

Uzbekistan

Ex-Post Monitoring of Completed ODA Loan Project
“Three Local Airports Modernization Project (1) (2)”

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Field Survey: June – July, 2009

1. Project Description



Map of the project area



Urgench Airport radar tower

1.1 Project Objective

The objective of this project is to improve the functions of the international airports and to promote the development of the nation's tourist industry as well as to increase safety by the development and modernization of airports at Samarkand, Bukhara and Urgench, all of which are located in significant areas of Uzbekistan, thereby contributing to the acquisition of foreign currency and the economic development of Uzbekistan.

1.2 Outline of the Loan Agreement

	Phase I	Phase II
Approved Amount / Disbursed Amount	15,526 million yen / 15,036 million yen	2,871 million yen / 2,786 million yen
Loan Agreement / Final Disbursement Date	December 1996 / December 2001	December 1999 / January 2003
Ex-post Evaluation	FY 2003	FY 2003
Executing Agency	Uzbekistan Airways	Uzbekistan Airways
Main Contractor	ALARKO (Turkey) • JOHN LAING INT'L LTD (UK) • Marubeni Co. (Japan) (JV), Mitsui & Co., LTD. (Japan) •	ALENIA MARCONI SYSTEMS S.P.A. (Italy)

	Mitsubishi Co. (Japan) • Shimizu Co. (Japan) (JV)	
Main Consultant	Japan Airport Consultants, Inc. (Japan)	Japan Airport Consultants, Inc. (Japan)

1.3 Background of Ex-post Monitoring

At the time of the ex-post evaluation, some concerns about effectiveness were pointed out as the number of arrivals and departures had declined since 1998/1999. There were also some concerns about the financial aspect of sustainability since all three airports had overspent every year between 1995 and 2002, the excess being covered by payouts from the budget of Uzbekistan Airways. Moreover, it was recommended that measures necessary to ensure the project objective of tourism development through airport modernization be considered, such as a review of the number and timetable of international flights.

Therefore, this project was selected for ex-post monitoring and was reviewed through each criterion together with the findings of the field survey and other research activities, leading in turn to the conclusion below.

2. Monitoring Results

2.1 Effectiveness (Impact)

After ex-post evaluation, the number of passengers arriving and departing dramatically increased at Samarkand Airport and Bukhara Airport due to the growing number of international flights used especially by local residents. The number of chartered flights from European countries has increased at Urgench Airport. All three airports have played an important role as international airports.

2.1.1 Quantitative Effects (Current Facilities Operating Conditions and Effectiveness)

(1) Improvement in airport safety

Airport safety complied with the standards of the International Civil Aviation Organization, hereafter ICAO, and this has been maintained since the ex-post evaluation. According to Uzbekistan Airways, there have been no accidents at any of the three airports since 2000 when the Project was completed¹.

The number of canceled and delayed flights at the three airports is as shown in Table 1 and Table 2 respectively. According to Uzbekistan Airways, reasons for cancellation and delay have mainly been owing to bad weather. Sometimes flights are cancelled when there are not enough

¹ However, according to data from the flight safety foundation, Aviation Safety Network, one accident was reported: that a takeoff was aborted because of power loss on a no. 1 engine where the plane could not be stopped on the remaining runway. The Yak overran 3000 meters 13/31. The right main landing gear leg collapsed. (<http://aviation-safety.net/database/record.php?id=20030409-1> as of Sep. 8, 2009)

passengers. No delay or cancellation was caused by accidents at the three airports and they are considered to be suitably secure.

Table 1: Number of canceled flights at the three airports

Unit: flight

Airport	2003	2004	2005	2006	2007	2008
Samarkand	—	—	—	—	—	—
Bukhara	3	20	3	41	6	11
Urgench	—	—	—	45	46	13

Source: Uzbekistan Airways

Table 2: Number of delayed flight at the three airports

Unit: flight

Airport	2003	2004	2005	2006	2007	2008
Samarkand	—	78	107	121	153	215
Bukhara	72	101	79	101	79	115
Urgench	—	—	—	73	83	131

