

Afghanistan and its Economy

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Abstract-Afghanistan is one of the least developed countries of the world. United States of America and several other nations spent hundreds of billions of dollars during the last 13 years to strengthen her economy and security but due to pervasive corruption the country could not absorb the aid effectively. As long as Afghanistan remains resistant to change, and corruption and lawlessness continue to hurt the country, the badly needed foreign assistance, no matter how colossal, will not make much difference.

In this paper, the author explains the historical, geographical and political factors that have plagued and still hinder economic development of Afghanistan. The paper briefly explains land, population, resources and economic aggregates in addition to the historical events that have caused the progress to remain slow. Some recommendations are made at the end.

Key words-Population, resources, quality of life, gross domestic product, corruption, foreign assistance, development strategies.

I. LAND

Afghanistan is located in Central Asia between Turkmenistan, Uzbekistan, Tajikistan, China, Iran and Pakistan. Although a dry, mountainous and poor country, she has attracted a succession of invaders since the sixth century BC. She has no seaport; being landlocked her transit with outsiders pass through ports bordering her neighbors: Torkham and Spin Boldak with Pakistan, Sher Khan Bandar (formerly known as Qizil Qalah) with Tajikistan, Hairatan with Uzbekistan, Torghundi with Turkmenistan, and Islam Qalah and Zaranj with Iran. The country covers a surface area of 647,500 km² and is the 41st largest country in the world with a size approximately equal to the size of the state of Wisconsin or around 3-4 percent smaller than the state of Texas.

Rugged mountains, some with the highest peaks in the world, cover more than 85% of the land surface. Arable land is only 12% but permanent crops cover merely 0.18% of the total surface area; the rest of the territory consists of deserts with patches of minor forests in the South. In recent years, forest cover has diminished due to community demands for fuel wood and commercial logs and she may have only little natural forest left in a few years [1]. The data in this assessment shows gradual decline of forested areas from 2.0% in 1990 and 1.6% in 2000 to 1.3 percentage in 2005 [2].

Irrigated land covers merely 32,000 km². The country faces serious shortage of renewable water (only 65.33 cu km) [3]. As a result, drought is a common occurrence. FAO has estimated that long-term water availability is about 2800 m³/head /year, enough to irrigate 5 million ha. To achieve this goal it is necessary to acquire large amounts of foreign capital and

expertise. Total developed irrigated area in 1978 was 2.63 Mha, consisting of (i) 1.32 Mha by traditional methods from perennial rivers (ii) 0.98 Mha by traditional methods from ephemeral streams, *kaaraze*, and *arhads*; and (iii) 0.33 Mha by modern systems from perennial rivers. Only 1.44 Mha had sufficient water to support double cropping. Approximately 2.3 million ha or 90 percent of total irrigated area uses traditional schemes built by farmers and operated according to traditional communal customs [4].

II. HISTORICAL BACKGROUND

Afghans held sway in this part of the historical crossroads of Central Asia for some five thousand years. The current borders were delineated relatively recently by an agreement between Russia and Britain in 1907 because of the "great game" rivalry. At that time, Amir Habibullah Khan, who possessed internal authority, had to obey Britain on external matters. Domestic revenue was insufficient to cover government expenditures, and the king needed assistance from outside. Accordingly, he received 400,000 Pounds Sterling annually from Britain. During the British rule that lasted until the Third Anglo-Afghan War in 1919, the country was lacking an organized economy. The entire population might have been 5,000,000 [5]. Virtually every citizen was illiterate. Mosques and religious institutions were providing educational services mostly in religious matters. The first high school, Habibiya, was founded in 1904 in which the majority of the teachers were Indian Moslems. Government established the first state hospital in Kabul in 1913, staffed by Indian attendants and supervised by two Turkish physicians one of whom was Amir's personal doctor.

In 1908 Afghanistan's principal trading partner was India. Major exports consisted of fruits and vegetables, grain and pulse, wool, ghee, tobacco, carpets, rawhide, karakul skin and horses. Major imports included cotton goods, dyes, sugar, tea, iron, knives, scissors, needles and thread, paper, drugs and machinery, largely coming from India [6]. Meanwhile, the trade with Russia increased, largely due to Russia's railway extension to the Afghan borders, the Trans-Caspian and Orenburg-Tashkent lines. The Russians exported chintzes, glassware, sugar, linen, silk, cotton goods, cutlery, paper and fur.

King Amanullah Khan (1892–1960) rose to power after his father, Amir Habibullah, was assassinated on February 20, 1919 in Jalalabad. He installed electricity here and there, and provided formal educational facilities for girls. In the 1920s, several wealthy merchants invested in a handful of small-scale industrial plants to produce soap, leather goods and seed oils for local

consumption. An entrepreneur, Abdul Majid Zabuli established the first private bank (Bank-e-Melli) in 1932. In the 1930's, the government introduced paper money, established a university, expanded school systems, and sent students abroad to attain higher education. Kabul University opened in 1932, the only one in the country until 1963 when the Nangarhar University was inaugurated in Jalal Abad. By all accounts modernization and economic progress came to Afghanistan very late and in very slow paces.

Most Afghans at that time were and still are living in rural areas and were mostly engaged in non-market activities. In 2011, only 23.5% of population lived in urban areas [7]. During the 1940s, the Kabul city began to room some small manufacturing plants that had no coal or wood as fuel. The city became semi-urban with only a couple of paved roads that were completed in the 1950s. The first official economic plan formulated in 1956, gave Afghanistan a sense of direction in terms of economic policy and orientation. The per capita GDP might have been about 5,000 Afghani (\$100 in terms of exchange rate in 1961[8]. Gradual development, primarily with the infusion of foreign assistance, began in the 1960's. After one century of struggle and many difficulties the poverty-ridden Afghanistan finally was in possession of a sort of semi-formal economic system called "*Guided Economy*" under which, mines and large-scale industries would be owned and controlled by the State, and the rest of the economy would run privately. The USA and NATO countries poured hundreds of billions of dollars for her development and security starting in August 2003. She is now moving forward but still very slowly. Unfortunately, reliable data on economic indicators such as national income, GDP, balance of payments, prices, wages, employment, etc. are lacking and this makes it difficult to evaluate macro economic needs and performances of Afghanistan with some degree of accuracy.

III. POLITICAL TURMOILS

An important reason for Afghanistan's backwardness has been continuous political upheavals. King Habibullah was assassinated in 1919 and his heir, King Amanullah was abducted in 1929. King Habibullah Kalakani who replaced King amanullah was assassinated within nine months of reign after whom King Nadir shah sat on the throne who too was assassinated in 1929. After forty-four years of reign King Zahir Shah, Nadir Shah's son, was overthrown by Mr. Daoud in a coup in 1973. In April 1978, leftist military officers overthrew and killed president Daoud and the communist party headed by Mr. Noor Muhammad Taraki assumed power. Soon Islamic traditionalists and ethnic leaders began an armed revolt, and by the summer of 1979, they controlled much of Afghanistan's rural areas. Mr. Taraki was deposed and assassinated in September 1979. His deputy, Mr. Hafizullah Amin, replaced him who failed to suppress the rebellion. On 25 December 1979, Soviet forces entered Afghanistan, took control of Kabul, assassinated Mr. Amin, and installed Mr. Babrak Karmal to power who was the

leader of another faction of the communist party (PDPA). However, rebellion intensified and in May 1986, Dr. Mohammad Najibullah became President in November 1987 by replacing Mr. Karmal. In 1992, fighting intensified further and Mujahidin forces closed in on Kabul and deposed Najibullah. On 24 April 1992, leaders of the Mujahidin forces with the exception of Engineer Gulbuddin Hekmatyar agreed to form a government under Hazrat Sibghatullah Mojaddedi for a term of two months. Afterward, Professor Rabbani was declared President of the Islamic State of Afghanistan in July 1992. Professor Rabbani's term ended when in September 1996 the Taliban took Kabul and hanged Dr. Najibullah. Taliban, in turn, were defeated by the US in November 2001. As a first step, the Afghan Interim Authority was established. On December 20, the Security Council, by resolution 1386 (2001), authorized the establishment of an International Security Assistance Force (ISAF) to help the Authority maintain security in Kabul and its surrounding areas. On December 22 President Rabbani handed power to the new Interim Afghan Administration, established in Bonn and headed by Chairman Hamid Karzai. Professor Rabbani was assassinated on September 20, 2011 in his home. After thirteen years of ruling, Mr. Karzai handed power to the elected president Professor Mohammad Ashraf Ghani on September 29, 2014, who after three and half months of delay that spawned public anxiety formed his cabinet on January 12, 2015 but most of the nominees were rejected by the Lower House of the Parliament. Until today, 4-16-15, the government is lacking a full-fledged cabinet. Public demonstrations have already started in Kabul against the government's inefficiency. As seen above, Afghanistan has been a very violent country and a blood bath for its leaders.

