per year. As the number of functioning SMEs has risen little over this period, it appears that the degree of informalization has grown. Data based on a head count of enterprises show a sharp decline—an annual average of 13 percent—which represents a squeeze on the formation of large and medium enterprises. If entrepreneurship in Khatlon is to prosper, such a trend will have to be arrested.

There is much to be gained from arresting the growth of informal activities. Formal enterprises make possible economies of scale, are better able to take advantage of logistical advantages, and are poised to trade more. They also are more promising for investments external to the firm. Informality may reduce tax and other burdens, but at the cost of efficiency and long term growth. Moreover, informality may also reflect business conditions prevailing in the oblast.

Tax administration hampers business. Measures of business constraints in Khatlon are poor by the standards of other CIS countries. The severest constraint arises from tax rates and tax administration; one third of all businessmen believe that tax rates are the number one constraint. Like the rest of the

Table 13 | Selected Governance Issues

	Khatlon	Total
In your opinion, how often do people like you have to make unofficial payments or gifts in these situations		
<i>Interact with the road police</i>		
Never/seldom	64.9	54.8
Sometimes	12.6	16.6
Usually/always	22.5	28.6
Total	100	100
<i>Request official documents</i>		
Never/seldom	56.8	54.3
Sometimes	30.7	29.9
Usually/always	12.6	15.8
Total	100	100
<i>Get to courts for a civil matter</i>		
Never/seldom	67.1	70
Sometimes	18.4	75.5
Usually/always	14.5	12.5
Total	100	100

Source: LSMS 2009.

country, electricity supply is also a major impediment to business growth.

Rules-based administration will help businesses. Public policy should concentrate on simplification of rules and regulations, lifting border control rigidities, and investments in logistics and market information. There are a number of areas where the discretion of officials looms large and constitutes a major impediment to business growth in Khatlon.

- First, despite the simplification of business registration through a single window, which requires a single application (or a signed memorandum of association) with a service requirement that within three days a certificate of registration would be issued, a high degree of discretion has subverted its operation
- Second, a recent government decision restricting inspections of business premises to being conducted no more often than once every three years is expected to go into effect shortly. The possibility of sudden, discretionary inspections,

Table 14 | Khatlon: Business Climate

BEEPS Indicators		World (2008)	Europe & Central Asia (2008)	Khatlon (2008)
Permits and Licensing	Number of days to obtain an operating license	30	24	24
	Number of days to obtain a construction-related permit	69	80	34
	Number of days to obtain an import license	20	14	n/a
	Percentage of firms identifying business licensing and permits as a major constraint	16	16	20
Regulation and tax issues	Percentage of senior management time spent on dealing with requirements of government regulations	9	10	12
	Average number of visits or required meetings with tax officials in a typical month	2	1.7	1.4
	Percentage of firms identifying tax rates as a major constraint	35	39	57
	Percentage of firms identifying tax administration as major constraint	23	21	9
Corruption	Percentage of firms expected to pay informal payments to public officials (to get things done)	26	24	33
	Percentage of firms expected to give gifts to get an operating license	15	13	25
	Percentage of firms expected to give gifts at meetings with tax officials	16	14	29
	Percentage of firms expected to give gifts to secure a government contract	24	17	23
	Percentage of firms identifying corruption as a major constraint	36	34	11

Source: — (2008 BEEPS).

insufficiently based on firm criteria for triggering such inspections, remains however.

- Third, the submission of tax forms requires direct contact with officials and often a process of negotiation is involved.
- Finally, obtaining construction permits poses particular problems that are discussed in a later section of the report.

The Supply of Energy

Khatlon has the potential to become the energy battery of the country. Tajikistan has a large hydro potential, from both small and large rivers, estimated at 264 TWh/year—over half of all the hydro potential of Central Asia. Much of this potential lies in Khatlon. Only about six percent of this potential is developed. Over 94 percent of electricity is supplied by hydro power plants (HPPs). Because of uneven water flow in summer and in winter, there are significant seasonal fluctuations. Considerable power shortages occur in winter because power generation is reduced (in order to conserve water in reservoirs for summer release to downstream riparian

states), while demand is driven up by the use of electricity for heating. Very energy-inefficient buildings with huge heat losses exacerbate the shortages. In the absence of electricity supply, large parts of the population use unreliable and/or expensive heating options (diesel, wood, dung, waste) leading to poor air quality, health problems, and deforestation.