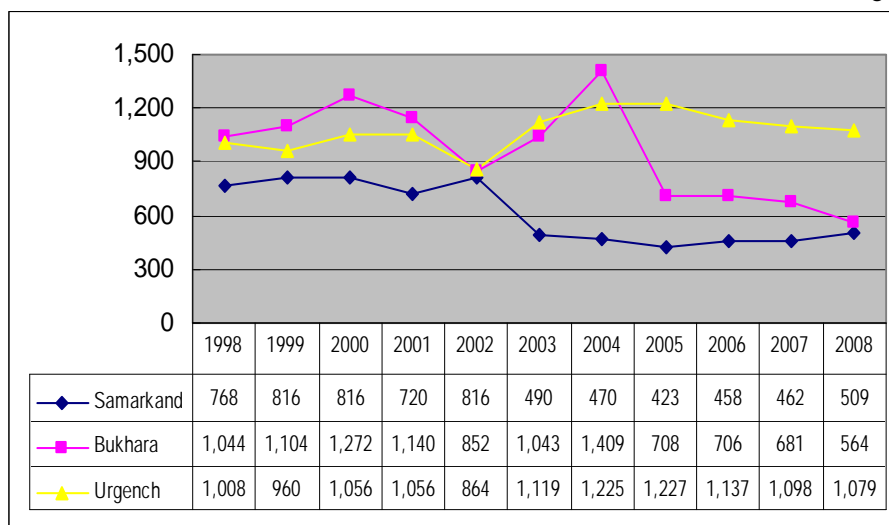
Source: Uzbekistan Airways

(2) Increase in flight numbers resulting from compliance with ICAO standards

The number of domestic flights is shown in Figure 1. At Samarkand Airport and Urgench Airport, the number of domestic flights has not changed substantially, although there have been fluctuations since 2003 when the ex-post evaluation survey was conducted. The number of domestic flights at Bukhara Airport peaked in 2004, but was down by half in 2005. Since then it has been on a declining trend. Uzbekistan Airways explains this as follows: recently flights between Tashkent and cities in the Commonwealth Independent States, hereafter CIS, have begun operating via Samarkand or Bukhara with large aircraft introduced on these routes, enabling the journey to be made in one flight. Therefore Uzbekistan Airways has decreased the number of flights between Tashkent and Samarkand or Bukhara aiming to reduce costs.

The number of international flights hovered at a low level between 2004 and 2005, affected by deterioration in the regional situation. Since 2005, however, the number has dramatically increased especially at Samarkand Airport and Bukhara Airport (Figure 2). This trend is pronounced among flights to CIS countries, particularly to major cities in Russia. The results of interviews with Uzbekistan Airways staff and the beneficiary survey conducted during this monitoring survey show that most users of international flights from Samarkand Airport or Bukhara Airport are local residents who aim either to work or to visit relatives in Russia. It can be seen, therefore, that the growing need for flights to major cities in Russia by local residents led to this increase in the number of international flights.

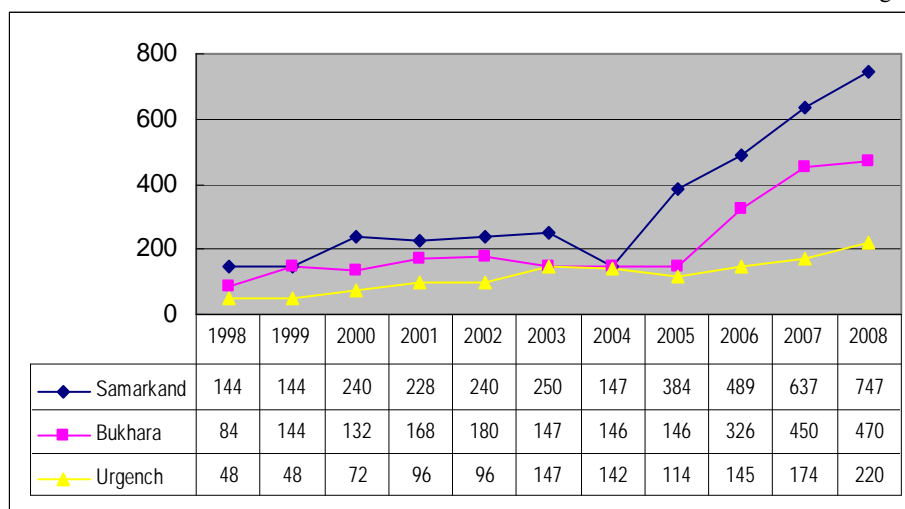
Unit: flight



Source: Uzbekistan Airways

Figure 1: Number of domestic flights at the three airports

Unit: flight



Source: Uzbekistan Airways

Figure 2: Number of international flights at the three airports

The number of regular international flights operated by Uzbekistan Airways and Russian Airlines at the time of the ex-post monitoring survey is as shown in Table 3 and Table 4 respectively. Since 2005 various Russian airlines have begun to operate international flights between each of the three airports and major cities in Russia. In addition, regular international flights between Urgench and Paris, Rome and Milan are planned to go into service from 2010.

Table 3: International regular flights by Uzbekistan Airways (as of August 2009)

Airport	Route	Year of starting service
Samarkand	Samarkand-Simferopol (Ukraine)	2006
	Samarkand-Kazan (Russia)	2006
	Samarkand- Moscow (Russia)	The Soviet era
	Samarkand-St. Petersburg (Russia)	The Soviet era
Bukhara	Bukhara-Moscow (Russia)	The Soviet era
	Bukhara-St. Petersburg (Russia)	The Soviet era

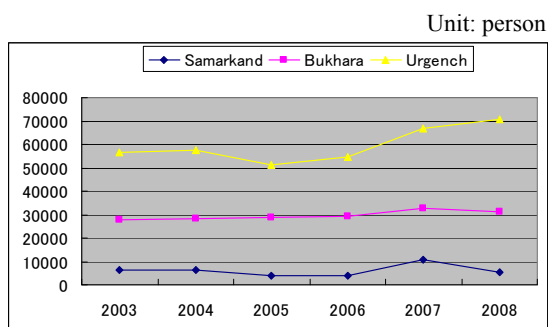
Source: Uzbekistan Airways

Table 4: International regular flights by Russian Airlines (as of August 2009)

