

Review on Road Conditions in Afghanistan

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Abstract: *Afghanistan is a country that suffered approximately three decades of war. During this duration Afghanistan had lost its major highways, state roads, airports, railways and specially its economy. After the falling of Taliban regime, the international community increased its support to Afghanistan. New Highways, state roads, rail ways, airports were built by the support of international donors etc. U.S. Organization for International Development (USAID) and the Department of Defense (DOD), World Bank, Asian Development Bank and so forth. As per SIGAR (Special Inspector General for Afghanistan Reconstruction) report (SIGAR-17-11-AR) the global network and United States spend through billions of dollars for building and fix of Afghanistan street organize. U.S spent approximately (2.8) billion USD dollars for building and repair of roads. They built approximately (42,150) Km of roads, (12,350) KM of them are paved roads and (29,800) KM of them are unpaved roads, which includes ring road (Afghanistan's national road), Highways, state roads, village roads etc. Objective: The Objective of this paper is to review the road conditions in Afghanistan. Since Afghanistan is a landlocked country and has no sea connectivity or ports ports but border has border named as Amu Darya, which is the border with Tajikistan, Turkmenistan and Uzbekistan, therefore Afghanistan's economy mostly depends on transportation system specially on different types of roads.. In the recent two decades, construction of new airports, railways and highways and rebuilding of the previous and damaged airports, railways and highways has led to rapid economic growth in Afghanistan.*

Keywords: *Road Conditions, Highways, Paved roads, Landlocked, Railways and Airports*

I. INTRODUCTION

We have a lot of factors that impact the economy and development of a country, but transportation system is the one that effects mostly. By improving the transportation system, the economy of the country will improve. Afghanistan is a developing country, that mostly uses roads for transportation system. So it's economy mostly depends on transportation system.

During the sultanate of Zahir Shah and presidency of Dawood Khan the main focus of the government was to improve the economy of the country. Therefore, they focused on transport system, industrial system and also constructing of water Dams etc. In transport system they build Ring Road (Afghanistan's national road), highways, state roads etc. in Industrial sector they build Gangalak factory, Nasagi of bagrami, Coal factories, Puli khumri cement factory, Gabal sirag cement factory, Herat cement factory, etc. and in dam sector they build Sarobi, Durunta, Mahipar, Naglo, kajaki etc. the ring road connects around (16) provinces. It is like a circle that connects (Kabul, Parwan, Baghlan, Samangan, Balkh, Jawzjan, Faryab, Badghis, Herat, Farah, Nemroz, Helmand, Kandahar, Zabul, Ghazni and Maidan wardak) provinces. Its length is approximately (2300) KM. that remained uncompleted during the three-decade war. Since Afghanistan suffered approximately three decades of

war and During this duration Afghanistan had lost its major highways, state roads, airports, railways and specially its economy. Most of the roads were not in good condition.

After the beginning of Hamid Karzai's government, financial support was increased to Afghanistan by the international community increased its financial support, transportation sector in Afghanistan improved rapidly. They spent a huge amount of fund to rebuilt Afghanistan's transport network. According to SIGAR report (SIGAR-17-11-AR) USAID and DOD spent around (2.8 billion) \$ to rebuild Afghanistan road network. New Highways, state roads, rail ways, airports were built by the support of international donors (USAID, DOD), World Bank, Asian Development Bank. etc.

Afghanistan road has overall length of approximately 3,300 km of highways comprising regional areas, with national highway of 4900 km length apart from provincial roads equal to 9700 km and urban roads only among with 1060 km length is of Kabul. There is a major ring road having length of 2300 km connecting all major regional centers of Afghanistan and 700 km length of ring road is linking neighbouring countries to Kabul.

Beside construction process, we have a lot of issues. There doesn't seem any roadside assistance for instance guard rails etc. No extra lane for bicyclists. Pedestrians, animals and bicyclists are moving on the same lane, so there is a lot of disorder in vehicular traffic. Most of the rural roads are not paved. Because of these congested roads every year number of fatal and non-fatal accidents occurs.

The Objective of this paper is to review the road conditions in Afghanistan. Since Afghanistan's economy mostly depends on transportation system, therefore recently the government mostly focused on construction of new airports, railways and highways and rebuilding of the previous ones.

II. DATA COLLECTION

In this section we will mention the main highways, tunnels and passes that constructed or repaired by Afghan government and by the help of international community.