IV. POPULATION

During the reign of Amir Sher Ali Khan (1868-79), government initiated, without result, a program to estimate population for tax purposes. Up to this date, due to the lack of population census, only estimates are available which vary considerably. According to a 1954 preliminary census, the official figure was 12,615,146 [9]. In 1960, The Afghan Ministry of Planning relied on a list of 14,205 villages compiled by the ministry of agriculture, and selected a sample of 526 villages. From the 413 villages that delivered usable information the total population was estimated to be 8 million, compared to the ministry of interior's estimate of 10.4 million in the same year. Adding to this total a crude estimate of 1 million city dwellers and 2.4 million nomads, a total population of 11.4 million inhabitants was assumed for the entire Afghanistan [10].

Following the 1976 rudimentary census the Afghan population was numbered at 16.6 million, but 4 years later, similar research put the population at 15.5 million. In 1979, the total population of Afghanistan was estimated to be 14 million, while 18-20 million has been indicated for 2001 [11]. In 1999, a United Nations sponsored census, carried out by the Taliban, put the population at 23 million. However, CIA reported the

population in July 2000 to be 25,838,797 [12]. The World Bank – in its Afghanistan data profile – showed estimates for the country's total population of 26 to 27 million in 2000 and 2001. The United Nations Office of Drugs and Crime puts Afghan population for the year 2000 at 22.5 million [13] while the United Nations Population Fund gave a figure of 22.7 million for the same year. A number of other population estimates for 2000/2001, including the United Nations and UNDP, place the in-country population at the 21 million levels.

The *Strategy Page* states that there are now 28 million Afghans [14]. The World Bank estimates the population at 31.28 for the year 2014. On the other hand, Dr. Wais Aria stated that Afghan population was 35 million in 2013 [15]. As these data show, there is considerable uncertainty about statistics in Afghanistan. On one hand, no source has compiled systemic data on population, and on the other hand, there is no guarantee that interviewed respondents have indeed disclosed the facts candidly regarding the size of their families. Experts on Afghanistan cannot vouch to the authenticity of released data.

A rough comparison with the State of Texas reveals that Afghan population has been overestimated. Texas has an area of 696,200 km² or 4% larger than Afghanistan. She has a growing population of 25.7 million residents. Possessing enormous natural resources, Texas is a major agricultural state and an industrial giant. It leads all other American states in such categories as oil, cattle, sheep, and cotton. Chemicals, oil refining, food processing, machinery, and transportation equipment are among the major Texas manufacturing industries. Almost 78 percent of Texas area is devoted to farming and ranching according to the US Department of Agriculture. Texas also has very large metropolitan area, such as Houston, with 2,099,451 people, San Antonio, 1,327,407; Dallas, 1,197,816; Austin, 790,390; and Fort Worth, 741,206. Afghan largest cities with the possible exception of Kabul not even being fully urbanized (only 24% urbanization on average), have fewer residents than Texan cities. Texas has a gross state product of \$ 1.332 trillion, the second highest in the U.S., with an average income of \$ 48,259.

According to the World Bank, in 2012, the Gross Domestic Product per capita in Afghanistan was \$687.20 [16]. Afghanistan is considered impoverished and one of the least developed countries in the world. In fact, the Human Development Index rates Afghanistan as the 15th least developed country. Afghanistan, HDI = 0.468, 169th out of 187 countries in 2014 [17]. Life expectancy is 80 years in Texas and less than 45 in Afghanistan. Texas attracts people from all over the world as job, security, accommodations and mobility are significant while Afghanistan, on the contrary, repels people due to criminality, insecurity, weak governance, lack of adequate transportation facilities, lack of drinking water and sanitation facilities, total absence of waste management facilities, shortage of healthy food and health care, severe unemployment, drug addiction, etc. Afghanistan has lost one million people for good in the last thirty years of war. Estimates of combat fatalities range between

700,000 and 1.3 million people. Millions more migrated to other countries. As civil war between various factions continued following the Soviet withdrawal, the number of civilians fleeing the country increased steadily, making Afghanistan the world's worst refugee crisis spot. By 1990, there were 6.3 million civilians in exile -3.3 million in Pakistan and 3 million in Iran [18].

By touring Texas and Afghanistan with keen eyes, one may arrive at the conclusion that Afghanistan population cannot possibly be 20-25 percent greater than Texas population as claimed by many sources. The size of Afghanistan population appears to be arbitrary and over-guessed. Her usable land and meager resources currently in use cannot possibly maintain a population in excess of Texan population at this stage of economic and security development.

During Habibullah Khan's reign Afghanistan was an agricultural economy, a characteristic that she has retained thus far. She had a certain amount of cropland at that time the size and the productivity of which have not changed much ever since. Afghans are still using predominantly primitive tools and equipment in agricultural fields such as crane, spade, shovel, fork, winnowing basket, sieve, wooden plows, beast of burden, etc. The amount of cropland that existed more than a century ago, with a possible little increase, cannot possibly maintain nearly seven times more people now than it did then. It cannot possibly support 20 million people without acute starvation or vast imports of food almost totally financed by gift from donor countries of the West.

Kabul, Afghanistan's capital has become a crowded city but population concentration there does not represent the overall population distribution throughout the country. The claim that Kabul is embracing five million people is sheer exaggeration. For, Kabul (164 square miles) is much smaller and less developed than Phoenix, the capital of the State of Arizona. Phoenix (517 square miles) is the fifth or sixth largest city in the United States of America and is highly developed, industrialized and urbanized. It has a population of around 1.5 million. How could the highly underdeveloped Kabul which is tightly surrounded by mountains and is lacking modern and modest roads, transportation infrastructure, production centers, hospitals, shopping malls and other needed amenities, be over three times more populous than Phoenix? There are not enough means of subsistence, housing and other needed facilities in Kabul to maintain such a large population. One could walk on foot from one end of Kabul city to the other end in just about two hours or so, on the omnipresent potholes, bumpy, dusty or muddy roads. There is only one traffic light in the entire city [19] and no traffic signs and demarcations. Kabul is lacking waste management facilities or enough cemeteries to accommodate five million people where annual death rate exceeds 3%. According to the City Mayor, they have designed Kabul to accommodate 500,000 people only [20].

Labor force in Afghanistan for the year 2012 could have been 7,512,205.25 according to the World Bank [21]. The CIA

supports this figure as well [22]. Civilian labor force is what remains from total population after subtracting persons of ages below 15, persons of ages above 65, full time students, homemakers, institutionalized people and people in the armed forces. Total labor force of Afghanistan meets the International Labor Organization definition of the economically active population and it includes both employed and the unemployed. Women supposedly comprise approximately 15.7 percent of the Afghan labor force [23].

Labor force is a part of the working population, which in turn is the total population less (people of ages between zero and fourteen, and people of ages 65 and over, and institutionalized (hospitalized and incarcerated) persons. As incarcerated and hospitalized people make up a very insignificant portion of Afghan population, they can easily be ignored. According to CIA *World Factbook* around 55-56% of population makes up the working population. Labor participation rate, the ratio of labor force to working population, is around 44% [24]. Labor force is approximately 25% of the total population and the unemployment rate reaches 38% according to the above sources.

The author believes that it is unlikely for any source to breakdown Afghan population by age because Afghans generally do not keep birth records and most of them do not know when they have been born and at what age the deceased ones have died since government does not issue birth certificates. From time to time, identification booklets (tazkera) are issued but implementation has been spotty. During the thirty years of turmoil, most of the records are lost and it is easy to produce forged birth certificates just by bribing the officials. Tazkeras display the year of birth and not the day and the month.

V. RESOURCES

There is a consensus that the natural resources of Afghanistan are in poor shape. Afghanistan is primarily an agricultural economy but badly faced with the paucity of water for irrigation. Some small-scale manufacturers produce cotton and other fabrics, furniture, shoes, fertilizer, vegetable oil, and processed agricultural goods. Afghanistan does not enjoy any comparative advantage in the production of any manufactured goods. Therefore, she is unable to specialize in the manufacturing of any product to be destined to foreign markets except for some rare minerals that she seems to be generously endowed. The country has been known since antiquity for gemstones such as lapis lazuli and emeralds. Based on recent discoveries she may have enormous mineral resources that yet have to be tapped. Except for natural gas, her mineral wealth is virtually undeveloped. There are significant deposits of iron, copper, niobium, cobalt, gold, molybdenum, praseodymium, cerium, lanthanum, neodymium, samarium, gadolinium, asbestos, silver, potash, aluminum, and critical industrial metals like lithium that could eventually transform Afghanistan into one of the rich centers in the world. Minerals that could ultimately exceed \$1

trillion by some claims are widely dispersed throughout the country [25]. Oil fields are found in the north. Her greatest potential for wealth generation consists of bulk quantities of copper and iron ore available close to the Earth's surface. Seven iron and copper mining are Haji Gak, Syadara, and Zarkashan for iron and Aynak, Balkhab, Dushan-Shaida, Kundulan, and Zarkashan for copper. According to forecasts, mining operations would yield about 58 million metric tons of ore annually. Production could approach 1.4 billion metric tons between 2017 and 2040. Minerals from Haji Gak, acclaimed as one of the world's largest iron reserves, account for most of the anticipated freight demand for a proposed southern line. Haji Gak's output may perhaps be four times that of all the other mining areas combined. Afghanistan offers many advantages as a source for minerals to supply the teeming markets of fast-developing South Asia. Almost all of it requires rail transport. Prior to 2011 Afghanistan never had a functioning railroad network. Train ran for a 75 km distance for the first time on Afghanistan's only major railway, between the Uzbek border and the northern city of Mazar-e-Sharif, in 2012 [26]. Although no minerals have been transported yet by the railroad, nevertheless, several hundred thousands of people such as traders and freight operators have benefited from the new railway [27].