Airport	Airline	Route	Year of starting service
Samarkand	Russiya	Pulkov(St.Petersburg)-Samarkand	2005
	Moskoviya	Domodedovo (Moscow)-Samarkand	2006
	Atlant Soyuz	Vnokovo(Moscow)-Samarkand	2007
	Others	Charter flights by Airlines UM and Air Inter	
Bukhara	Moskoviya	Domodedovo(Moscow)-Bukhara	2005
	Atlant Soyuz	Vnukovo(Moscow)-Bukhara	2006
	Trans Aero	Domodedovo(Moscow)-Bukhara	2006
Urgench	SIBIR Airlines (S7 Airlines)	Domodedovo(Moscow)-Urgench	2007

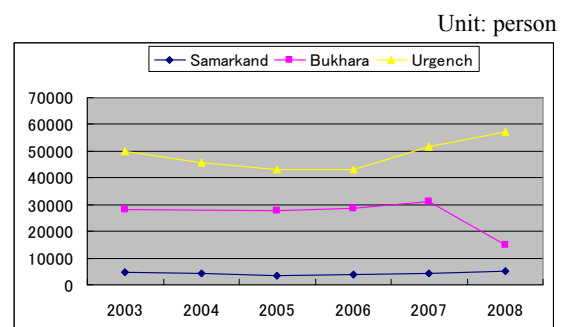
Source: Uzbekistan Airways

Although the number of domestic flights has been decreasing, the number of passengers arriving and departing at each of the three airports is stable (Figure 3 and Figure 4). It can be surmised from this that there have been improvements in transport efficiency through the use of larger aircrafts. The number of international flights and passengers has dramatically increased (Figure 2, Figure 5 and Figure 6). It is thought that this is due to compliance with the ICAO Standard.



Source: Uzbekistan Airways

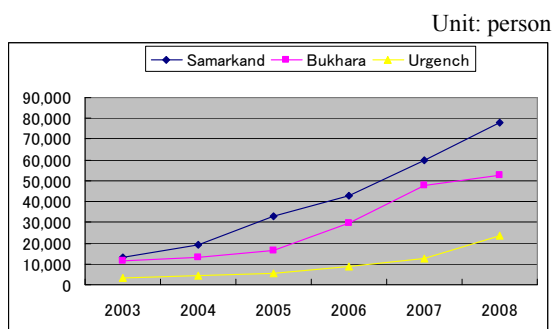
Figure 3: Number of domestic arrivals at the three airports



Source: Uzbekistan Airways

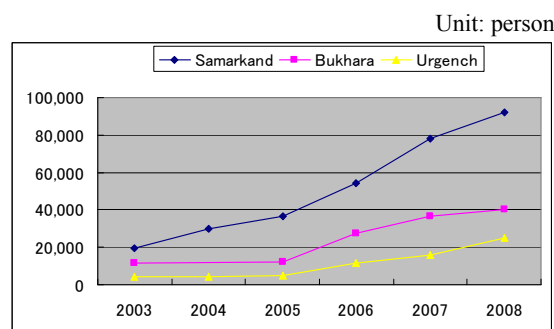
Figure 4: Number of domestic departures at the three airports²

² There is no record of numbers of departures at Bukhara Airport for 2004.



Source: Uzbekistan Airways

Figure 5: Number of international arrivals at the three airports



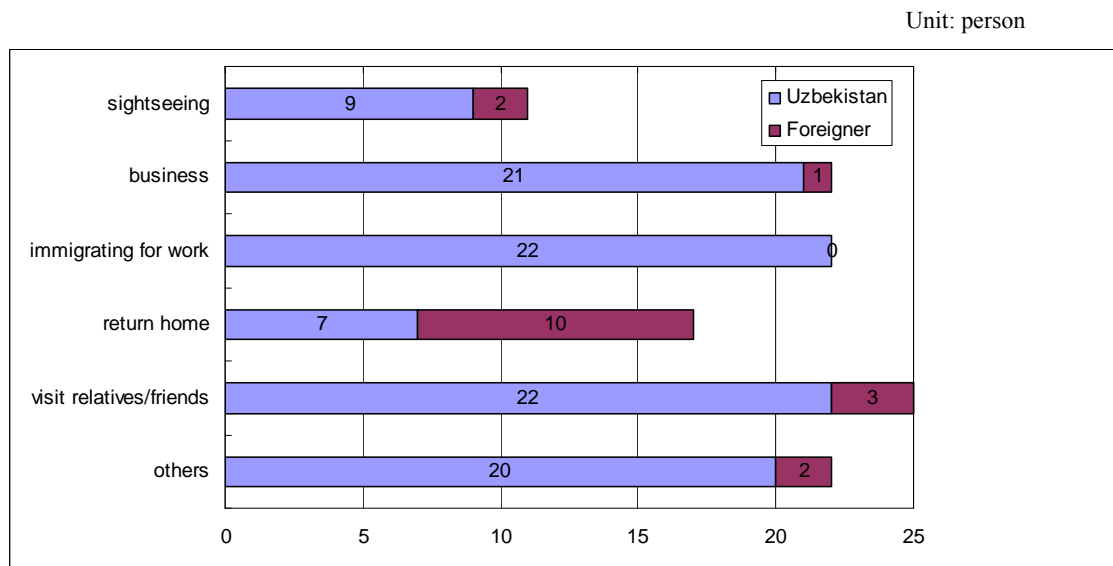
Source: Uzbekistan Airways

Figure 6: Number of international departures at the three airports³

2.1.2 Qualitative Effects

(1) Results of the beneficiary survey

The beneficiary survey was conducted with a sampling of 40 users and a total 120 samples, between July and September 2009, at Samarkand Airport, Bukhara Airport and Urgench Airport.⁴



Source: Beneficiary Survey

Figure 7: Number of travelers using the airports and their purpose

³ There is no record of numbers of departures at Bukhara Airport for 2004.

