

Papua New Guinea

2016 Country Review

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Chapter 1

Country Overview

Country Overview

PAPUA NEW GUINEA

Papua New Guinea is a South Pacific island country. In 1884, Germany formally took possession of the northeast part of the island of New Guinea and its offshore islands, and Britain took control of the southeast section known as Papua. Australia assumed administration of the British territory in 1902, and seized the German territory during World War I. In 1920 the League of Nations granted Australia a mandate to New Guinea. Being occupied by Japan in World War II, Papua and New Guinea were united as an Australian territory after the war. The country gained independence in 1975. Papua New Guinea had to deal with separatist forces on the island of Bougainville in the 1990s. Up to 20,000 people were killed in the nine-year conflict that ended in 1997. A peace deal signed in 2001 provided the framework for the election in 2005 of an autonomous government for Bougainville. Papua New Guinea is richly endowed with natural resources, particularly minerals, forests and fisheries. But rugged terrain and inadequate infrastructure have hampered the exploitation and development of these resources. About 75 percent of the population engages in agriculture, mostly at a traditional subsistence level.

Key Data

Key Data	
Region:	Pacific Islands
Population:	6672429
Climate:	Tropical; northwest monsoon (Dec.-March), southeast monsoon (May-Oct.); slight seasonal temperature variation; cooler at high elevations
Languages:	English Pidgin English Motu Total of 650--700 tribal languages
Currency:	1 kina (K\$) = 100 toea
Holiday:	Independence Day is 16 September (1975), Queen's Birthday is 10 June
Area Total:	461690
Area Land:	451710
Coast Line:	5152

Papua New Guinea

Country Map



Pacific Islands

Regional Map

Regional Map



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Chapter 2

Political Overview

History

Early History

Human habitation on the island is of immense antiquity. Estimates of its duration range as far back as 60,000 years, and in any case more than 40,000. Archaeological evidence indicates that people most likely arrived by sea from Southeast Asia during an ice age period when the sea was lower and distances between islands shorter.

Although the first arrivals were hunters and gatherers, early evidence shows that people managed the forest environment to provide food. There also are indications of gardening having been practiced at the same time that agriculture was developing in Mesopotamia and Egypt.

Early garden crops - many of which are indigenous - included sugarcane, Pacific bananas, yams and taro, while sago and pandanus were two commonly exploited native forest crops. Today's staples - sweet potatoes and pork - are later arrivals, but shellfish and fish have long been mainstays of coastal dwellers' diets.

European Arrival

When Europeans first arrived, inhabitants of New Guinea and nearby islands - while still relying on bone, wood, and stone tools - had a productive agricultural system. They traded along the coast, where products mainly were pottery, shell ornaments and foodstuffs, and in the interior, where forest products were exchanged for shells and other sea products.

The first Europeans to sight New Guinea were probably Portuguese and Spanish navigators sailing in the South Pacific in the early part of the 16th century.

In 1526-27, Don Jorge de Meneses accidentally came upon the principal island and is credited with naming it "Papua," a Malay word for the frizzled quality of Melanesian hair. A Spaniard, Ynigo Ortis de Retez, applied the term "New Guinea" to the island in 1545 because of a fancied resemblance between the islands' inhabitants and those found on the African Guinea coast.

Although European navigators visited the islands and explored their coastlines for the next 170

years, little was known of the inhabitants until the late 19th century.

New Guinea

Spurred by Europe's growing need for coconut oil, Godeffroy's of Hamburg, the largest trading firm in the Pacific, began trading for copra (dried meat of the coconut) in the New Guinea islands.

In 1884, Germany formally took possession of the northeast quarter of the main island and put its administration in the hands of a chartered company. In 1899, the German imperial government assumed direct control of the territory, thereafter known as German New Guinea.

In 1914, Australian troops occupied German New Guinea, and it remained under Australian military control until 1921. The British government, on behalf of the Commonwealth of Australia, assumed a mandate from the League of Nations for governing the Territory of New Guinea in 1920. It was administered under this mandate until the Japanese invasion in December 1941 brought about the suspension of Australian civil administration.

New Guinea and adjoining seas was the scene of some of World War II's fiercest and most climactic battles. Following the surrender of the Japanese in 1945, civil administration of Papua as well as New Guinea was restored, and under the Papua New Guinea Provisional Administration Act, 1945-46, Papua and New Guinea were combined in an administrative union.