VI. QUALITY OF LIFE

The Afghan ppp per capita income is said to be \$1100 [28]. This, however, may be over-stated. According to the Islamic Republic of Afghanistan (2010), in 2007/08, approximately 36% of the population fell below the official poverty line [29] and they were unable to meet their minimum basic needs. A survey found that 2.55 million Afghans run into "high-risk" food-insecurity and are in need of a "safety net". Based on the National Risk and Vulnerability Assessment (NRVA), 54% of the Kuchi population (nomads) was poor in 2007/08. Over half of the population consumed less than 20 percent above the poverty line in 2011 [30]. The average Afghan family living below the poverty line earns about \$10 a month per capita. Two-thirds of the population lives on fewer than 2US dollars a day [31]. Mean per capita calorie intake is approximately 2600 with the lowest 10% of population consume 1700 calories per day [32]. Sources point out that Afghanistan has extremely high levels of underweight (33%) in children [33]. Nearly 30% of Afghan households fail to meet the conventional nutritional benchmark of 2,100 calories per day [34]. Afghan households spend about 60% of their budgets on food. Wheat products contribute approximately 54% to daily caloric intake and 35% to food expenditures. As of 2012, only around 33% of Afghan population has access to electricity, and 70% in Kabul have access to 24hr electricity [35]. On the hour 11:45 Arizona time on 12-24-14, I listened to an interview on the *Aryana TV* channels where various Kabul residents were complaining about the shortage, irregularity and frequent interruption of electric current in their residences. On average they get electricity half of the time during

the week without being sure when to expect.

Lack of sanitation facilities is surmounting since sixty percent of population is deprived of improved sanitation [36]. Hundreds of thousands of people roam around the towns all day along without having access to any kind of toilet. Many men use the dry Kabul River, located in the very center of the town, as bathroom. Women have no place to wash inside the city. Road communications throughout the country are poor, slow and congested. Pack animals are an important means of transport in the interior.

Afghanistan has the second highest rate of under-five mortality in the world, with thousands of children dying every year. The under-five mortality rate (U5MR) is 101 per 1000 live births, the infant mortality rate (IMR) is 73 per 1000 live births and the neonatal mortality rate (NMR) is 36 per 1000 live births. Across Afghanistan, every two hours a woman dies due to pregnancy related causes. Fifty five percent of children under the age of five cannot develop physically or mentally due to chronic nutritional deficiency. Maternal mortality, pregnancy-related deaths remain a leading cause of death (41%) for women in their childbearing years. Under current conditions, a woman has a 1-in-32 chance of dying from pregnancy-related causes during her lifetime [37]. There are only three doctors and five hospital beds per 10,000 people. Most of the hospitals and clinics are in urban areas, meaning that many rural Afghans rarely see a doctor or a hospital [38]. Due to the shortage of health care services, hundreds of patients go to Pakistan for treatment every month. Life expectancy at birth is 44.6 years. Over half of Afghans do not have access to safe drinking water [39].

Afghanistan is the worst air polluted country in the world, where the average levels of polluted particles measured was 334, followed by Iran (320), India (200), Bangladesh, Senegal, Mongolia and Mauritius [40]. During most of the wars in Iraq and Afghanistan, the military and its contractors disposed of garbage and everything else it did not want to ship back to the U.S. There were at least 230 burn pits in Iraq and Afghanistan according to data from the Government Accountability Office and the Department of Defense [41]. Air pollution in Kabul may be hastening the death of thousands of people every year there because the level of sulphur dioxide (SO₂) is very high. According to the US EPA, exposure to NO₂, SO₂ and other particulate matter negatively affects the respiratory system, damages lung tissue, and can cause cancer and premature death. Kabul has turned into a center of old vehicles and the use of substandard fuel is prevalent. Afghanistan imports 5,000-6,000 tons of fuel every day but there is little or no supervision of its quality, according to the government. In the absence of electricity and gas, most people use any fuel they can lay their hands on (plastic, wood, rags, dung) for heating, cooking and other purposes, which adversely affect air quality. Lack of green zones and the loss of trees and forests resulting from recurrent drought and/or widespread deforestation have further exacerbated the situation. Only 5 percent of Kabul's homes have sewerage systems, while most household waste flows straight into open

roadside drains. People drive on unpaved roads that kick up clouds of dust. According to Afghanistan's health ministry, cases involving respiratory problems tripled between 2005 and 2011 to nearly 500,000 [42].

Gallup classifies people as "thriving", "struggling," or "suffering" with steps numbered from zero to 10 based on the Cantril Self-Anchoring Striving Scale. Gallup considers people to be suffering if they rate their current lives a 4 or lower and their lives in five years a 4 or lower. For Afghans the rate stands at 4.3. The majority of Afghans (55%) rate their lives poorly enough to be considered "suffering," the highest percentage Gallup has measured in the world in 2013. While the majority of the Afghan population were suffering, no Afghans rated their lives highly enough to be considered "thriving" in 2013. Additionally, 61% of Afghans have said that now is a bad time to find a job in their local job market, a rate not seen since 2008 [43]. Therefore, a great deal of uncertainty and frustration looms over people's life.

One issue that has been the cause of deep frustration to the Afghan people is the pervasive corruption in all levels. In 2012, Transparency International ranked Afghanistan in a tie with Somalia and North Korea as the most corrupt country in the world [44]. A 2012 Asia Foundation survey found that 70 percent of Afghans view corruption as a major problem in their provincial government and 79 percent in Afghanistan as a whole.

Afghanistan has a poor history of combating corruption. President Karzai appointed a childhood friend to head the Afghan anti-corruption agency. In 2007 it was revealed that the official - Izzatullah Wasifi - spent 3 1/2 years in a U.S. prison for selling \$2 million worth of drugs in the late 1980s [45]. In Afghanistan corruption has become a way of life and almost legal under Mr. Karzai. A report produced by UNODC [46] states: "it is almost impossible to obtain a public service in Afghanistan without greasing a palm: Bribing authorities is part of everyday life. During the past 12 months, one Afghan out of two, in both rural and urban communities, paid at least one kickback to a public official openly and in cash equal to \$160 in a country where GDP per capita is hardly \$900 per year". According to this report, taken together, Afghans paid out \$2.5 billion in bribes over the past 12 months, nearly a quarter of Gross Domestic Product. Around 25% of Afghan citizens had to pay at least one bribe to police and local officials over the past year. Between 10-20% of adults had to pay bribes to judges, prosecutors, doctors and members of the government. A kickback is so commonly sought (and paid) to speed up administrative procedures, that more than a third of the population (38%) thinks that this is the norm. Over half of the Afghans (54%) believe that international organizations and NGOs, the transmission belts of foreign assistance, "are corrupt and are in the country just to get rich". People believe that it is cheaper to bribe a judge than to hire a lawyer. According to an Aid worker, for Afghan women and children, corruption is particularly deadly [47].

Bribery in Afghanistan is so pervasive that in order to withdraw money from your own bank account you need to bribe the cashier; to pay your utility bills or even your tax, you need to bribe the collector or else collection will be refused and you will be subjected to delinquency fines later on. To get a copy of a deed it costs you around \$10,000; to sell your house and convey a deed, it will cost you sometimes \$50,000 in bribe depending on the value of the property. Many people who have had their homes illegally occupied by others need to spend months or years and spend thousands of dollars to reclaim their own property. Sometimes even such attempts end up in failure and the money and time spent fall into the drain. To get a job in government, the applicant must bribe the officers even if he/she happens to be a relative of the head of the organizations. Even people appointed by Mr. Karzai had to bribe administrative personnel who were in charge of implementing President's orders. All elections are rigged so visibly that national and international observers can easily trace but no one caught in cheating faces justice. Vendors must pay bribes in cash to the municipality officials (whose duty is to protect public property) in order to use public roads as a retail portable shop.