⁴ Surveys were conducted in the departure lounge after check-in at each airport. The respondents were chosen by a random sampling method. Surveyors interviewed respondents in person in accordance with a prepared questionnaire.

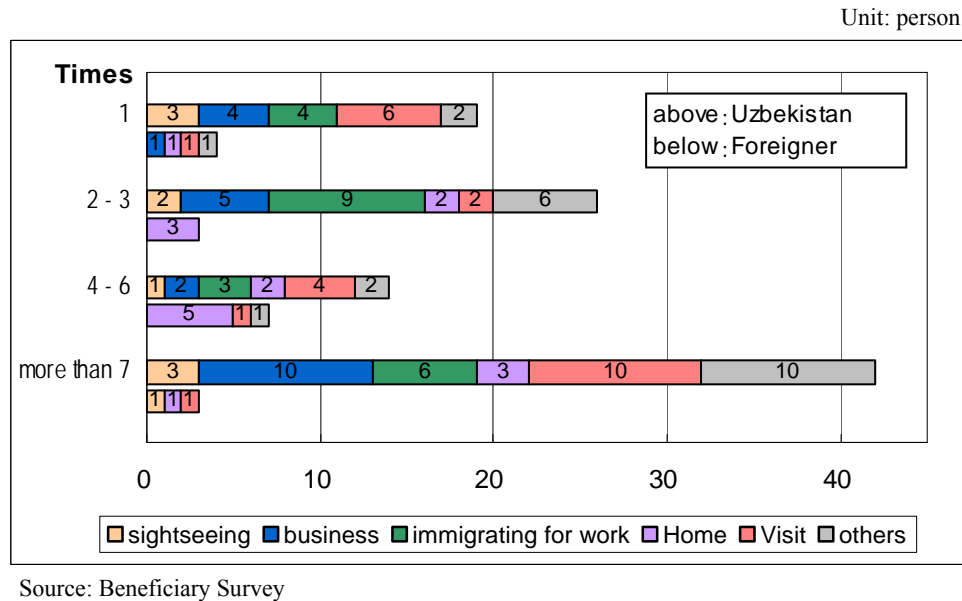


Figure 8: Usage frequency of airports

Most users planned to work, to do business or to visit relatives or friends in Russia. Only 9 percent of users lived in Uzbekistan, 9 out of 101, and only 11 percent of users lived abroad, 2 out of 19 (Figure 7) has the aim of sightseeing. Users show a strong tendency to take flights repeatedly regardless of their purpose (Figure 8).

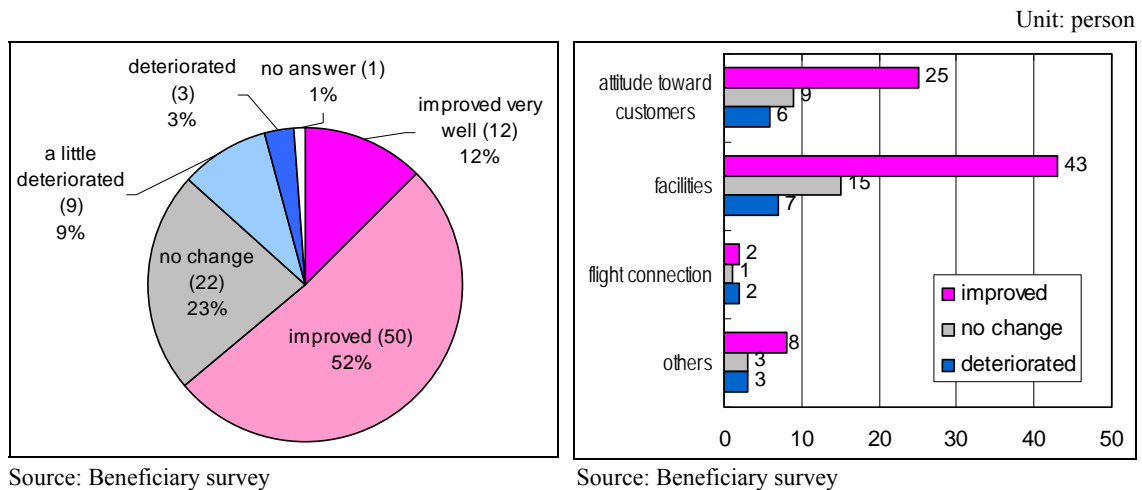


Figure 9: Improvement of airports (1)

Figure 10: Improvement of airports (2)
(multiple answers)