Papua

On Nov. 6, 1884, a British protectorate was proclaimed over the southern coast of New Guinea (the area called Papua) and its adjacent islands. The protectorate, called British New Guinea, was annexed outright on Sept. 4, 1888. The possession was placed under the authority of the Commonwealth of Australia in 1902.

Following the passage of the Papua Act of 1905, British New Guinea became the Territory of Papua and formal Australian administration began in 1906. Papua was administered under the Papua Act until the Japanese invaded it in 1942.

During the war, Papua was governed by a military administration from Port Moresby, where Gen. Douglas MacArthur occasionally made his headquarters. As noted, it was later joined in an administrative union with New Guinea during 1945-46 following the surrender of Japan.

Postwar Developments

The Papua and New Guinea Act of 1949 formally approved the placing of New Guinea under the international trusteeship system and confirmed the administrative union of New Guinea and Papua

under the title of "The Territory of Papua and New Guinea." The act provided for a Legislative Council (established in 1951), a judicial organization, a civil service, and a system of local government. A House of Assembly replaced the Legislative Council in 1963, and the first House of Assembly opened on June 8, 1964. In 1972, the name of the territory was changed to Papua New Guinea.

Elections in 1972 resulted in the formation of a ministry headed by Chief Minister Michael Somare, who pledged to lead the country to self-government and then to independence. The nation became self-governing in December 1973 and achieved independence on Sept. 16, 1975. The 1977 national elections confirmed Michael Somare as prime minister at the head of a coalition led by the Pangu Party.

However, the first Somare government fell upon a vote of no confidence in 1980 and was replaced by a new cabinet headed by Sir Julius Chan as prime minister. A revolving-door succession of prime ministers has continued to characterize Papua New Guinea's political scene. For instance, Somare resumed the post of prime minister in 1982, but relinquished it again in 1985.

National elections take place once every five years, but interim changes in government have frequently occurred as a result of parliamentary no-confidence votes. Under legislation intended to enhance stability, new governments remain immune from no-confidence votes for the first 18 months of their incumbency.

About seven major political parties and numerous smaller parties contend for leadership in Papua New Guinea. Party identities, and certainly party alliances and individuals' political loyalties, have not remained stable. Consequently, short-lived coalition governments have been the norm since independence, a pattern likely to persist for the foreseeable future.

Note on History: In certain entries, open source content from the State Department Background Notes and Country Guides have been used. A full listing of sources is available in the Bibliography.

Political Conditions

While intra-parliamentary disputes, arising from unstable political alliances and leading to frequent changes in government, are a typical and seemingly intractable feature on Papua New Guinea's political landscape, the nation has also experienced extra-parliamentary political strife in recent

years. Between 1989 and 1998, the principal dispute, centered on the island of Bougainville, reached the stage of armed conflict.

Bougainville is the larger of two offshore islands that make up Papua New Guinea's North Solomons province. In the late 1980s, landowners on the island demanded compensation from Australian-owned Bougainville Copper Ltd. for environmental damage caused by mine operations. A guerrilla force, the Bougainville Revolutionary Army, or BRA, led by Francis Ona, initiated a sabotage campaign when compensation talks reached an impasse. The Papua New Guinea government then sent security forces to the area; the BRA countered by increasing its demands, including secession from Papua New Guinea. The conflict escalated, with the national government offering a reward for Ona's capture or death.

Australia announced it would send forces into Bougainville to evacuate its nationals. The Papua New Guinea government negotiated a cease-fire in March 1990 and withdrew forces from Bougainville. The upshot was that the BRA took effective control of the island, whereupon the government imposed an economic blockade. Fighting continued between the secessionist BRA and the Papua New Guinea government for several years despite numerous attempts to achieve a negotiated outcome.

The scandal that was to bring down the government of Prime Minister Julius Chan erupted in early 1997. It was revealed that his administration had employed Sandline International, a subsidiary of Executive Outcomes, a well-known South African private army company, to conduct military operations in Bougainville. The regular army of Papua New Guinea as well as the general public opposed the use of mercenaries. Civic unrest over the scandal eventually forced Chan to resign as prime minister.

At the time of the Sandline revelations, the commander of the PNG Defense Forces, Jerry Singirok, detained the mercenaries and demanded their deportation. Public support for Singirok and his stance eventually led to the resignation of Chan, as noted above. However, Singirok was himself dismissed from his post prior to the dissolution of the Chan government, and in addition implicated for accepting bribes. Singirok was temporarily restored to his command during the tenure of the prime minister who succeeded Chan, Bill Skate. He was sacked again in August 1999.