The climax reached when the President himself received bribe from the President of another country. The *New York Times* reported that one evening last August, as President Hamid Karzai wrapped up an official visit to Iran his personal plane waited for a late-running passenger, Iran's ambassador to Afghanistan. The ambassador, Feda Hussein Maliki, finally appeared, taking a seat next to Umar Daoudzai, Mr. Karzai's chief of staff and his most trusted confidant. According to an Afghan official on the plane, Mr. Maliki handed Mr. Daoudzai a large plastic bag bulging with packets of euro bills. A second Afghan official confirmed that Mr. Daoudzai carried home a large bag of cash. The bag of money was part of a secret, steady stream of Iranian cash intended to buy the loyalty of Mr. Daoudzai and promote Iran's interests in the presidential palace, according to Afghan and Western officials here. The payments, which officials say total millions of dollars, form an off-the-books fund that Mr. Daoudzai and Mr. Karzai had used to pay Afghan lawmakers, tribal elders and even Taliban commanders to secure their loyalty [48]. There is an additional story. Mr. Karzai invited the Iranian president, Mahmoud Ahmadinejad, to the presidential palace, where Mr. Ahmadinejad gave a virulently anti-American speech. When Mr. Ahmadinejad visited Kabul, he brought two boxes of cash, an Afghan official said. "One box was for Daoudzai personally, the other for the palace", the official said [49]. Mr. Karzai has admitted to receiving millions in cash donations from Iran—in return for an Iranian role in Afghan affairs. Similar charges were also levied against Mr. Karzai for accepting cash and money from Bharat (aka India) [50]. Under president Karzai administration corruption became practically legal and an official duty [51]. Corruption breeds inefficiency, delays, injustice and frustration that diminish welfare and happiness and tarnishes the quality of life. According to *Integrity Watch Afghanistan*, one Afghan in seven paid a bribe in 2010 and the average bribe is equal to one third of the average Afghan salary [52].

VII. GROSS DOMESTIC PRODUCT (GDP)

Despite many problems that encompass the estimation of real GDP, per capita GDP has been used as an index for measuring the standard of living among nations. It is preferable to estimate GDP at purchasing power parity (PPP) exchange rate that is the sum value of all goods and services produced in the country valued at prices prevailing in the United State. However, in Afghanistan the greatest part of domestic output is non-tradable goods and services that cannot lend themselves to a comparison with output in the USA. Thus, for simplicity, the author prefers to look at the nominal per-capita GDP in this paper.

For Afghanistan where reliable data do not exist calculation of GDP is enormously difficulty and unsatisfactory. GDP, as expressed by the equation below, refers to the market value of all final goods and services that a country produces within her borders during a given year.

$$GDP = C + I + G + (X - M)$$

In order to complete the final figure on GDP statisticians need to collect accurate data on personal consumption expenditures on goods and services (C), on gross private domestic investment including changes in inventories (I), on government expenditures on goods and service (G) and on the values of exports (X) and imports (M).

One should estimate C monthly so it can provide an early indication of the course of GDP in the current quarter. C measures the purchase of new goods and services by households and nonprofit institutions serving households who are resident in Afghanistan, and by the Afghan who are traveling or working abroad for one year or less. C includes purchases by households from private business, from government and government enterprises and expenditures financed by employer-paid health insurance and medical care financed through government programs. C also covers residential rent whether residents are rental or owner occupied or whether employers pay the rent on behalf of employees in cash or in kind valued in market prices, including sales and excise taxes.

Personal consumption expenditures are composed of durable goods (having an average useful life of at least 3 years such as jewelries, furnishings, household equipment, vehicles etc.) and nondurable goods (having an average useful life of less than 3 years such as food and beverages, clothing, footwear, fuel, etc.). It also covers services such as utilities, health care, transportation and communication services, recreation services, food services and accommodations (restaurants and hotels), financial services and insurance, and others that cannot be stored or inventoried and are usually consumed at the place and time of purchase, and routine household maintenance, education, net foreign travel and expenditures abroad by Afghan residents.

The calculation of C entails both quantities and prices. Quantities are determined by dividing the current-dollar value of

the component by an appropriate price index. Experienced experts can determine some quantities by extrapolation. There are thousands of domestically produced and imported commodities that enter consumers' expenditures and it is impossible for the Afghan government and or international agencies, given current Afghan capacity, to compile the appropriate data. The three largest consumption items may be housing, transportation and food. How many dwellings are there in Afghanistan in the villages and towns? How many of them are occupied by owners and how many are tenant-occupied and what rent is being approximated? To my knowledge, nobody has ever sought or provided answers to these questions. How much money people spend on transportation. Nobody knows how many vehicles there are, how much money consumers spend on gas, lubrications, tires and parts and accidents and fines, and how much money is involved in non-motorized transportation handled by pack animals that is predominant outside the towns.

Wheat is the staple food constituting perhaps 85 per cent of country's agriculture production and 35 percent of food consumption. However, prices and quantities of meat, fish, fruits, vegetables, sugar, and other food products that are daily consumed have never been collected systematically by any source inside the country. FAO, as an example, has stated that there were 13.378 million poultry in Afghanistan in 2011. Chickens are generally raised in villages most of which are very remote. I wonder how anybody can have access to those dangerous and mostly inaccessible places in order to determine the number of chickens. Some years ago, I discussed the matter with some officials of the Ministry of Planning, they told me that figures on poultry, livestock, trees, and plants are determined on the dining tables by colleagues who make wild guesses. I think that culture has not changed ever since, but if changed, changes have perhaps been for the worse due to pervasive corruption and dishonesty that haunt the Afghan administration.

Gross private domestic investment (I), the other component of the GDP, includes buildings, plants, factories, barns, storage facilities, repair shops, machines, equipment, fixtures, tools, bulldozers, forklifts, trucks, buses, planes, shovels, pitchforks, winnowing baskets spades and any large and small commodities used to produce goods and services. Investment also includes inventories including consumer goods left unsold by the end of the fiscal year. Net investment constitutes a change in the current stock of physical capital. There are thousands of items that make up the stock of private capital. I know of no agency in Afghanistan in charge of collecting data on the stock of physical capital, its depreciation, and annual changes to it. The lack of expertise, technology, financial capital, adequate regulations and proper incentive does not allow Afghanistan to engage in this type of activity. It is the author's belief that data released on this account do not appear to be authentic.

Information on (G) is presumably less distorted since it comes out of official books that are subject to annual audit even though transparency is missing. It is believed that only a handful of the presumed 352000 soldiers and police force that NATO is

training in Afghanistan shows up for duty and the rest are, nonetheless, being paid while absent. IRS is attempting to find out what has happened to nearly \$45 billion spent on military personnel and logistics still unaccounted for.

Data on exports and imports too are subject to challenge. Large quantities of Afghan products avoid customhouses and are smuggled to Pakistan and Iran. At the same time, some imported products, particularly handicrafts, coming from Pakistan are exported under Afghani labels since some Afghan products, such as hand-made rugs and carpets, enjoy good reputation and premium over similar goods made in Pakistan. Many export items are subject to tax collected at the customhouses. Thus, exporters have the incentive to evade the tax by avoiding the custom channels as often as they can, a phenomenon that leads to underreporting of the Afghan exports. Data on imports are likewise distorted. Many items are taxed based on imaginary prices fixed by the government, prices that do not represent the correct market values. Even if tariff charges are calculated using certified invoices, under-invoicing frequently occurs. This is especially true if invoices are prepared in Asian countries, notably Pakistan, Iran, India, Thailand and Hong Kong. Briefly, following the expenditure approach, the value of Afghan GDP does not reflect the true picture.

Alternatively, one needs to collect data on employee compensations (including wages, salaries and bonuses), corporate profit and incomes of unincorporated enterprises (such as sole proprietorships, partnerships, farmers and self-employees), rental incomes, net interest, dividends, capital gain, gifts, inheritance, etc. Additionally, one needs information on depreciation on capital goods, indirect business taxes (such as property tax, land tax, livestock tax, sales tax, excise tax and tariffs), and on government subsidies and vouchers.

If one follows the production approach, the required information must come from agriculture, horticulture, animal husbandry, fisheries, poultry, hunting, mining, manufacturing, utilities, and transportation and construction sectors. Information must also come from the service sector including financial, insurance, retailing, health, education, recreation, repairs, hotels, restaurants, clubs, beauty parlors, barber shops, handicrafts, potteries, weavers, carpet makers, porters, tailors, cobblers, butchers, vendors, shopkeepers, bricklayers, carpenters, masons, lumber producers, Mullahs, shepherds, publishers, book stores, and all types of other professional service providers. One should only sum up values added whereas the values of used products, and goods and services produced via illegal activities, and the value of non-marketed goods and services produced by households for their own use and consumption excepting their value added, should be ignored. Moreover, data on prices of thousands of other items produced or consumed and the proper weights attached to them ought to be compiled.

To meet the above requirements and many more, a gigantic and efficient machinery including technical facilities and trained and devoted personnel are needed which is beyond Afghanistan's current capacity to furnish. Even international organizations such

as World Bank, IMF, UNDP, OECD, WHO, and others which must necessarily rely on unqualified Afghan personnel for assistance find it exceedingly hard to collect genuine information in a country where laws and regulations are not there to compel sound, reliable, honest and transparent book keeping. Most people are illiterate in addition to being out of government's reach. Transactions are almost without exception carried in cash without recorded receipt. Wide scale corruption and people's general tendency to distort the facts is a way of life in Afghanistan and this make it impossible for any organization to collect data with some degree of accuracy.