Sixty-four percent of the respondents (62 out of 97) who use the same airport more than twice answered that the airport got better than before (Figure 9). Forty-three people answered that facilities had especially improved. Twenty-five people answered that the airport staff's attitude toward passengers had improved (Figure 10). On the other hand, seven people answered that facilities had not improve sufficiently and six answered that the attitude of staff had not

improved. Compared to other answers, these answers accounted for a significant number. Although at the time of the ex-post evaluation, it was recommended that measures should be taken for the development of tourism, such as a review of the number and schedule of international flights, referring to Figure 10, there are not many respondents who answered that these were improved or even not. These results imply that these measures had not been recognized by users. In the answers to free response questions, there are many comments about the bad attitude and low quality of service of airport staff, including custom officers, as well as demands that facilities such as tax-free shops, internet access, ATM etc. be improved. Moreover, in the answers to the questions asking the points to be improved for promoting the utilization of the airports, there are many requests on reduction of air fares and increase in flights (Figure 11).

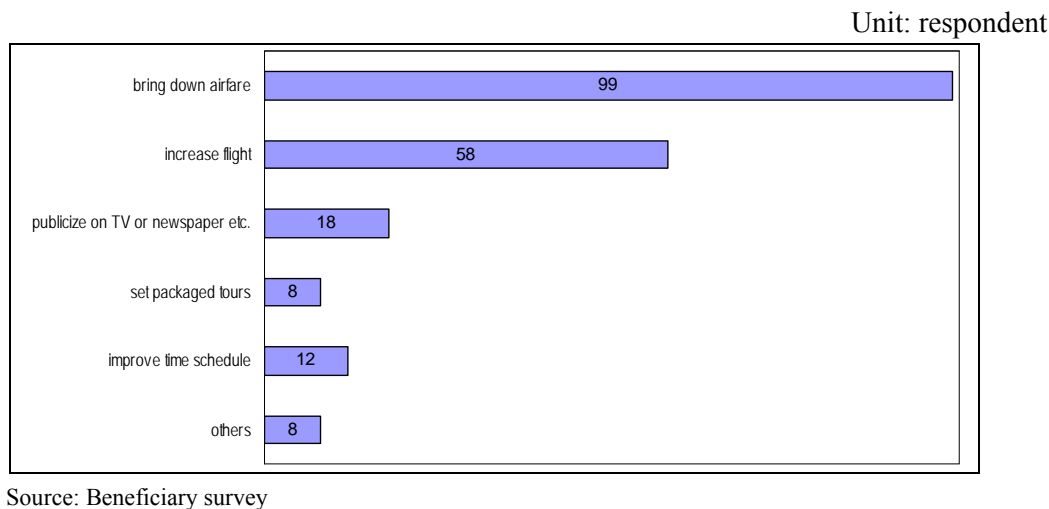


Figure 11: Points to be improved for promoting the utilization of the airports (multiple answers)

(2) Improvement in the convenience of the airports for passengers through the modernization of airport facilities

In addition to the above mentioned beneficiary survey, interview surveys⁵ with airport staff and major travel agencies were conducted regarding improvements in the convenience of the airports for passengers through the modernization of airport facilities. Some airport staff felt that the quality of service for navigating, landing and taking-off together with safety had increased through compliance with ICAO standards and the rehabilitation of airport control towers. Many travel agencies thought that modernization of the three airports was definitely a good thing as an airport is the face of the country that tourists see when they first arrive. Others said that the number of direct international flights had increased and more local residents were using flights. Moreover, there are other positive comments about the improvement of safety through modernized airport facilities and the increase in international flights.

⁵ For the interviews with staff at each airport, questionnaires were sent via Uzbekistan Airways in advance and interviews with persons in charge were conducted individually at each airport based on the questionnaire. Semi-structured interviews also took place with twelve travel agencies in Tashkent, Samarkand, Bukhara and Khiva which had been introduced by Japanese travel agencies specializing in Central Asian or Uzbek tourism

Uzbekistan Airways has made efforts to improve convenience for passengers by reviewing their timetables based on the recommendations of major travel agencies made at meetings between Uzbekistan Airways, Uzbektourism and Uzbekistan Railways. However, many travel agencies harshly criticized Uzbekistan Airways' review of their timetable as it did not necessarily correspond to passengers' needs.

2.1.3 Impact

2.1.3.1 Attainment of Project Goals

(1) Promoting Tourism Development

The number of tourists in Uzbekistan has basically increased although it decreased temporarily due to the Andijan Massacre in 2005 (Table 5).

Table 5: Trend in the number of tourists⁶

Unit: person

year	2004	2005	2006	2007	2008
Total in Uzbekistan	261,600	241,900	272,200	353,800	377,450
Samarkand	336	653	710	1,475	2,000
Bukhara	72,103	60,468	73,602	101,232	111,448
Urgench/ Khiva	19,420	17,248	19,600	24,315	29,657

Source: Uzbektourism, Uzbekistan Airways

Simple comparisons of data in Table 5 cannot be made as it is from different sources and is based on different statistical bases. However, the numbers of tourists who use the airports in Samarkand and Urgench/Khiva after ex-post evaluation can be estimated to some extent as the data is limited to the number of airport users⁷.