Main Highways:

The following national roads have been reviewed in this research

A. *Kabul-Kandahar Highway (A-1)*

It connects Kabul with Kandahar. Its length is approximately (483) Km or (300-mile). It passes through Kabul, Maidan Wardak, Ghazni, Zabul and finally reaches to Kandahar.

B. *Kabul-Jalalabad Road (A-1)*

It is a section of A01 national highway. Its length is (143) Km. it connects Kabul and Ningarhar provinces of Afghanistan (the capital of Ningarhar is Jalalabad). It passes through Kabul, Laghman and finally reaches to Ningarhar.

C. *Kabul-Gardez Highway*

It connects Kabul with the capital of Paktia province (Gardez). Its length is approximately (136.3) Km. It passes through Kabul, Logar and finally reaches Paktia province.

D. Kabul-Herat Highway (A-77)

It is located between Kabul and Herat provinces of Afghanistan. Its length is approximately (816.6) Km. It passes through Kabul, Maidan Wardak, Ghazni, Zabul, Kandahar, Helmand, Nemroz, Farah and finally reaches Herat province. It is a major part of ring road (Afghanistan's national road).

E. Kabul-Mazar Highway (A-76)

It is located between Kabul and capital of Balkh province (Mazar-e-sharif) Afghanistan. Its length is approximately (426.6) Km. It passes through Kabul, Parwan, Baghlan, Samangan and finally reaches capital of Balkh province (Mazar-e-sharif).

F. Kabul-Fayzabad Highway

It is located between Kabul and capital of Badakhshan province (Fayzabad) Afghanistan. Its length is approximately (511) Km. It passes through Kabul, Parwan, Baghlan, Takhar and finally reaches capital of Badakhshan province (Fazyabad).

G. Kandahar-Bamyan Highway

It is located between Kandahar and Bamyan provinces of Afghanistan. Its length is approximately (597.1) Km.

H. Kandahar-Boldak Highway

It is located between Kandahar province and one of its district (Spin Boldak) of Afghanistan. Its length is approximately (102.1) Km.

I. Kandahar-Herat Highway

It is located between Kandahar and Herat provinces of Afghanistan. Its length is approximately (557) Km or (346 mi). It passes through Kandahar, Helmand, Nemroz, Farah and finally reaches Herat province. It is a part of ring road (Afghanistan's national road) that was first constructed by Soviets in 1960s. The reconstruction of the highway began in Oct 2004 by the help of United States, Saudi Arabia and Japan, in which each country build his own portion of the highway.

J. Kandahar-Tarin Kowt Highway

It is located between Kandahar province and capital of Urozgan province (Tarin Kowt) Afghanistan. Its length is approximately (167.5) Km.

K. Kunduz-Puli Khomri Highway

It is located between Kunduz province and capital of Baghlan province (Pul-e-Khumri) Afghanistan. Its length is approximately (107.4) Km.

L. Herat-Islam Qala Highway

It is located between Herat city and Islam Qala (located in Kohsan district of Herat that has border with Iran) of Afghanistan. Its length is approximately (114.9) Km.

M. Herat-Mazar Highway

It is located between Herat province and capital of Balkh province (Mazar-e-sharif) of Afghanistan. Its length is approximately (729.8) Km. It passes through Herat, Badghis, Faryab, Jawzjan and finally reaches Balkh province.

N. Dowshi - Puli Khumri Road

It is located in Baghlan Province of Afghanistan. It connects Dowshi (Dushi) district with capital of Baghlan (Puli Khumri). Its length is approximately (47.4) km.

O. Delaram-Zaranj Highway

It is also known as Route 606 or A71. It is located between Delaram in Farah province and Zarang in Nimruz province. Its length is (217) Km and comprises of two major lanes thereby connecting border of Afghan and Iran with the Kandahar–Herat Highway in Delaram, thereby connecting to other major Afghan cities via A01.

P. Gardez-Pathan Highway in Paktia Province

It is located in Paktia province. It connects Gardez capital of Paktia with Dand Aw Pathan district.

Q. Gardez Khost Highway (NH08)

It is located between Gardez (Capital of Paktia) and Khost province of Afghanistan. Its length is approximately (101.2) Km. It connects eastern Afghanistan with Ghulam Khan highway of Pakistan.

Tunnels and passes

Following is a partial list of major tunnels and passes.

A. Kotal-e Tirah

Also known as Tera Pass. It is a high mountain pass located in Afghanistan. It connects Logar province with Paktia province. Its elevation is (2895) m above the sea level.