Meanwhile, an interim government led by acting Prime Minister John Giheno served for a two-month period leading up to the scheduled national election in June 1997. The election produced a large turnover in sitting members of parliament. Numerous veteran politicians, including former prime ministers Sir Julius Chan and Pias Wingti, lost their seats, and many independents were elected. Losing candidates in the courts had challenged 88 of the 109 election victories. Some elections had been annulled, while most of the challenges were wending their way through the judicial process. National leadership emerging from the election came from a coalition of several

parties, headed by incoming Prime Minister Bill Skate, whose government was to have a two-year lifespan.

The Skate government negotiated with all factions involved in the Bougainville fighting and achieved declaration of a cease-fire (the Burnham truce) in October 1997. This was followed by a more comprehensive truce, the Lincoln Agreement. The latter, which came into force in January 1998, called for disarmament and withdrawal of government troops from Bougainville Island. However, BRA leader Ona maintained his position against the series of peace agreements and refused to be a party to them. Nevertheless, formation of an interim government for the island proceeded.

BRA commander Sam Kauona and the vice-president of Bougainville's interim government, Joseph Kabui, signed a permanent cease-fire in April 1998. The cease-fire has held, while parties have moved closer to the goal of a political resolution of the conflict. The PNG national government initially opposed, then accepted, elections on Bougainville for a provisional government. The interim government was formally commissioned in March 2000. Leading this entity were Governor John Momis and president of the Bougainville Peoples Congress Joseph Kabui.

Rebel leader Ona renamed his political faction the Mekamui National Chief's Assembly, and his army the Mekamui Defense Forces. Ona continued to oppose the cease-fire, and to claim that local chiefs support full independence from Papua New Guinea. This claim is given limited credence by both other insurgents and outside observers. A multinational peacekeeping force under auspices of the United Nations Security Council was monitoring the suspension of hostilities. This military observer mission, comprised of contingents from several South Pacific nations, was scheduled to remain in place for the foreseeable future.

The long-term genesis of the Bougainville conflict relates, in part, to islanders' cultural ties to the nearby nation-state of the Solomon Islands. Bougainville and its sister island of Buka became affiliated with Papua New Guinea, not historically a close confederate, as a result of German colonization. The immediate trigger of the recent violent conflict was land damage from the Panguna copper mine. Papua New Guinea appears to have maintained political sovereignty over the affected province of North Solomons by means of a referendum on autonomy it has pledged to hold when the political situation quiets further. If the autonomy deal proceeds in compliance with Bougainville residents' majority opinion, the Panguna mine would most likely remain closed. At one time, this operation accounted for 40 percent of PNG's total exports and 19 percent of national revenue.

The decade of guerrilla war on Bougainville took a heavy human toll. Up to 20,000 people were killed, including rebels, national defense force soldiers, and civilians caught in the crossfire. A concomitant blockade imposed by Papua New Guinea in an effort to deny supplies to the insurrectionists was also a deadly factor. Humanitarian agencies estimate that while food and

medicine were prevented from reaching the island, several thousand noncombatants died.

However, the toll of the Bougainville war was not just in terms of human casualties. An international group of eminent persons said the decade-long war had ruined the country, which is still struggling to regain the initiative. The group said that the horrors of the war, which is still simmering and occasionally threatens to re-ignite, will hang over the country for some time. According to the group, the war also totally drained the PNG economy since all investment and maintenance expenditure by the defense forces were barely enough only to keep the war going. Outside the army, the war contributed to a degradation of the government services and also fueled inflation. It also said that corruption in the government and the society had grown during the war.

In the meantime, Prime Minister Skate battled scandals emanating from allegations of various improprieties; the most vivid was a broadcast videotape in which he admitted accepting bribes and gang involvement. At first evading calls for his resignation, he shuffled his cabinet and saw his coalition majority thin.

Ultimately, his departure resulted from his diplomatic recognition of Taiwan, announced around the beginning of July 1999. By recognizing Taiwan, Skate would eliminate all relations with China, which had been rapidly increasing its trade with Papua New Guinea. The Taiwanese engagement angered regional and domestic leaders with business ties to mainland China. Within a few days Prime Minister Skate vacated his post in lieu of sure defeat in a pending no-confidence vote.