The inclusion in the GDP of the value of opium production and export, a very large and a banned item, overestimates agricultural production. For example, information on Afghan exports retrieved from the *World Factbook* names major export items as opium, fruits and nuts, handwoven carpets, wool, cotton, hides and pelts, and gemstone [53]. Opium accounted for more than half of Afghanistan's GDP (52%) in 2007, with a sale proceed of \$2.7 billion, says United Nations Office on Drugs and Crime (UNODC) [54]. Since its production and export are not legal, opium should not be included in the GDP, but unfortunately, it is.

For these and many other reasons, estimates of GDP like the estimates of other vital information vary from source to source. For example, according to Afghan Ministry of Finance GDP was \$8.5 billion in 2007 [55]. According the Library of Congress publications, Afghan GDP amounted to \$8.8 billion in 2007 [56]. CIA valued Afghan GDP at \$12.85 billion for 2008 [57] and World Bank, \$10.19 billion for the same year [58]. US Department of State has attached a value of \$8.8 billion to the 2008 GDP of Afghanistan. Which of these sources can be considered reliable, is a question without answer?

Theoretically speaking, one may go to the Equation of Exchange for an estimate of the value of GDP given values of the involved parameters:

$$MV = PQ$$

Where, M stands for the supply of money- usually M2 - , V stands for the velocity of circulation or the average number of times an Afghani changes hand during one year, P stands for the price level and Q represents real GDP whereas the product PQ equals nominal GDP. The World Bank's data suggest that in 2013 the value of M2 in Afghanistan was equivalent to 33% of the GDP, which means that the value of V was three [59]. CIA estimated the value of M2 to have been \$6.499 billion in 2012 [60]. Between 2011 and 2012, the change in M2 is estimated to be 2.3%. If we assume the same percentage increase in M2 between 2012 and 2013, the supply of money in 2013 would have been \$6.648 billion in which case GDP was equal to \$19.945 billion or approximately 20 billion dollars, a figure that is consistent with \$20.3 billion released by the World Bank for the same year [61].

The per capita GDP in Afghanistan has risen from 201 dollars in 2002 to 528 dollars in 2010. However, Ms. Josie

Bassinette (the acting country director for the World Bank), has said that the figure conceals pockets of worse poverty because aid money has not been evenly spread: Money has poured into unstable areas while bypassing more peaceful ones [62]. Even if the figures are well founded, the change between the two periods appears to be mostly due to rising prices and not rising production. As an example, government's own statistics show that the GDP per capita (Constant Prices based on 2000, National Currency) for Afghanistan in year 2013 was AFA 13,595.32, while GDP per capita (Current Prices, National Currency) was AFA 33,451.26 [63]. Inflationary rate in 2013 was perhaps around 7-8%, comparable to the rate of inflation in Pakistan whose economy dominates the Afghan economy [64]. The above figures on GDP per head stated in Afghani units are equivalent to 240 and 589 US dollars respectively. Major world sources have released comparable figures for Afghanistan GDP per capita for the year 2013: IMF (\$678), World Bank (\$678), CIA (\$700) and UN (683) for 2012 [65]. The government of Afghanistan and major international organizations ordinarily fail to agree with one another regarding the size of the population and the volume of GDP in Afghanistan.

Estimation of per capita GDP requires knowledge of both GDP and population, a knowledge that Afghan government is too feeble to furnish. According to HEME Fund Worldwide (Housing. Education. Medical. Employment), average earning of adult males might have been about \$30 a month in 2013 [66], or \$360 per year for those who earn honest and legal income, not like defense contractors, drug dealers, corrupt government officials and smugglers who receive huge bribes and illegal kickbacks. Professor Noorzoy, an expert on Afghanistan, states, "What relevance has per capita income measurement in an economy where there is 40-65% unemployment in different parts of the country and the unemployed workers cannot find jobs at \$2 per day" [67]. Mr. Halim, another expert, opines, "the daily wage is about \$1.5 to 2.0 for labors, if they could find work to do; but many of them pass several days without" [68]. Office of the US Trade representative has pointed out to a measure of the gender disparity in Afghanistan by the comparison of the female-male GDP based on PPP (Purchasing Power Parity) which is estimated at \$402 for Afghan women and \$1,182 for men (2002) [69]. If the same ratio of 2.95 to one applies in 2013, then in 2013 a women on average would earn approximately \$122 per year based on \$30 per month for male worker. On the other hand, Afghan labor force was composed of 15.7 percent women and 84.3% men in 2012 [70]. CIA has earmarked 7.512 million to be the size of the entire labor force in 2013 [71]. From the above figures, one can deduce that income per employee would be \$323 in 2012 and a little more for 2013. Since labor force is the sum of employed and unemployed persons, following Heritage Foundation's release that the unemployment rate in Afghanistan was 35% in 2013 [72], the earning of an average Afghan in the 2013 labor force would be \$210, a figure comparable to per capita GDP of 2002 as claimed by Yoshikazu Yamada. Yet, Aziz Shams, spokesperson of the Ministry of Finance, claimed that by 2009, the average income of Afghan workers has jumped to \$426

a year from \$70 since 2004. By the same token MS Jessica Donati has written that “Nasir earns over three times the national average wage of around \$650 a year, thanks largely to U.S. money that covered most of the cost of the concrete trellises on which his grapes grow near Kabul” [73]. Following Mr. Tanseem, average pay for an Afghan Laborer is around \$376 a year, based on 2007 GDP [74]. The above figures, however, ignore the fact that 35% of labor force is unemployed with no money wage earned at all. If we take the average of these figures and adjust them for the percentage of unemployed people, the average yearly wage of men in the Afghan labor force may be around \$250 and by 2013, this could have reached \$315 due to an average of 8% annual inflation. In 2010, the daily wage of a female worker was 48 cents [75] that could have reached a level of 61 cents adjusted by the same rate of inflation. According to National Risk and Vulnerability Assessment (NRVA) 2003, wage ratios (women/men) were 51% for planting, 61% for harvesting, and 50% for other farm work. In the case of non-farm occupations, the wages paid to women for making handicrafts were only 41% of men’s wage, and 53% for weaving. A woman gathering wood earned only 53% of a man’s pay for similar work. NRVA in 2005 found that 4% of households in Afghanistan participated in cash for work. Of these, 3% were women, and 4% were children [76].

While there is no consensus regarding Afghanistan’s per capita GDP, the latest figure available points to \$964 released by *Statistica* [77] and it is equal to \$2.60 per day. This is equivalent to 2% of the per capita GDP of the United States of America [78]. Based on the GDP figure derived by the use of the Equation of Exchange, and the GDP per capita based on *Statistica*, the size of population may be around 20 million as suggested by the author on page 6 above. Afghans are in dire need to improve their living standard and they, therefore, need a big push to move forward.

VIII. A RUDIMENTARY MODEL

Let us assume

- a- GDP, (Y_t), at any given time (t) is partially consume (C) and partially invested (I)

$$Y_t = C_t + I_t$$

- b- The accelerator principle is valid and therefore investment is linked to the change in GDP

$$I_t = \beta [Y_t - Y_{t-1}] = \beta (dy/dt)$$

Where, β stands for the incremental capital-output ratio.

- c- In the long-run a constant proportionality exists between the aggregate consumption and the level of GDP:

$$C_t = \alpha Y_t$$

- d- Population (N) grows at a constant rate (γ)

$$N_t = N_0 e^{\gamma t}$$

- e- The per capital GDP (y) can be traced by combining the above equations:

$$y_t = y_0 \exp\left[\frac{1-\alpha}{\beta} - \gamma\right]t$$

For Afghanistan, values of the coefficients could be as follow:

$\alpha = 0.92$ [79], meaning that out of each extra dollar earned 92 cents will be spent on consumption.

$\beta = 3$ [80], implying that \$3 worth of capital investment is necessary to generate \$1 of extra production.

$\gamma = 2.29$ [81], indicating that population will double within 30 years *citrus paribus*.

Given these values, per capita GDP will grow at a rate of less than 0.4% per year. If nothing else changes, it will take Afghanistan 175 years to double her current per capita GDP. A faster growth rate requires a higher saving ratio to accommodate a higher level of investment in more efficient activities. A decrease in population growth rate also will lead to higher per capita GDP.

Theoretically, population growth is a virtue because increased population breeds entrepreneurial talents, scientific discovery and increased labor force. In Afghanistan, given her very high rate of unemployment, increased population opens more mouths to feed which consequently reduces the quantity of saving needed to finance capital formation. Moreover, in viewing Afghanistan’s cultural and religious beliefs and practices, it is virtually impossible to check population growth by family planning and other modern devices. Population growth is better to be matched by improved labor productivity through human investment, physical capital production, better technology, and enhanced management skill.

Investment as the engine of growth is usually financed by saving. In Afghanistan, national saving is negative since government consistently runs huge budget deficit that exceeds private saving. To change the situation by cutting consumption is not the panacea. For one thing, the per capita income is very low and millions of people live below the poverty line. The income of large number of people is not sufficient even to maintain a subsistence level of living for them as witnessed by their low daily calorie intake. For another thing, the rapid movement of population from rural to urban areas changes the pattern, composition and level of consumption. Moreover, growing international openness and modernization increase consumption as many people want to emulate the behavior of the well-to-do foreign consumers. This phenomenon is reflected by the growing trade deficit that Afghanistan is facing. In 2012, Afghanistan exported 1,551,831,487 Afs worth of goods and services, and

imported 7,115,181,197 Afs worth of goods and services, an amount 4.6 times the proceeds from exports [82].