Generally speaking, in Uzbekistan, foreign tourists get into the country from Tashkent and fly to Urgench. They then travel by land (on buses and trains) from Urgench to tourist spots in Bukhara and Samarkand. They leave the country from Tashkent or take a reverse route. Tourists generally take flights to Urgench as it is located more than 1,000 km from Tashkent. On the other hand, Samarkand is located at an approximately 4-5 hours distance by bus or train. In comparison with the time it takes to get to the airport and for boarding procedures, buses or trains are more convenient, their fares also being lower than flights as well as the negligible difference in time required for the journey (Table 6). Tourists do not therefore use the airports in order to travel from Tashkent to Samarkand. Moreover, as Bukhara is located between

⁶ The total number of tourists in Uzbekistan is the number of foreign tourists who visit Uzbekistan. It is not limited to airport users. (source: Uzbektourism) The number of Samarkand is the number of arrivals by chartered flights or aircrafts of tourists themselves. (source: Uzbekistan Airways, Samarkand Airport) The number of Bukhara is the number of tourists who visit Bukhara for one year. It is not limited to airport users and it includes domestic tourists. (Source: Uzbektourism Bukhara office) The number of Urgench is the number of tourist who departed from Urgench Airport or were members of registered group tours. (source: Uzbekistan Airways, Urgench Airport)

⁷ The total number of tourists who used the airports is not illustrated.

Samarkand and Urgench/Khiva and Shahrissabz, a tourist spot only accessible by land, is between Samarkand and Bukhara, airplanes are not used in this case either⁸. Therefore tourists generally travel by land in order to visit Bukhara.

Table 6: Comparison with other modes of transportation for the journey between Samarkand and Tashkent⁹

Mode	fare	Time (hour)	number	remarks
Uzbekistan Airways				
First class	€104	1	6/week	
Business class	€53			
Economy class	€36			
Uzbekistan Railway				
Business class	18,000 sum (about€8.5)	4	5/week	Express train “Sharq”
Economy class	12,000 sum (about€5.7)			
National Bus				
—	7,100 sum (about€3.4)	4~5	Everyday (8/ week)	

Source: various references

At present, in order to promote tourism development in Uzbekistan by integrated measures, the Government of Uzbekistan has set up a cross-organizational working group comprising of the ministries concerned, agencies and local governments. It is also implementing the “Tourism Development Program 2009-2015”. As part of the program, integrated tourism redevelopment is being undertaken in Samarkand through the large-scale rehabilitation of tourism infrastructure and guidance for hotels in Samarkand in order that they can improve their service in compliance with international standards.

(2) Promoting Economic Development

As cargo volumes at each airport have varied quite a bit through the years, it is difficult to say how much the Project has contributed to economic development in Uzbekistan (Figure 12)¹⁰.

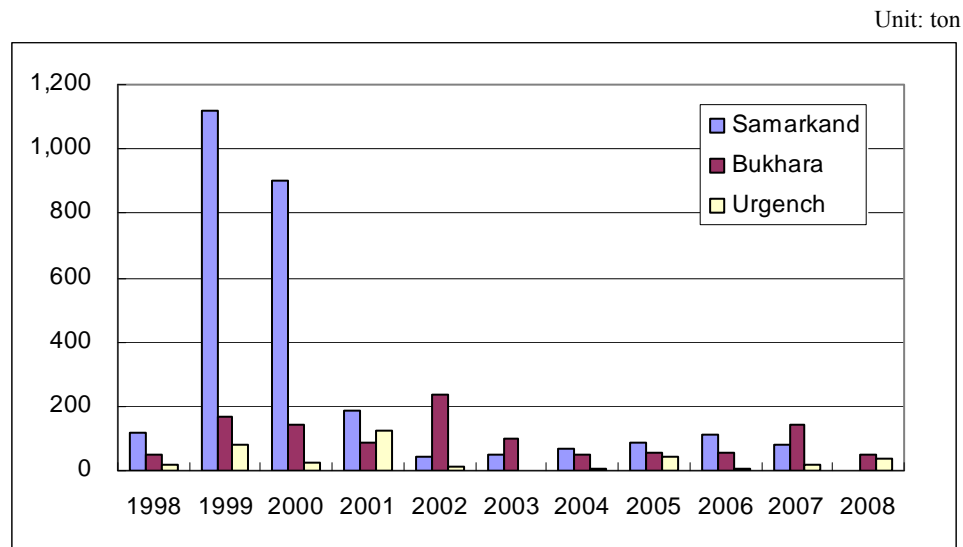
Although it cannot be seen clearly from the figures, however, staff at Bukhara Airport says that they have appreciated side-effects on the regional economy. For example, spare parts and equipments required at oil refineries and other plants near Bukhara can be imported directly from other countries without going through Tashkent as Boeing cargo jets can land and take off

⁸ There is only a limited number of inter-city flights in Uzbekistan. Basically people have to go through Tashkent in order to move to other cities. There is a flight that runs Urgench – Bukhara – Tashkent on the timetable, however, it is often cancelled because of a lack of passengers.