B. Kowtal-e Yagharda

It is located in Badakhshan province of Afghanistan. Its elevation is (3525) m (11,564) ft. above the sea level.

C. Eshkashem - Gaz Khan road

It is part of The Wakhan corridor. It is located in mountains of Wakhan valley, Badakhshan province with an elevation of (2700) m above the sea level.

D. Dorah Pass

It is a border between Afghanistan and Pakistan, located on high mountains. Its elevation above the sea level is (4300) m (14,000) ft.

E. Salang Pass

It is located in Hindu Kush, high mountains at an elevation of (3,878) m (12,723) ft. above sea level. It connects south Afghanistan with north Afghanistan. It facilitates the trade of Afghanistan with Tajikistan, Turkmenistan and Uzbekistan.

F. Tangi Tashkurgan gorge

It is an amazing gorge located in Balkh province north of Afghanistan. Its height is approximately (3094) m.

G. Kotal-e Shibar

It is located in Koh-e-Baba mountains. They are located in central Afghanistan. The height of this pass is (3000) m (9,843) ft. from the sea level.

H. Kotal-e Anjoman

It is located in Badakhshan province, north of Afghanistan. Its elevation above the sea level is (4430) m (14,534) ft.

I. Hajigak Pass

It is a mountain pass located in Bamiyan Province of central Afghanistan. it has an elevation of (3475) m (11,401) ft. above the sea level.

J. Pazhuk Pass

It is a mountain pass located in north-eastern Afghanistan. It has an elevation of (3160) m (10,367) ft. above the sea level.

K. K-G Pass

The Khost-Gardez Pass (K-G Pass) is a mountain pass located in the Hindukush Mountains of Afghanistan. It has an elevation of (2869) m (9,413) ft. above the sea level.

L. Unai Pass

It is a high mountain pass located in the Sanglakh Range, in Afghanistan. It has an elevation of (3000) m (9,843) ft. above the sea level.

M. Khedir Pass

It is a high mountain pass located in the Daykundi, central Afghanistan. It has an elevation of (3700) m (12,139) ft. above the sea level.

N. Kotal-e Lataband

It is a high mountain pass located in the Karkacha hills between Butkhak and Seh Baba in the Hindukush Range, in Afghanistan. It has an elevation of (2499) m (8,199) ft. above the sea level.

O. Shahtigh Pass

It is located in Daykundi province, central Afghanistan. It is a high mountain pass. It has an elevation of (3316) m (10,879) ft. above the sea level. It has hairpin curves and dangerous drop-offs.

P. Hawz e Wighnaan

It is a high mountain reservoir located in Takhar province of Afghanistan. it has an elevation of (2600) m (8,530) ft. above the sea level.

Q. Tagab-e Anjuman

It is located in in north-eastern Afghanistan. It is a high mountain pass that has an elevation of (3013) m (9,885) ft. above the sea level.

R. Kotal-e Palpi

It is located in Baghlan province at north-eastern Afghanistan. It is a high mountain pass that has an elevation of (2885) m (9,465) ft. above the sea level.

S. Peiwar Pass

It is located between Afghanistan and Pakistan. It is a high mountain pass that has an elevation of (2615) m (8,579) ft.

T. Kotal-e Ghar Jawin

It is located in Badakhshan province at north-eastern Afghanistan. It is a high mountain pass that has an elevation of (3769) m or (12,365) ft. above the sea level.

U. Wakhjir pass

It is a high mountain pass, located on Afghanistan-China border. It has an elevation of (4836) m or (15,866) ft. above the sea level.

III. CONCLUSION

According to SIGAR report (SIGAR-17-11-AR) and internet sources Afghanistan had improved a lot in transportation sector especially in construction of various categories of highways having different importance's and requirements in the area along with urban roads, tunnels and passes.

- (42,150) KM of roads are built in Afghanistan since (2002).
- (12,350) KM of which are paved and the remaining (29,800) KM are unpaved.
- Approximately (21) Tunnels and passes are constructed and some of them are under construction.

Since Afghanistan is a developing country so a lot of work required in transportation field specially in road system. The government of Afghanistan has to focus on building new roads and beside that the safety of the road is also important factor. There doesn't seems any roadside assistance for instance

guard rails etc. No extra lane for bicyclists. Pedestrians, animals and bicyclists are moving on the same lane, so there is a lot of disorder in vehicular traffic. Most of the rural roads are not paved. Because of these congested roads every year number of fatal and non-fatal accidents occurs. So for reducing accidents we have to focus on safety of roads.

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