Foreign capital inflow has been the major source of expenditures in Afghanistan particularly during the last decade. Afghanistan government has borrowed heavily from Russia and Japan. In 2010, foreign aid constituted 71% of GDP [83]. According to the World Bank, an estimated 97 percent of Afghanistan's roughly \$15.7 billion gross domestic product comes from international military and development aid and from the money spent by foreign troops. The economy has already begun to contract as troops have mostly left Afghanistan. The future growth will be even slower, especially in urban areas and areas of conflict [84]. The World Bank, in a report, said Afghanistan could face a \$7 billion deficit in its budget annually through 2021 [85]. Many countries notably Iran, India, Pakistan, China, Russia, Saudi Arabia, Qatar, UAE and particularly the USA have been pouring money to develop schools, hospitals, roads, bridges, railways, power as well as the agricultural, telecommunication and mineral sectors. During the post-Taliban era nearly a trillion dollars of military and developmental aid has been poured into Afghanistan. The United States of America alone has spent \$557 billion on Afghanistan between 2002 and 2012 [86]. Unfortunately, Afghanistan has not been able to absorb the foreign aid effectively. Aid money instead of being properly invested inside the country has usually been flowing out and invested elsewhere. Government has put a cap of \$20,000 of cash transfer abroad, but this is totally ignored by wealthy people. Michael Georgy and Hamid Shalizi have indicated that wealthy Afghans are carrying about \$8 billion -- almost double the state budget -- in suitcases out of the country each year, an amount likely to rise as the exit of foreign troops nears completion [87].

Foreign direct investment (FDI) if instituted will partially solve the problem of capital outflow. In addition, FDI allows the transfer of technology that cannot take place through financial investments or trade in goods and services alone. FDI can also promote competition in the domestic input market. FDI will provide training and skill to Afghan employees in the course of operating the new businesses. Tax on profits generated by FDI contributes to government budget, which now suffers from deep deficits. To attract FDI government should focus on improving the investment climate. Dr. Ghani visits Arab countries in an effort to attract foreign investment but the growing threat from Taliban in the face of government's inability to cope with the situation reduces the likelihood of foreign direct investment take place in quantity needed.

Since the national saving in Afghanistan is negative, foreign government aid in cash is the only hope for the country to save it from failure. Foreign aid and investment as a ratio of Afghan GDP (f) must supplement the saving ratio (s) to accelerate the rise of per capita GDP:

$$y_t = y_0 \exp \left[\frac{s+f}{\beta} - \gamma \right] t$$

Where, (s) is equal to $(1 - \alpha)$.

Everything else constant, if domestic saving is supplemented by foreign aid (f) in cash equal to 10% of the Afghan GDP, (y) will increase by 3% per annum. If (f) is equivalent to 20% of the GDP, (y) will increase by 6.4% annually, and if (f) is equal to 30% of the GDP, (y) will increase by 10.4% per year. This, being nominal per capita GDP, if adjusted for inflation, a constant rate of 7.4% per annum, per capita GDP in real terms will rise by 3% per year. This way, it will take nearly a quarter of a century for the standard of living of Afghans to double. It seems that Afghanistan remains perpetually and heavily dependent on foreign assistance. The situation will improve more rapidly if, in addition to continual foreign monetary assistance, the government adopts certain strategies as summarized below.

IX. STRATEGIES

1) The major first step for Afghanistan is to build a sound data pool without which assessment, prediction and policy formulation will remain arbitrary. Data released even by international agencies display inconsistencies. For example, her per capita GDP for 2013 was 424.37 USD according to World Bank [88] and her GDP for the same year was \$20.72 billion [89]. Per capita GDP being the ratio of GDP to population, it follows that on the basis of the World Bank data Afghan population would be about 49 million, a figure too large to be perceivable.

2) More attention is required to agricultural sector since the value of (β) is lower in that sector than in manufacturing, professional service and mining activities. Improved agriculture offers more and better nutrition, and more export. Taiwan utilized agriculture to stimulate job creation and domestic demand; she did benefit from this strategy. Moreover, government needs to introduce improved distribution and marketing systems that can bridge the gap between rural farmers and urban or overseas markets.

3) There are millions of self-employed Afghans not only in towns but in villages as well. Policy should focus on access to technology, training, credit, marketing and distribution channels, especially for women, and should promote small-scale enterprises in the rural areas. Japan, China, and many other nations followed such a policy with noticeable success.

4) The service sector is expanding rapidly in Afghanistan accounting for half of the economy at present, but many of the services are not productive enough. For example, transportation, particularly in Kabul, creates negative externality and deadweight loss to the society since marginal social cost exceeds marginal private cost because of hazardous pollution, delays, stress and anxiety and health issues to the public. Ahmad Azam has stated, "Traffic in Kabul is like no other in the world; it is not that they drive crazy, it is just that is so crowded there is no room to drive. He says, "You will be in bumper-to-bumper traffic all day" [90]. Kabul mayor's office estimates that there are 600,000 vehicles vying for the right of

way on a network of narrow streets built to accommodate only 30,000". "There are thousands of cars, trucks, vans, motorcycles and even bicycles, lined up in vehicular purgatory after falling afoul of the Kabul traffic police. Things that have landed cars in the slammer: illegal left turns, parking violations, involvement in fender-benders and, perhaps most egregious, failure to pay a bribe". "I've been waiting two months to get my van back," said Sayed Wahid, whose quest to reclaim it, after it was impounded for an expired international permit, propelled him on an exhausting odyssey through no fewer than six different government agencies" [91]. Imagine if your shop or your factory were shut down for two months for no reason, what would be the extent of financial and mental damage to bear? The best policy appears to be a complete ban in automobile import for a while in addition to employing more efficient and determined traffic personnel.

5) Technology should be borrowed in the areas of export processing, export promotion, export insurance, warehouse receipt, quality standards, and tourism.

6) Corruption is rampant and pervasive causing nearly a quarter of GDP to be lost due to delays, disputes and wastes. Government administration is overly inflated and is in dire need of downsizing. More government personnel, using public offices for private gains, actually means more grabbing and extorting hands aimed at people's pockets. Educating people to learn more about their legal rights is one remedy. People should know that government officials are their servants, not their bosses. An additional option may be to place minute cameras in the offices without informing the officers, and to punish the culprits seriously and expeditiously. An additional method may be to assign university students, who are generally uncorrupt and are eager to help their country, to spend time regularly in government offices as observers and watch the daily activities of the petty officials. For this they should be awarded academic credit. Setting people's committed made up of honest people and giving them the power to make citizen arrest and weed out the culprits is an additional corrective measure. Government officials are mostly appointed based more on nepotism and less on merit. Standardized formula and criteria should be established related to appointment, dismissal, promotion, retirement, transfer, discipline and remuneration of government employees. There are too many generals in the army and too many chiefs in the police force. There are too many ministers, deputy ministers department president and general directors, all political appointees. The number must be scaled down to improve transparency, efficiency and accountability. As long as there is political will on the part of the leaders in the government, corruption can be eradicated substantially.

7) There are thousands of educated and sympathetic Afghans who live in the Western countries and are eager to join the Afghan labor force voluntarily only if government furnishes modest accommodations and safety for their temporary stay. This is a colossal potential wealth that Afghanistan is endowed with and should be taken advantage of. Government should promote

new institutions, programs and systems to encourage a national climate of open-mindedness to foreign professional ideas and success stories. Traditionally, Afghans resist changes. Large-scale effort is needed to change this attitude and to help make people understand the merits of profit, rent seeking, social interest and self-interest within defined limits.

8) Afghans need relatively more vocational education and less general education. General education mostly teach people how to read and write and solve basic mathematical questions. Secondary general education does not help the student to add to production as much as vocational training does. Labor productivity has been increasing in East Asia by 10 per cent a year, half of which is attributable to investment in vocational education and technical skill development. Higher education should be increasingly reoriented to impart the knowledge and attitudes needed to promote self-employment and entrepreneurship rather than salaried employment in the public sector.

9) Restricting the outflow of capital from Afghanistan by decree does not necessarily prevent capital flight. Proper incentive is needed to encourage wealth to stay within the country. Better banking facilities, deposit insurance and efforts to restore confidence in the government are essential in this regard. Government must make efforts to conduct stable, consistent, predictable and transparent monetary policies. Experienced bankers or economists who are sufficiently familiar with the Afghan economy and the operation of IMF and World Bank and other international financial institutions will be able to reform the banking system in Afghanistan. Government should look for such qualified individuals to head the Central Bank and other state banks instead of individuals whose appointments are based on politics.