On July 22, 1999, a new government under Sir Mekere Morauta was approved by a wide parliamentary margin of 99 votes in favor versus five opposed. One of Morauta's first moves was to withdraw recognition of Taiwan and reaffirm the "One China" policy. Morauta then announced that his focus as prime minister would be to eliminate Papua New Guinea's \$845 million debt and help restore financial stability. He advocated large-scale privatization of public enterprises, notably in the utility and telecommunication sectors, to raise cash for debt liquidation. His China policy received a further boost when the Chinese government announced that it had invited Papua New Guinea to participate in the informal meeting of the leaders of the Asia Pacific Economic Cooperation, or APEC, forum to be held in China in October 2001. The invitation was a reaffirmation by China of the reestablished bilateral ties.

While the Bougainville crisis was receding, another political storm with a similar cause - this one on the main island - was brewing. Environmental damage at the giant Ok Tedi copper mine, in Western province 18 kilometers from the Papua (formerly known as Irian Jaya) international border, significantly surpassed official projections. The mine opened in 1984 with an estimated operating life through 2009. The Australian firm Broken Hill Proprietary, or BHP, has a 52 percent ownership stake, with minority shares of 30 percent and 18 percent, respectively, held by the Papua New Guinea government and Inmet Mining Corporation, a Canadian company. The mine has generated 10 percent of Papua New Guinea's GNP, and 20 percent of its export revenues.

However, tailings and waste from the mine have caused widespread land degradation, with the potential to become even more extensive, in the nation's largest watershed.

In response, a movement of local residents, supported by international environmental organizations including the World Wildlife Fund, has demanded closure of the mine. Somewhat dampening the impact of this opposition is the low population density of the area and the fact that some local residents favor continued mining as a source of jobs and funds for public services and economic development. For its part, the government has ruled out closing down Ok Tedi before the originally planned date. It is difficult to see how it could replace the mine's positive cash flow impact in the short term. At such, experts were pondering a set of waste disposal alternatives that might permit mining activity with less environmental damage than the present direct dumping of 85 million tons of tailings per year. In any case, the area is ill-prepared for long-term economic self-sufficiency, whether Ok Tedi were to shut down now or at its initially projected phase-out in 2009. To date, only small-scale efforts to develop an alternative economic base, supported mostly by agricultural and livestock operation, have been undertaken.

In March 2000, a political crisis for the Morauta government broke when it became known that the nation's largest social security account, the Provident National Fund, or PNF, actually had only half as much money as had been stated. Diversion of part of the difference into general revenues was confirmed, and allegations of embezzlement were raised. Meanwhile, Prime Minister Morauta agreed to a full investigation, which won widespread support. The PNF supported pensions for government employees and unionized workers at large firms. The shortfall may give them no option but to accept a cut in benefits.

In 2001, the Morauta administration underwent some severe political storms. In March 2001, soldiers of the PNG army went on a mutiny in protest against the government plan to halve the size of the army. The plan was recommended by the Commonwealth Eminent Persons Group, or CEPG, who was reviewing the country's defense forces for purpose of reforms. The CEPG also recommended that the country needed a properly-funded professional force as well as a more efficient one. According to CEPG, the oversize of the army had caused most of the defense budget to go to salaries, with virtually nothing left for training, operations, or even food, fuel and clothing. Accordingly, it recommended a voluntary release scheme, saying that from discussions with the army, it was sure that there would be plenty of volunteers to leave the defense forces. It was this recommendation that led to the mutiny in the army.

The rebel soldiers seized arms from the country's main armory to press their demands for the government to give up the plan. The situation remained tense for nearly two weeks and the soldiers gave up only when Prime Minister Morauta gave an assurance that the plan would not be implemented, and granted amnesty to the soldiers who participated in the mutiny.

As reform for the armed forces has been among Prime Minister Morauta's economic restructuring

program, the mutiny halted the reform. Making matters worse was the fact that it triggered widespread opposition to the prime minister's other economic reform plans, especially plans of privatization of government assets. In a bid to revive PNG's ailing economy, the World Bank and the IMF had promised \$210 million in loans conditional on measures of privatization of government assets like national airline Air Niugini, the telephone company Telikom and the PNG Banking Corporation. However, these privatization plans were strongly opposed by students as well as workers of government owned businesses.