Energy shortages restrict growth. Paradoxically, in a country with abundant hydro-power potential and a strong inherited Soviet tradition of engineering in the sector, electricity supplies are notoriously deficient and unreliable. The exceptionally harsh winter of 2008–09 saw a collapse in the energy system, amidst great hardship. Energy shortages are exacerbated by privileged access accorded to a large aluminum smelter. With too low tariffs and large energy losses, the sector runs deficits, with consequences of inadequate operations, maintenance, and capital spending, and arrears in taxes and payments to suppliers. Both infrastructure improvements and management reforms, including transparency in accounts and financial controls, paid for partly by rational tariffs, are essential. The economic growth prospects of the country and of Khatlon oblast,

in particular, are greatly damaged by energy shortages and uncertainties of supply.

The power deficit is estimated at 20 percent of winter demand and costs the economy \$150 million per year (two percent of GDP). About 70 percent of the population suffers from blackouts during winter. Without action, the gap between winter demand and supply could double from 1200 MW to 2400 MW by 2020, doubling again by 2040.

Eliminating the deficit will require a combination of actions: an aggressive tariff and energy efficiency program, rapid development of coal-fired plants, and revitalization of energy trade. By these means the deficit could be reduced by 60 percent by 2016 and eliminated by 2020. The combined costs, dominated by new generating capacity, amount to \$3.7 billion or \$460 million per year (four percent of GDP)—a cost that would have to be distributed amongst customers through tariff increase, government through public subsidy, and development partners through preferential financing. A more aggressive set of actions includes more extensive gas and electricity imports from Central Asia, accelerating energy efficiency further, and load shedding by TALCO during winter months, coincident with maintenance periods.

The absence of energy security is a particular problem for the Khatlon oblast. Khatlon contains all the major power generating stations of the country, except for the Kairakum hydroelectric station, small hydroelectric stations in Varzob cascade located near Dushanbe and Varzob district and the Dushanbe heat station. The capacity would be sufficient for the needs of all consumers in the province year round, if the more than 70 percent of power generated in the Khatlon province were not to be directed to the aluminum factory of Tursunzade district.

Today, the province is fully provided with electricity only in the summer. From October, for six months in the winter, there occurs an acute shortage of electricity, with energy supply generally of six hours a day, and in peak winter of perhaps only three to four hours. Electricity is provided three hours in the evening, from six or seven till nine or ten o'clock, and from five till eight o'clock in the morning. This schedule makes it impossible to use even limited electricity for industrial purposes, as electricity is provided after

working hours. This greatly restricts the use of industrial capacity of the region.

Planned investments alone will not be enough to eliminate the problem of energy security. HES Sangtuda 2 would add at most two hours to electricity supply. In any case, given the very low domestic tariffs for electricity, generators have an incentive to export at international prices. Given the fact that the owners of both Sangtuda HESs are foreign companies (HES-1 – Russia and HES-2 – Iran), and the expressed interest of management of hydroelectric stations in export of electricity to Afghanistan (through newly constructed electric power lines) we can assume that the supply of electricity from HESs Sangtuda will not significantly affect energy supply in Khatlon.

Institutional constraints to expanding supply. The state-owned, vertically-integrated utility, Barki Tojik, is a highly inefficient, poorly regulated monopoly with little market credibility and a major source of poor governance. It owns and operates most generation assets, the transmission and distribution grids, and provides supply services for most of the country. The generation assets and the grids are obsolete and need urgent modernization, but neither Barki Tojik nor the government have enough funds for the needed investment. Barki Tojik is heavily indebted, in large part for failures to collect on its bills, to the state owned aluminum company and to government ministries. It is the single largest delinquent taxpayer in the country.

There is no independent energy regulator. Potential private investors fear the different roles undertaken by the government (as a policy maker, a regulator, and an investor), lead to conflicts of interests. Moreover, tariffs for all types of end users are regulated and kept below cost, despite recent annual increases of up to 25 percent. Residential users pay about \$0.02 per kWh. Agriculture (irrigation), electric transport, the public service institutions, and the state aluminum company all pay low regulated tariffs.