10) Afghanistan is believed to possess about one trillion dollars worth of attractive mineral deposits according to certain estimates. Mineral deposits should be tapped more rapidly by creating proper infrastructure for mining, transporting and processing. China as a major partner to Afghanistan has invested in mineral exploitation. For example, Chinese companies ZTE and Huawei collaborating with the Afghan government have implemented Afghanistan's digital telephone switches. In addition, the China Metallurgical Group Corporation won a \$3 billion bid to develop the Aynak copper deposits. This project is the largest foreign direct investment in Afghanistan's history. China also intends to build a coal-fired electric plant, and to construct a railway line that connects the Pakistani port of Gwadar with Aynak and even with Tajikistan [92]. Other countries should be encouraged to take similar steps.

11) Government should make effort to raise the level of resource management, and should hold accountable those whose actions damage natural resources. Currently, Afghanistan does not have an agency with overall responsibility to protect its natural resources.

12) Afghanistan's tariff structure needs drastic revision. The

one currently in use is more import-oriented and less production-oriented. Tariff rates should be determined with reference to effective rate of protection (ERP). Accordingly, tariffs on inputs embodied in the production of import-substituting goods should be eliminated, and on luxuries should be raised. It is time for the government to institute an independent Tariff Commission in charge of inquiry procedure and systematic tariff revision.

In conclusion, it must be emphasized that at present the number one enemy to the Afghan economy that impedes progress is corruption. Eradication of corruption should be assigned priority. It has been due to corruption that billions of dollars of foreign aid during the last decade have been wasted. The Afghan economy cannot develop without foreign assistance. However, no amount of foreign aid and investment and transfer of technology will quench Afghanistan's economic thirst unless corruption is rapidly removed by improved laws and courts and honest and efficient administrators in charge of implementing the laws. Protection of private property, right incentives and timely implementation of laws aimed at promoting economic freedom are desperately needed in order for Afghanistan to attract foreign assistance and to get out of the current doldrums.

REFERENCES

- [1] "Global Forest Resource Assessment 2005", FAO, <http://www.fao.org/forestry/site/32179/en>.
- [2] "Afghanistan, Environment and Energy", UNDP -referring to Global Forest Resource Assessment 2005, FAO, <http://www.fao.org/forestry/site/32179/en>. The data in this assessment shows gradual decline of forested areas from 2.0% (1990), 1.6% (2000) and 1.3% (2005).
- [3] South East Asia: "Afghanistan, Geography, Total renewable water resources", CIA, the World Factbook, 1997; (last updated on October 28, 2009).
- [4] "Afghanistan Natural Resources and Agricultural Sector Comprehensive Needs Assessment", International Trade Administration, Final Draft, July 2002, pp 18.
- [5] 5- "List of Countries by population in 1907", Wikipedia, updated, May 25, 2012.
- [6] Rameen Moshref, *The Life and Times of Amir Habibullah Khan*, Afghanistan Online, www.afghan-web.com.
- [7] "Afghanistan, Urban Population", Mundi Index, www.indexmundi.com/...ts/afghanistan/urban-population. Also, see: South East Asia, "Afghanistan, People and Society", CIA, The World Factbook, Page last updated on June 24, 2014.
- [8] "Afghanistan, GDP per capita", Mundi Index, www.indexmundi.com/...acts/afghanistan/gap-per-capita
- [9] *History of Afghanistan 1945-64*, World History at KMLA, and This page is part of World History at KMLA. First posted, June 6, 2002. Last revised, April 14, 2007. <http://www.zum.de/whkmla/region/centrasia/afg19451964.html>.
- [10] Ministry of Planning, Kabul, Afghanistan, 1964.
- [11] "Study of the Socio-economic Impact of Mine Action in Afghanistan (SIMAA)", Revised Draft Report June 2001. <http://reliefweb.int/sites/reliefweb.int/files/resources/626744F84AC79DC7C1256C1C005BBDA8-m>
- [12] "Afghanistan": Facts, The Heritage Foundation, September 17, 2001, <http://www.heritage.org/research/reports/2001/09/afghanistan-facts-and-figures>
- [13] *The Opium Economy in Afghanistan*, United Nations Office of Drugs and Crime, New York, 2003, pp 147.
- [14] "Afghanistan: The Land Of Brawn And Bravado", - *Strategy Page*, September 23, 2014. www.strategypage.com/...afghan/articles/20140923.aspx
- [15] Aria Wais, "Global Mental Health, Inside Stories", , *NPG*, Kabul, Afghanistan , August 12, 2013. www.nationellapsykoterapigruppen.se/...obal-mental..
- [16] "Population of Afghanistan 2015", *World Population Statistics*, December 5, 2014.
- [17] "Afghanistan, List of countries by Human Development Index", Wikipedia, the free encyclopedia, July 24, 2014. en.wikipedia.org/...iki/List_of_countries_by_Human.
- [18] 18- *Afghanistan & the United Nations*, The 1990's, The UN. <http://www.un.org/News/dh/latest/afghan/un-afghan-history.shtml>.
- [19] 19- Hassibullah Harris Eltezam, ISAF, Kabul, Afghanistan, 2014.
- [20] 20- Hafizullah Safi, *Vehicles Traffic Problems In Kabul Afghanistan*, Kabul, Afghanistan, May 2011. Research Unit, Afghanistan Institute Of Rural Development, MRRD.
- [21] "Afghanistan, Labor Force", World Bank. Also, see "Labor force - total in Afghanistan", Trading Economics, 2014.
- [22] Afghanistan Labor Force, Labor force, CIA, *World Factbook* , Index Mundi, - August 23, 2014.
- [23] "Deputy Assistant U.S. Trade Representative Mara Burr Visits Kabul to Promote Women's Entrepreneurship" Office of the United States Trade Representative., 6-17-2013.
- [24] "Index of Economic Freedom, Afghanistan", Quick Facts, The Heritage Foundation, 2014. www.heritage.org/index/country/afghanistan
- [25] Richard Byrne Reilly, "The future of Silicon Valley may lie in the mountains of Afghanistan", *VB News*, March 20, 2014 9:15 AM.
- [26] Lawrence J. Pleis, Richard Lliteras, David A. Wood, Matthew D. Bain, and Steven J. Hendrickson, "The Afghanistan National Railway: A Plan of Opportunity", *JFQ* 75, September 30, 2014, National Defense University Press.
- [27] "Building Afghanistan's New Railway as Lifesaving Link", Asian Development Bank, 6 May 2014.
- [28] Southeast Asia, "Afghanistan, Economy", the *World Factbook*, CIA, June 24, 2014. <https://www.cia.gov/library/publications/the-world-factbook/geos/af>.
- [29] Anna D'Souza and Dean Joliffe, "Food Insecurity in Vulnerable Populations: Coping with Food Price Shocks in Afghanistan", *American Journal of Agriculture Economics*, Oxford Journals Volume 96, Issue 3 Pp. 790-812.
- [30] "Poverty Reduction and, Economic Management, South Asia Region", The World Bank, October 2011.
- [31] "Afghanistan IP: Trademarks, Patents, Industrial Designs", *Inventa International*, 2014, inventa.com/afghanistan.
- [32] Anna D'Souza, Dean Joliffe, "Coping with Food Price Shocks in Afghanistan", World Bank, ZEF-IFPRI Workshop on Food Price Volatility and Food Security, July 2014.
- [33] "Afghanistan, Statistics", UNICEF, December 18, 2013. www.unicef.org/...country/afghanistan_statistics.html
- [34] "Afghanistan National Development Strategy", *Scribd*, (2008-2013).