In late June, only a few months after the army mutiny, the worst protest since independence erupted in the capital Port Moresby. Six days of student protests against economic reforms turned violent, with four students being killed and 18 injured. In order to prevent the incident from developing, Prime Minister Morauta put Port Moresby under curfew that ran until July 10.

While the privatization plans were postponed as a result of the student protests, the global economic slowdown and PNG's domestic problems, such as rampant crime, have also put the commercial viability of the country's privatization program in doubt. In late July, the central bank announced a severe downgrading of the country's growth forecast for 2001, attributing this to lower activity expected in agriculture, forestry, fisheries and mineral sectors. The central bank predicted that the economic activity of the country would not pick up again for another year. This would undoubtedly worsen the already severe unemployment situation in PNG, where about 40 percent of the working-age population have been looking for jobs.

Despite frustrations in economic reforms, progress has been made in the government talks with Bougainville for its autonomy. In May 2001, during the talks between the PNG government and the regional government of Bougainville, the PNG government announced that it would give an as yet unspecified amount as a one-time establishment grant to the regional government of Bougainville. During the talks in June, the last major obstacle to reaching a comprehensive agreement on autonomy of Bougainville was cleared - Bougainville would have its own criminal laws, which could be the first step towards Bougainville getting its own police and prisons.

Then on August 31, the Bougainville Peace Agreement was signed between the PNG government and the regional government of Bougainville, paving the way for an autonomous government in the war-torn province. The agreement provides for disarmament, the creation of a Bougainville constitution leading to autonomous government, and an eventual referendum on independence. The PNG government was to pass the necessary amendments regarding Bougainville before the agreement could be implemented. Prime Minister Morauta stressed that only Parliament would have the final say on Bougainville. While legislation passed through the preliminary stages, in March 2002, parliament refused to ratify the Bougainville amendments as many lawmakers were dissatisfied with the disarmament program.

The near-unanimity of Morauta's support when he took office was expected to be transitory, and

the prime minister subsequently altered the composition of his cabinet to defuse political pressures against him. As in the past, the terms and administration of some business concessions were the targets of government critics. At the time of the formation of the government, doubts were raised about its longevity, as is so often the case in Papua New Guinea politics, the ability of the ruling coalition to hold together until the next scheduled election (2002) was uncertain.

In May 2001, Morauta's administration was challenged when opposition leaders alleged that the government had used development funds in order to induce Members of Parliament to join hands with the ruling party. These charges notwithstanding, Morauta's position was strengthened when a small party in the parliament merged with his PDM in June 2001, giving the PDM a clear majority in the parliament. This was the first time that any government in PNG has enjoyed a parliamentary majority, however small.

These political developments aside, the government's economic reforms have had some notable effects as well. In March 2002, mutinous soldiers took control of an armory and burned three buildings, in protest of the government's economic reform plan, which included decreased military spending, privatization, and structural adjustments at the behest of international aid agencies. The soldiers gave the government a thirteen-point petition with demands that included a governmental halt on the plan to downsize the defense force as part of its economic reform; the immediate dismissal of the prime minister; privatization to be stopped; and the expulsion of the World Bank, IMF and Australia, all of whom the soldiers believed to be exerting too much influence over the handling of the nation's social, economic and mining issues. These were virtually the same demands made by the 2001 mutiny. This time, though, the government was less tolerant of mutiny and the military overtook the rebel soldiers before the government conceded to any aspect of the petition.

Privatization of state-owned entities began with the purchase of the state-owned Papua New Guinea Banking Corporation (PNGBC) by the Bank of South Pacific (BSP). Despite criticism and violence that had recently ensued, Prime Minister Morauta continued to go on with reforms. Also the PNG was preparing for the 2002 local and national elections scheduled to take place in June.

There were 43 political parties registered for the election. During the electoral campaign, Prime Minister Morauta highlighted the success of his government's reforms, most notably by reducing the country's inflation rate in 2002. For its part, the opposition highlighted the fight against corruption, mismanagement and the misuse of public monies.

Parliamentary elections were held in June 2002, although voting in the Southern Highlands was not completed until 2003. The elections themselves held the dubious distinction of being the worst ever, according to independent observers. Violence, the deaths of at least 100 people, and rife vote-rigging characterized the elections. Indeed, there were reports of stolen ballot boxes, multiple voting, incomplete electoral rolls, inclusions of fictitious or dead individuals on other electoral rolls,

not to mention the inflation of some voting rosters as much as 300 percent. As well, a lack of funding for transport and personnel made it impossible for electoral officials to reach remote areas where about twenty-five percent of the voters live.