These factors affect the climate for private investment. Though the state utility is obliged by law to purchase private power, the credibility of its ability to pay renders the law meaningless. Rather, Khatlon must explore the possibility of privately generated captive power, as discussed in Chapter IV.

ANNEXES

Annex A: Donor Presence in Khatlon

- Close to 50 various multilateral, bilateral, and non-governmental organizations active in Khatlon.
- Close to 200 ongoing projects totaling over \$0.5 billion.
- Agriculture is by far the largest sector in terms of active projects (almost 40 percent of all projects), followed by health (14 percent), social welfare (12 percent), education (nine percent), and multisector (six percent) together representing almost 80 percent of all projects.
- Agriculture is also by far the largest sector in terms of US dollar value of projects with about \$220 million in commitments, followed by energy—\$83 million, transport and social welfare—each at \$58 million, education—\$37 million, and health—\$29 million—together representing over 92 percent of all commitments.
- The EU is the largest donor by number of projects (32), followed by the Government of Japan (20), and the World Bank (13).
- The World Bank is the largest donor in terms of US dollar value of projects, with over \$80 million committed to Khatlon, followed closely by the Government of Japan (\$70 million), WFP (\$60 million), ADB (\$60 million), KFW (\$51million), and USAID (\$49 million).

Annex B: Value Chain Analysis for Selected Activities

Evaluation Criteria	Fruit and Vegetables	Textiles and Clothing	Honey	Logistics	Packaging
Market Opportunity					
Export Potential	Exports to Russia and Kazakhstan, also potentially more to Afghanistan. Markets are lower end of quality spectrum. Needs significant improvement in product quality. Significant scope for high-value product exports.	Two distinct sectors: 1) Textiles and Clothing. ^a Highly competitive markets globally, will depend upon ability to find and focus on niche markets. 2) ITC facilitating trade events. Kyrgyzstan is a good example.	Good export prospects, but needs EU certification. Globally in short supply. Only 2.5 percent of production exported.	Needed to ensure export potential of fresh and other agricultural products.	Focus mostly on import substitution. May also be prospects for export of packaging materials within Central Asia region in the future.
Import Substitution	Very limited, but increasing imports from Pakistan, etc., to meet local demand.	Good prospects provided quality and price is competitive. For example, approximately 200,000 school uniforms needed annually.	Tajikistan is largely self-sufficient in honey. Production, ~3,000 tons per annum, is mostly sold into local markets. ^b	N/A.	Excellent prospects for import substitution.
Price Prospects	Early season advantage needs to be better used. Tajikistan mostly a price-taker unless able to achieve product differentiation.	Needs product-by-product assessment. Global markets highly competitive.	Very good provided quality standards and certification met. Local market prices are good by world standards (\$5–7 per kg.).	Potentially very good demand, possibility to be monopoly supplier and significant first mover advantages.	Potentially good demand, monopoly supplier. Significant advantage for first mover.
Competitors	Competition mostly from Turkey and other European/ Mediterranean and C Asian countries.	Global market, many competitors.	Global market in short and declining supply. Future is very positive for high quality honey.	None at present. Significant advantage for first mover.	Currently only glass jar production is occurring in Tajikistan.
Barriers To Trade	Tajikistan has preferential access to Russian and CIS markets. Quality, consistency, and food safety issues will be key.	Pricing, quality, and consistency. Other (tariff) barriers need to be assessed market by market.	Needs export certification to be included on EU approved list. ^c	N/A	N/A
Potential Competitiveness					
Any Successful Enterprises Currently In Region	There are competitive juice and dried fruit producers in Sugd region. No modern production plants in Khatlon.	This is a relatively well-organized sector. Has received very good support from ITC. Success of individual enterprises not known. Viability of spinning mills yet to be proven.	Many small producers. Strong local market and demand exceeds supply. Skills and technologies need updating.	No modern cold storage or other logistics enterprises exist currently.	There is glass jar production in Sugd region/ viability of this business unknown.
What Cost Advantages Exist	Potentially lower land, labor and water costs. Needs to be evaluated against potentially higher imported inputs and transport costs. Cost competitiveness needs further detailed analysis.	Potential lower cost of cotton (transport saving), lower labor costs. Advantages may be offset by cost of imported inputs. Cost competitiveness needs further investigation.	Significant scope to improve honey yields in Khatlon. Much may depend upon extent of cotton cultivated.	No significant comparables. No modern operations exist.	Depends upon scale and other operational efficiencies.