⁹ Exchange rate 1sum= €0.0004720 (interbank rate as of July 29, 2009)

¹⁰ Cargo will be dealt with intensively at Navoi Airport. A Special Economic Zone has been constructed around Navoi Airport and the plan to construct an international logistic center at the airport is being carried out.

at Bukhara Airport following modernization.



Source: Uzbekistan Airways

Figure 12: Trends in cargo volume

2.1.3.2 Environmental and Social Impact

At the time of the ex-post monitoring, there had been no reports of problems due to air or noise pollution during project implementation or in connection with the subsequent operation of the various airport facilities. At the time of the ex-post monitoring, no problem was reported. According to Uzbekistan Airways, the environment is improving from year to year due to the transition from soviet propeller aircrafts to jets such as Boeing and Airbus in compliance with ICAO standards.

2.1.3.3 Other Impacts

The following impacts were also recognized at the time of the ex-post monitoring; (1) benefit to local residents, (2) improvement in work efficiency for airport staff, and (3) improvement in the motivation of airport staff.

(1) Benefit to local residents

The number of local residents taking flights in order to visit relatives and work in Russia is increasing. For instance, the number of international arrivals at Samarkand Airport in 2008 was 78,198 in total and the number of tourists was 2,000. It can be estimated that more than 75,000 peoples went to Russia from Samarkand Airport on international flights. Since there were only approximately 13,000 users in 2003, this illustrates that the number of local users of the airport have increased markedly during the past five years. Airport staff indicates that one of the causes of this increase in users is that people can save time and money as they no longer need to go through Tashkent.

(2) Improvement in work efficiency for airport staff

Some airport staff commented that operational efficiency also improved as the work environment improved through the modernization of the airport control towers. A further comment was that the modernization had made it easier for staff to operate and maintain facilities. It can thus be seen that the Project has contributed to improvement in work efficiency for airport staff to a certain extent.

(3) Improvement in the motivation of airport staff

After the ex-post evaluation, each airport won international prizes for their operation. For example, Bukhara Airport won a prize for the best airport in CIS countries in 2008. Samarkand Airport won a similar prize. Urgench Airport won a gold prize from the European Fund for Business Practice (FEBP)¹¹. This resulted in improvement in staff motivation. Some staff said that they took pride in working at the airport.

2.2 Sustainability

No problem was seen regarding the structural aspects, human resource aspects, technical aspects nor regarding the current status of operation and maintenance. As for the financial status, concerns were pointed out at the time of the ex-post evaluation, and expenditure continued to exceed income in Bukhara Airport and Urgench Airport. However, there is no problem with the budget for operation and maintenance since according to Uzbekistan Airways, headquarters cover the shortfall from their own budget.

2.2.1 Operation and Maintenance Agency

2.2.1.1 Structural aspects of Operation and Maintenance

The structure of operation and maintenance has not changed since the ex-post evaluation. Uzbekistan Airways is responsible for everything from airport construction, operation and management, through air transport services and the licensing of airline companies. In addition, Air Administration of the Republic of Uzbekistan exists as a supervisory authority over both the civil and the military aviation sectors. Air Administration is responsible for regulation and supervision over the complete aviation sector including Uzbekistan Airways.

Operation and maintenance of equipment at each airport is carried out by the department responsible for the provision of electricity and light. Operation and maintenance of the runways at each airport is undertaken by the department responsible for ground operations. Special departments for the procurement of spare parts required daily are set up at each airport, and they supply them without delay¹².

¹¹ This organization recognized the business practiced by the airport and the effective management system they have. They also noted the status of the airport as an international airport that complies with ICAO standards.

¹² Headquarters are responsible for procurement for major civil works and expensive equipment.

2.2.1.2 Technical aspects of Operation and Maintenance

According to Uzbekistan Airways, manuals for the equipment procured by the Project still existed at the time of the ex-post monitoring. Guidelines for the operation and maintenance of airport facilities have also been drawn up. Operation and maintenance of airport facilities are basically conducted in line with these guidelines. These, together with guidelines for the handling of hazardous materials and guidelines for handling general cargo are revised annually in accordance with ICAO recommendations.

There are sufficient spare parts in stock and no problem was observed at the time of the ex-post monitoring.

According to Uzbekistan Airways, engineers working on operation and maintenance of airport facilities were trained in Western Europe. There is no problem in sustainability in terms of personnel or technical capacity.

2.2.1.3 Financial aspects of operation and Maintenance

It is difficult to make a definite statement on whether or not the financial status is sound as financial data provided by Uzbekistan Airways does not come in the form of balance sheets but in records of cash flow. According to Uzbekistan Airways, however, there is no problem with the budget for operation and maintenance since headquarters cover the shortfall from their own budget, should the airport budgets run short.

At the time of the ex-post evaluation, all three airports had been constantly in deficit between 1995 and 2002 and excesses were covered by payouts from Uzbekistan Airways. However, surpluses at Samarkand Airport have been recorded since 2006 due to income from passengers and the sale of fuel which has been increasing due to this increase. Urgench Airport is expected to improve its balance of payment following the establishment of services between Urgench and Paris, Rome and Milan in 2010.