With most results tallied (the situation in the Southern Highlands notwithstanding), Morauta's party had won only 12 seats. The National Alliance, led by former Prime Minister Somare, secured 15 seats. With the support of seven other parties, Somare was able to form a coalition. Then, in late July, Governor General Silas Atopare asked Somare to form a new government. Allan Marat became the deputy prime minister. A new cabinet was presented in August 2002.

In 2003, more than 200 Australian police were to be deployed to Papua New Guinea, after the signing of a bilateral agreement. Papua New Guinea is Australia's largest recipient of aid and with the country often suffering from political and economic strife, John Howard's government in Australia wanted to ensure greater accountability in regard to how the aid money was spent. Thus, despite initial objections from Prime Minister Somare, 200 Australians will work to improve public administration in Papua New Guinea.

In 2003, despite the previous Prime Minister's reform attempts, a report was released describing Papua New Guinea as being precipitously close to crisis conditions, with decreasing living standards, rampant corruption and endemic mismanagement.

Australia's intensified interest in other countries in the world, such as Papua New Guinea, has come as a consequence of recent acts of global terrorism. Australia's prime minister has cautioned that countries in crisis are potential breeding grounds for terrorists. In this regard, in mid-2004, Australia's government signed a concord providing for the deployment of 300 police and civil servants to be sent to Papua New Guinea to assist in the fight against crime and corruption.

In June 2007, voters in Papua New Guinea began going to the polls to cast ballots in the country's general election. The election took several weeks -- lasting until mid-July 2007 -- in a phased voting process intended to ensure the inclusion of people in the most remote parts of the country. Thousands of police and military troops were deployed across the country to prevent an outbreak of violence and also to foreclose the rampant irregularities that plagued the voting process in the 2002 elections, and bestowing the dubious distinction as the worse elections ever, as discussed above.

By August 2007, the ballots had been counted and Prime Minister Michael Somare's National Alliance Party had won 29 of the 109 parliamentary seats at stake. Together with independent allies and smaller parties, it claimed to have control over 55 seats in parliament, and thus had a stable majority to form a government. As such, the country's head of state, Governor-General Paulias Matane, called on Somare to form a new coalition government. Somare responded saying, "I accept the invitation to form the next government of Papua New Guinea." Somare also spoke

on behalf of his party, conveying his gratitude to fellow citizens for again placing their confidence in the National Alliance Party.

Somare was set to be formally reclaim his position as prime minister on Aug. 13, 2007 following a majority vote in parliament. Prime Minister Michael Somare appointed a caretaker government upon reclaiming his post. He was set to appoint his full cabinet on Sept. 18, 2007.

The year 2007 was also marked by scandal involving the prime minister's intervention on the former Attorney-General of Solomon Islands Julian Moti's Inquiry. Moti was a close associate of the prime minister of the Solomon Islands, Manasseh Sogavare. He was arrested in Papua New Guinea in 2006 under an Australian extradition request. At issue were child sex charges that allegedly occurred in Vanuatu in 197. Moti reportedly was able to vitiate existing bail regulations and flown out of the country and back home to the Solomon Islands on an aircraft belonging to the Papua New Guinea Defense Force. The situation sparked a diplomatic conflict with Australia, even leading to the outraged Australian government from banning Papua New Guinea officials from entering Australia. Despite denying that he authorized the flight, Somare has nonetheless been implicated in the international scandal.

In May 2008, Prime Minister Michael Somare's government was mired in something of a financial scandal when it was reported that three key government players met officials involved in the matter, which stretched to Taiwan. At issue was the apparent disappearance of the \$US30 million, which had been intended for development aid in Papua New Guinea. There were reports that Taiwanese middlemen had been engaged to ensure that the aid money went to Papua New Guinea, presumably as a means of offsetting its ties with mainland China, and even augmenting the Taiwanese case for sovereign recognition. These reports gained credence when it was revealed that Planning Minister Paul Tiensten, parliamentary public accounts committee chairman Timothy Bonga, and attorney Florian Gubon, acknowledged meeting Taiwanese officials in Taipei in 2006.