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Evaluation Criteria	Fruit and Vegetables	Textiles and Clothing	Honey	Logistics	Packaging
What Resource Advantages Exist	Sunshine, labor, land and water. Early season advantages. Labor availability may be an issue.	No preferred pricing on raw cotton, but saving on transport costs. Highly skills dependent.	Good scope to expand if access to new technology (bee varieties) is available. Cotton reduction will reduce main source for honey production.	Good options for locations in or near to key logistics points. Will depend upon farms' ability to produce quality and quantity.	Full import of raw materials likely.
Market Access Advantages	Early season advantages. Significant airfreight potential. Preferential access to Russian market. Proximity to South Asian markets.	Depends upon price, quality, and consistency.	Durable high value product, able to afford long transits.	Significant first mover advantages.	Potentially access to markets in Afghanistan and elsewhere in the central and southern Asian regions.
Skills Base	Weak skills base in all functions of business, esp. processing. Skills are most significant limitation to development.	Skills base is improving. Highly skills dependent.	Needs updated technical and marketing expertise.	Poor skills base. No recent exposure to modern logistics.	Will depend upon foreign investment and skills.
Potential Impact					
Impact on Jobs and Exports	Significant. Labor intensive, opportunities exist especially for women. Good export potential.	Significant. Labor intensive, opportunities exist especially for women. Potentially good exports.	Significant. Labor intensive. Very good export potential.	Significant. Labor intensive.	Significant. Labor intensive.
Knock-on Benefits to Other Business	Substantial links to farms, other inputs suppliers, packaging, financing, and logistical sectors.	Substantial linkages to downstream and upstream sectors	Limited to local area/ trade and export logistics.	Substantial linkages to downstream and upstream sectors. Capacity to put structure into supply chains.	Substantial linkages to downstream and upstream sectors.
Is Success Replicable within Tajikistan	Yes, within producing regions.	Yes, within producing regions.	Yes, within producing regions	Yes, within proximity of relevant production facilities	Yes, depending upon market demand.
Investment Prospects	Strong local interest. Potential FDI in high value export crops.	Sector viewed as "too volatile" by IFC investments. Needs to show sustainable success to test investment case.	Strong local interest but relatively small investments needed. Very suited to SMEs.	Potentially both local and foreign interest.	Potentially both local and foreign interest.
Market Opportunity					
Export Potential	Exports to Russia and Kazakhstan, also potentially more to Afghanistan. Lower end markets of quality spectrum. Needs significant improvement in product quality. Significant scope for high value product exports.	Two distinct sectors: Textiles and Clothing. ^d Highly competitive markets globally, will depend upon ability to find and focus on niche markets. ITC facilitating trade events. Kyrgyzstan is a good example.	Good export prospects, but needs EU certification. Globally in short supply. Only 2.5 percent of production exported.	Needed to ensure export potential of fresh and other agri products	Focus mostly on import substitution. May also be prospects for export of packaging materials within Central Asia region in future.
Import Substitution	Very limited, but increasing imports from Pakistan, etc. to meet local demand.	Good prospects provided quality and price is competitive. For example, approx. 200,000 school uniforms need annually.	Tajikistan is largely self-sufficient in honey. Production ~ 3,000 tons per annum is mostly sold into local markets. ^e	N/A	Excellent prospects for import substitution.