- [35] "Energy in Afghanistan", Wikipedia, the Free Encyclopedia, This page was last modified on November 20, 2014.. en.wikipedia.org/wiki/Energy_in_Afghanistan
- [36] "Afghanistan among 23 Least Developed Countries", *RAWA News*, November 8, 2010
- [37] "Health and Nutrition in Afghanistan", UNICEF. www.unicef.org/...ghanistan/health_nutrition_2179.htm
- [38] "Afghanistan: The Land Of Brawn And Bravado", *Strategy Page*, September 23, 2014.
- [39] "Afghanistan climbs up Human Development Index", *IRIN*, In Brief: Kabul, November 8, 2010. <http://www.irinnews.org/report/91015/in-brief-afghanistan-climbs-up-human-development-index>
- [40] Itay Gal, "Israel ranks 12th in air pollution" - Israel Culture, Health and Science, *ynet news*. Com. WHO report 5-11-14.
- [41] Dan Sagalyn, "The burn pits of Iraq and Afghanistan", *PBS NEWSHOUR*, at 6:05, 11-17-14.
- [42] Laura Lynch, "In Kabul, Death Toll from Dirty Air Rivals That of War", *Public Radio International (PRI)*, April 23, 2012
- [43] Mohammad Younis, "Majority of Afghans Suffering in 2013", *Gallup*, February 19, 2014.
- [44] "A Strategic Plan and Mechanisms to Track Progress are needed in Fighting Corruption in Afghanistan", Special Inspector General for Afghanistan Reconstruction, SIGAR, and U.S. Anti-corruption Efforts, September 11, 2013.
- [45] General John R. Allen, USMC, "Corruption in Afghanistan, Corruption is the existential strategic threat to Afghanistan", *Afghan War News*, General Information.
- [46] "Corruption in Afghanistan, bribery as reported by the victims", UNODC, United Nations Office on Drugs and Crime, January 2010.
- [47] Matthew Rodieck, "Corruption in Afghanistan: An Aid Worker's Experience", *the New York Times*, October 7, 2010.
- [48] *The New York Times*, October 25, 2010. Several international sources such as *Wall Street Journal*, *Irish times*, *Gulf News*, *The Daily Mail*, *Yahoo Daily News*, *The Telegraph India*, *Mumbai Mirror*, *The Hindu*, *The Guardian*, *The Examiner*, *Seattle Times*, *Deccan Herald* and many more sources have reported this scandal.
- [49] Dexter Filkins, "Iran is said to give Karzai Aide Cash by the Bagful", *New York Times*: October 23, 2010.
- [50] "What did Iran get in return for giving Karzai bags of cash?" *Times of Kabul*, October 25, 2010?
- [51] Zabioullah A. Eltezam, "Global Scarcity – A Challenge to Technology", *GSTF Journal of Agricultural Engineering (JAE)* Vol.1.No.1, February 2014.
- [52] Srirak Plipat, "Corruption Perceptions Index 2012 demands a new tack in Afghanistan", *Transparency International*, 3 December 2012, blog.transparency.org/...03/corruption-perceptions
- [53] "Economy of Afghanistan, National Accounts", Wikipedia, the Free Encyclopedia, This page was last modified on December 23, 2014. en.wikipedia.org/wiki/Economy_of_Afghanistan.
- [54] "Opium production in Afghanistan", Wikipedia, the Free Encyclopedia, his page was last modified on 7 January 2015. en.wikipedia.org/...i/Opium_Production_in_Afghanistan.
- [55] Morten Sigsgaard, "Education and Fragility in Afghanistan", *International Institute for Educational Planning (IIEP)*, 2009, pp 21.
- [56] "Doing Business in Afghanistan: A Country Commercial Guide for U.S. Companies", US Commercial Service, 12-2-2007, pp 2; trade.gov/static/afghanistan_ccg_2007.pdf . Also, see "Country Profile: Afghanistan", Library of Congress – Federal Research Division, August 2008, pp 9.
- [57] "Afghanistan Economy 2009", CIA, *World Factbook*, 10 June 2009. www.geographic.org/...2009/afghanistan/
- [58] "Afghanistan GDP | 1960-2014", Trading Economics. <http://www.tradingeconomics.com/afghanistan/gdp>, reported by the World Bank, last refreshed on Wednesday, December 24, 2014.
- [59] "Money and quasi money (M2) as % of GDP", Data, The World Bank. <http://data.worldbank.org/indicator/FM.LBL.MQMY.GD.ZS>
- [60] "South East Asia: Afghanistan", CIA, the *World Factbook*, June 24, 2014. <https://www.cia.gov/library/publications/the-world-factbook/geos/af.html>
- [61] "Afghanistan", Data, the World Bank. data.worldbank.org/country/afghanistan
- [62] ALISSA J. RUBIN, "World Bank Issues Alert on Afghanistan Economy", *the New York Times, Asia Pacific*, November 22, 2011. Also, Yoshikazu Yamada, "Reconstruction and Development in Afghanistan" –The Road to Self-Reliance as Witnessed from the Trenches, Japan International Cooperation Agency (JICA), July 3, 2012.
- [63] "Economic Indicators for Afghanistan 2013", *Economy Watch*, Afghanistan (Islamic Republic of Afghanistan) Economic Statistics and Indicators, Date of Last Update: 6 May 2013.
- [64] "Inflation, consumer prices (annual %)", The World Bank, <http://data.worldbank.org/indicator/FP.CPI.TOTL.ZG>
- [65] "List of Countries by GDP (nominal) per capita", Wikipedia, the Free Encyclopedia, 4 January, 2015. [http://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(PPP\)_per_capita](http://en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP)_per_capita) ..
- [66] "Help Afghanistan", HEME Fund Worldwide (Housing-Education-Medical Employment), August 7, 2013. <http://www.hemefund.org/how-you-can-help/helpafghanistan>.
- [67] Siddiq Noorzoy, "Afghanistan's Wartime Economy (2001-2014)". The Devastating Impacts of IMF-World Bank Reforms, *Global Research*, July 24, 2014
- [68] Sefatullah Halim, "What Is The Average Wage For An Afghanistan Worker?" - *Blurtit*. employment.blurtit.com/...what-is-the-average-wage
- [69] *National Action Plan for the Women of Afghanistan*, 2007-2017 Islamic Republic of Afghanistan, Kabul, Afghanistan, pp 9. www.svri.org/Afghanistanpolicy.pdf.
- [70] "Deputy Assistant U.S. Trade Representative Mara Burr Visits Kabul to Promote Women's Entrepreneurship", Office of the United States Trade Representative, 6-17-2013. <http://www.ustr.gov/about-us/press-office/blog/2013/june/daustr-burr-afghanistan-mou>
- [71] "Afghanistan Labor Force – Economy –", CIA, *World Factbook, Index Mundi*, August 23, 2014. www.indexmundi.com/afghanistan/labor_force.html.
- [72] "Index of Economic Freedom, Afghanistan, Quick Facts", retrieved from Afghanistan Economy: Population, GDP, Inflation, Business, Trade, The Heritage Foundation, in partnership with *Wall Street Journal*, 2014. <http://www.heritage.org/index/country/afghanistan>.
- [73] Jessica Donati, "A decade of Western aid in Afghanistan - mission unsustainable?" *Daily Mail Reuters*, KABUL, Dec 24, 2014.
- [74] Sidr A Tasneem, "What Is The Average Wage For An Afghanistan Worker?", *Blurtit*. employment.blurtit.com/...what-is-the-average-wage/

- [75] "Women in Afghanistan | Unchained Sorrow", Amnesty International, October 20, 2010. <http://jonieu.wordpress.com/2010/10/20/women-in-afghanistan/>
- [76] "Women and Men in Afghanistan", *Baseline Statistics on Gender*, Ministry of Women's Affairs, United Nations Development Funds for Women, 2008, pp31.
- [77] "Afghanistan: Gross domestic product (GDP) per capita in current prices from 2004 to 2014 (in U.S. dollars)", *Statista*, 2015. www.statista.com/statistics/262052/gross-domestic.
- [78] Andrei D. (Kid  l), "The Richest Countries in The World Based on GDP Per Capita 2004-2014", *Quantum Books*, 2015. www.quantumbooks.com/economy/richest-countries...
- [79] "GDP by Type of Expenditure at current prices - US dollars, National Accounts Estimates of Main Aggregates", | United Nations Statistics Division, Dec 2014. releasedata.un.org/...px?d=SNAAMA&f=grID%3a101%3bcurrID%3.
- [80] Based on data from the source on (79) above.
- [81] "List of countries by population growth rate", CIA, *World Factbook*, Wikipedia, the Free Encyclopedia. en.wikipedia.org/...ist_of_countries_by_population.
- [82] See 79 above.
- [83] Mohammad Lateef Totakhail, "Analysis of German assistance to Afghanistan with reference to the Paris Declaration on Aid Effectiveness", Willy Brandt School of Public Policy, University of Erfurt, September 8, 2011, pp14.
- [84] "Afghanistan Economy Profile 2013", *IndexMundi*. www.indexmundi.com/afghanistan/economy_profile.html.
- [85] "Despite steady growth over the past decade, landlocked nation's high dependency on foreign aid remains a concern", *Aljazeera*, February 19, 2012.
- [86] Kenneth Katzman, "Afghanistan: Post-Taliban Governance, Security, and U.S. Policy", Congressional Research Service, January 17, 2014, pp 56. 7-5700 www.crs.gov RL30588.
- [87] Michael Georgy and Hamid Shalizi, "Billions in cash flees Afghanistan, economy threatened", *Reuters*, Kabul, March13, 2012.
- [88] "Afghanistan GDP per capita | 1960-2015 |", *Trading Economics*, 2014. www.tradingeconomics.com/...fghanistan/gdp-per-capita
- [89] "Afghanistan GDP 1960-2015", *Trading Economics*, 2014. www.tradingeconomics.com/afghanistan/gdp
- [90] Azam Ahmed," In Kabul's Car Guant  namo, Autos Languish and Trust Dies", *New York Times*, Asia Pacific, February 17, 2013.
- [91] Azam Ahmad, *New York Times*.
- [92] Daniel Korski & John Fox, "Can China save Afghanistan?" | European Council on Foreign Relations, September 29, 2008. www.ecfr.eu/...tent/entry/can_china_save_afghanistan.

president of the largest Custom House in Kabul, president of Export Promotion Bank, president of Afghan National Bank, president of Export-Import Corporation, President General of Food Procurement Department, First Deputy Minister of Commerce, Acting Minister of Commerce, and the Governor of the Central Bank with a rank of Minister.

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