Table 7: Cash Flow Status of the three airports

Unit: Sum

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Samarkand	Income	338,077	406,573	433,175	1,666,265	3,054,639	4,718,619	6,617,328	9,375,494	16,369,600
	Expenditure	472,779	607,820	565,997	2,176,179	3,118,778	4,952,954	5,891,779	8,929,573	14,145,684
	Balance	-134,702	-201,247	-132,822	-509,914	-64,138	-234,336	725,549	445,922	2,223,916
Bukhara	Income	315,036	514,743	700,425	1,470,549	2,014,164	2,020,867	4,480,924	7,220,359	11,062,096
	Expenditure	376,902	526,722	604,197	1,917,562	2,776,259	4,061,864	4,437,510	7,775,751	11,881,981
	Balance	-61,866	-11,979	96,228	-447,014	-762,095	-2,040,997	43,414	-555,393	-819,885
Urgench	Income	301,773	419,481	517,916	1,321,108	1,726,785	1,753,510	2,902,531	4,669,903	6,824,052
	Expenditure	290,233	447,548	614,485	2,085,681	2,444,186	4,193,714	3,412,839	6,188,008	8,147,303
	Balance	11,540	-28,067	-96,569	-764,574	-717,401	-2,440,204	-510,308	-1,518,105	-1,323,251

Source: Uzbekistan Airways

2.2.2 Current status of Operation and Maintenance

No problem is observed in the current status of operation and maintenance. In addition to daily checks on the runways, at Bukhara Airport and Urgench Airport where there are inclement weather conditions, major checkups and repairs with bitumen are conducted every spring and autumn. All three airports were credited with “satisfactory conditions” when the roughness of runways were checked in an inspection conducted by the Moscow Scientific Institute in 2006.

Airport facilities and equipment other than runways are well maintained, based on guidelines in compliance with ICAO standards, and they are in a very good condition.

Photo 1 : Repairs with bitumen



3. Conclusion, Lessons Learned and Recommendations

3.1 Conclusion

Although, at the time of the ex-post evaluation, some concerns about effectiveness were pointed out due to the declining number of passengers since 1998/1999, this number has dramatically increased at each airport since 2006. This increase in effectiveness is remarkable in comparison with the results of the ex-post evaluation. Regarding sustainability from the financial aspect, expenditure has continuously exceeded income at Bukhara Airport and Urgench Airport, although a tendency to improve has been observed in Samarkand. However, there is no problem with the budget for operation and maintenance since headquarters cover the shortfall from their own budget, if the airport budgets run short. Uzbekistan Airways has made efforts to establish flights going through Samarkand or Bukhara for international flights between Tashkent and CIS countries and to have meetings with the concerned parties in order to revise timetables for the tourist season. However, this has not sufficiently reflected the needs of passengers according to the beneficiary survey and interviews with travel agencies.

3.2 Lessons Learned

An intended outcome of the project was the promotion of tourism development as the project sites are located in tourist spots. However, buses or railways have usually been used for tourists because of their convenience and the short distances involved. The number of tourists has been affected by international affairs but it is has been difficult to discern a relationship between modernization of the airports and tourism development. Therefore, if the promotion of tourism development is set as an outcome of projects involving construction or rehabilitation of airports, a consideration is necessary as to whether the airport is closely related to a tourist area and whether air transportation is predominant over other modes of transportation.

3.3 Recommendations

【To the Executing Agency】

While the modernization of the airports has been appreciated by travel agencies and passengers, problems with services such as baggage handling and staff attitudes toward passengers at customs control and passport control have also been pointed out. Further training is necessary to improve this service. Moreover, efforts towards the provision of more flexible services in response to passengers' needs towards the improvement of balance sheets are to be expected.

End

Comparison of the Original and Actual Scope

Item	Original	Actual
1. Project Outputs	<u>Samarkand Airport</u> 1) Civil work 2) Construction work -New passenger terminal -New cargo terminals 3) Air traffic control equipment <u>Bukhara Airport</u> 1) Civil work 2) Construction work -New passenger terminal -New cargo terminals 3) Air traffic control equipment <u>Urgench Airport</u> 1) Civil work 2) Construction work -New passenger terminal -New cargo terminals 3) Air traffic control equipment	As planned As planned Not constructed As planned As planned Rehabilitated existing terminal Not constructed As planned As planned As planned Not constructed As planned
2. Project Period (for all 3 airports)		
Phase I	June 1997 – Aug. 1999	Mar. 1997 – June 2000
Phase II	Oct. 1999 – Sep. 2000	June 2000 – Dec. 2001
3. Project Cost		
Phase I		
Foreign currency	15,526 million yen	15,036 million yen
Local currency	1,762 million yen	1,517 million yen
Total	17,288 million yen	16,552 million yen
Japanese ODA loan portion	15,526 million yen	15,036 million yen
Exchange rate	1 sum = 2.868 yen (June 1996)	1 sum = 2.092 yen (Phase I contract period average)
Phase II		
Foreign currency	2,795 million yen	2,786 million yen
Local currency	77 million yen	0 yen
Total	2,872 million yen	2,786 million yen
Japanese ODA loan portion	2,871 million yen	2,786 million yen
Exchange rate	1 sum = 0.740 yen (Nov. 1999)	