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Evaluation Criteria	Fruit and Vegetables	Textiles and Clothing	Honey	Logistics	Packaging
Price Prospects	Early season advantage needs to be better used. Tajikistan will be mostly a price-taker unless it is able to achieve product differentiation.	Needs product-by-product assessment. Global markets highly competitive.	Very good provided quality standards and certification met. Local market prices are good by world standards (\$5–7 per kg.).	Potentially very good demand, possibility to be monopoly supplier and significant first mover advantages.	Potentially good demand, monopoly supplier. Significant advantage for first mover.
Competitors	Competition mostly from Turkey and other European/ Mediterranean and Central Asian countries.	Global market, many competitors	Global market in short and declining supply. Future is very positive for high quality honey.	None at present. Significant advantage for first mover.	Currently only glass jar production is occurring in Tajikistan.
Barriers to Trade	Tajikistan has preferential access to Russian and CIS markets. Quality, consistency and food safety issues will be key.	Pricing, quality and consistency. Other (tariff) barriers need to be assessed market by market.	Needs export certification to be included on EU approved list. ^f	N/A	N/A
Potential Competitiveness					
Any Successful Enterprises Currently in Region	There are competitive juice and dried fruit producers in Sugd region. No modern production plants in Khatlon.	This is a relatively well-organized sector. Has received very good support from ITC. Success of individual enterprises not known. Viability of spinning mills yet to be proven?	Many small producers. Strong local market and demand exceeds supply. Skills and technologies need updating.	No modern cold storage or other logistics enterprises exist currently.	There is glass jar production in Sugd region/ viability of this business unknown.
What Cost Advantages Exist	Potentially lower land, labor and water costs. Needs to be evaluated against potentially higher imported inputs and transport costs. Cost competitiveness needs further detailed analysis.	Potential lower cost of cotton (transport saving), lower labor costs. Advantages may be offset by cost of imported inputs. Cost competitiveness needs further investigation.	Significant scope to improve honey yields in Khatlon. Much may depend upon extent of cotton cultivated.	No significant comparables. No modern operations exist.	Depends upon scale and other operational efficiencies.
What Resource Advantages Exist	Sunshine, labor, land and water. Early season advantages. Labor availability may be an issue.	No preferred pricing on raw cotton but saving on transport costs. Highly skills dependent.	Good scope to expand if access to new technology (bee varieties). Cotton reduction will reduce main source for honey production.	Good options for locations in or near to key logistics points. Will depend upon farms' ability to produce quality and quantity.	Full import of raw materials likely.
Market Access Advantages	Early season advantages. Significant airfreight potential. Preferential access to Russian market. Proximity to South Asian markets.	Depends upon price, quality, and consistency.	Durable high value product, able to afford long transits.	Significant first mover advantages.	Potentially access to markets in Afghanistan and elsewhere in the central and southern Asian regions.
Skills Base	Weak skills base in all functions of business, esp. processing. Skills are most significant limitation to development.	Skills base is improving. Highly skills dependent.	Needs updated technical and marketing expertise.	Poor skills base. No recent exposure to modern logistics.	Will depend upon foreign investment and skills.

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Evaluation Criteria	Fruit and Vegetables	Textiles and Clothing	Honey	Logistics	Packaging
Potential Impact					
Impact on Jobs and Exports	Significant. Labor intensive opportunities exist, especially for women. Good export potential.	Significant. Labor intensive opportunities exist, especially for women. Potentially good exports.	Significant. Labor intensive. Very good export potential.	Significant. Labor intensive.	Significant. Labor intensive.
Knock-on Benefits to Other Business	Substantial links to farms, other inputs suppliers, packaging, financing, logistical sectors.	Substantial linkages to downstream and upstream sectors	Limited to local area/trade and export logistics.	Substantial linkages to downstream and upstream sectors. Capacity to put structure into supply chains.	Substantial linkages to downstream and upstream sectors.
Is Success Replicable within Tajikistan	Yes, within producing regions.	Yes, within producing regions.	Yes, within producing regions	Yes, within proximity of relevant production facilities	Yes, depending upon market demand.
Investment Prospects	Strong local interest. Potential FDI in high value export crops.	Sector viewed as “too volatile” by IFC investments. Needs to show sustainable success to test investment case.	Strong local interest but relatively small investments needed. Very suited to SMEs.	Potentially both local and foreign interest.	Potentially both local and foreign interest.

^a Extract from T&C Export Development Strategy (facilitated by ITC). The Strategy is directed at two industry sub-sectors: Textiles and Clothing or “T&C”. Both sub-sectors rely on Tajik farmed cotton and both are becoming increasingly more integrated. Although there are similarities in the objectives, technical and financial requirements of each sub-sector, their business models, the markets they serve, suppliers and distribution channels are different. The textiles and fabrics subsector is characterized by continuous process volume manufacture for large clients where the design of the goods does not change so rapidly—even in areas such as household furnishings. On the other hand, the clothing industry is a fast-moving, consumer-oriented business, whose designs and supplies may be changed up to 10 times per year.

^b Global production of honey is approximately 1.7 million tons (China ~250,000 tons). Global trade is approximately 300,000 tons. Source: Bernard Saubot – Supply Development Manager, Lune de Miel, France, October 2011.

^c EU certification of honey attests two main issues: (1) residues and (2) adulteration (addition of sugars etc.).

^d Extract from T&C Export Development Strategy (facilitated by ITC). The Strategy is directed at two industry sub-sectors: Textiles and Clothing or “T&C”. Both sub-sectors rely on Tajik farmed cotton and both are becoming increasingly more integrated. Although there are similarities in the objectives, technical and financial requirements of each sub-sector, their business models, the markets they serve, suppliers and distribution channels are different. The textiles and fabrics subsector is characterized by continuous process volume manufacture for large clients where the design of the goods does not change so rapidly—even in areas such as household furnishings. On the other hand, the clothing industry is a fast-moving, consumer-oriented business, whose designs and supplies may be changed up to 10 times per year.

^e Global production of honey is approximately 1.7 million tons (China ~250,000 tons). Global trade is approximately 300,000 tons. Source: Bernard Saubot – Supply Development Manager, Lune de Miel, France – October 2011.

^f EU certification of honey attests two main issues: (1) residues and (2) adulteration (addition of sugars etc.).

Annex C: Other Value Chains Considered

Value Chain	Description
Aromatic and Culinary Herbs	Potentially very good scope for both fresh and dried herbs. Will need comprehensive technical and marketing support. UNDP conducted a production and market review in 2011. ^a
Citrus	Small, but important value chain. Most lemons produced by households in greenhouses (80 percent of national production in Khatlon). Low level of productivity, but provides source of seasonal income. Expansion potential is limited by capacity of greenhouses. Currently no processing. Most sales into local markets. Not competitive with Mediterranean lemons exported to Russia. ^b
Construction Materials	No prospects seen or offered by anyone beyond the cement factory currently being installed by Chinese contractors at Shartuuz. There is a plan for a glass factory in the SEZ at Nizhny Panj.
Dairy Products	Highly-fragmented value chain. Expensive processing, feed limitation (imports of meal from Kazakhstan), and dependent on pasture, so high seasonality of milk production. Very low productivity per cow. Low milk fat content is a result of poor nutrition. Weak or non-existent veterinary and disease controls. No prospective investments of any decent scale in milk processing in Khatlon. Has good potential, but must be preceded by significant regulatory and value chain structural reforms.
Meat Products	Mostly the same issues as in dairy products. Outdated genetics/weak performance of state breeding farms. Inadequate local source of feed necessitates supplementary imports. Strong demand for lower-value meat cuts but limited demand/affordability for high quality meat products. However, demand exceeds supply and meat prices have almost tripled during the past 5 years. ^c Apart from recent poultry investments (viability not yet proven?) there are no prospective investments of any decent scale in meat processing in Khatlon.
Silk	Silk production was reported in several interviews as not being viable. However, the sector may be worth a more in-depth review. Potential impact is possibly limited.
Tourism	Realistically, very few external tourist prospects in Khatlon. May be potential for further developments around Nurek Dam and historical sites in Kulyob. Significant infrastructural challenges (airports, roads, hotel facilities) need to be addressed. The development of home-style or farm tourism may be best left to smaller NGOs. Sector needs further investigation.

^a Sector Study on Aromatic Herbs and Spices Market Development in Tajikistan. Francis Petre. UNDP Tajikistan. July 2011.

^b Source: Marketing Chain Analyses for Onion, Lemon, Watermelon, Apricot, Tomato and Beef in Tajikistan. USAID Productive Agriculture Project. Dushanbe June 2010.

^c Source: Tajikistan Market Price Report. World Food Program. June 2012.



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