The situation resulted in resignations of senior Taiwanese politicians, including Vice Premier Chiou I-jen. At home in Papua New Guinea, leading figures, including opposition politician Mekere Morauta, former treasurer Bart Philemon, and former prime minister Julius Chan, claimed that the scandal led back to Somare. As such, Morauta called on Somare to resign since it was clear that he must have endorsed the meeting. There were also calls the resignation of all the officials involved in what came to be known as the "cash for recognition" scandal with Taiwan. Nevertheless, Somare was successful in getting the National Court to halt an investigation of his finances.

In 2009, the opposition -- fueled to some degree by rising public discontent -- was keen to bring down the government. At the forefront of the movement to take on the government, with its legacy of recent scandals, was former Prime Minister Sir Mekere Morauta, who has been viewed as something of a reformist, as well as former Treasurer and Finance Minister Bart Philemon. As

of the start of 2010, Prime Minister Somare remained in power.

Note: Somare holds the distinction of being the longest serving head of government in Papua New Guinea. He has begun to suggest that he is considering retirement from public office.

On January 14, 2011, Papua New Guinea's parliament elected Michael Ogio as the new governor-general of the country. Ogio won the internal election with 65 votes against his rival Pato Kakeraya who garnered 23 votes. The vote came after a boisterous exchange in parliament, some of it focused on whether a sitting member of cabinet could run for the post of head of state. Now, Ogio was set to resign from his cabinet position and would be sworn in as governor-general when the parliament resumed operations on May 10, 2011. The developments related to the election of a new governor-general or head of state came less in late 2010, in the aftermath of a Supreme Court ruling that re-installation of Paulias Matane as governor-general in mid-2010 was both invalid and unconstitutional. The Supreme Court thus ordered members of parliament to reconvene for a fresh presidential vote before the end of January 2011.

In September 2011, Papua New Guinea was being rocked by political turbulence as a result of a series of controversial developments involving former head of government -- Sir Michael Somare.

The situation began on December 13, 2010 when Prime Minister Somare announced that he would "voluntarily step aside" to face a pending leadership tribunal, focused on allegations that he failed to submit his financial returns. Less than a month later, though, a statement was issued noting that the prime minister had resumed office after being on holiday. The announcement gave no reference to the leadership tribunal. On January 18, 2011, Prime Minister Michael Somare, who stepped away from office in late 2010 to face a leadership tribunal, resumed office claiming he was away on holidays.

By March 2011, the findings of the leadership tribunal were dominating the prime minister political fate. Indeed, on March 25, 2011, Sir Michael Somare was suspended from office for two weeks after being found guilty of 13 charges of misconduct. At issue were the aforementioned charges that the prime minister failed to submit financial returns for as many as two decades. The decision by a three-person tribunal in the capital of Port Moresby was handed down after deliberations that lasted two weeks. While two tribunal members ruled in favor of suspension, the third member of the tribunal had advocated the prime minister's dismissal from office. The pro-suspension chairman, Roger Gyles, argued that there was "no serious culpability warranting dismissal." However, the dissenting tribunal member said that the prime minister's nonchalant attitude towards the charges showed "disregard bordering on disdain" for the constitutional obligations of the office of the prime minister.

For his part, Prime Minister Sir Michael Somare may well be regarded as the ultimate political survivor in the region. In power as the head of government of Papua New Guinea for 40 years,

the opposition forces have tried as recently as 2009 to bring down Somare's government. This latest case showed Somare's resilience even in the face of criticism. Following the announcement of the decision by the tribunal to suspend him for two weeks, Prime Minister Somare addressed cheering crowds and to apologize for his "administrative oversight," saying: "As a leader, I take full responsibility for failing to fulfill certain administrative aspects of my duties and responsibilities of leadership by submitting several late and incomplete returns to the Ombudsman Commission." He said that he looked forward to his two week suspension as an opportunity to spend "quality time" with his family.

A month later in April 2011, Somare was dealing with heart health complications. Two months later in June 2011, the Somare family announced Sir Michael Somare's retirement as prime minister and his exit from the political scene. Sir Michael Somare remained hospitalized in intensive care at the time in Singapore and clearly could not be consulted on this announcement. By the start of September 2011, Sir Michael Somare was declaring that he remained the head of government and was returning home to resume his post. In a signed statement that was published by Agence France Press, Somare asserted: "Let me be clear. I am ready, willing and able to complete my term as the only legally elected prime minister of Papua New Guinea." But with the prime ministership ruled vacant by a majority vote in parliament, and Somare disqualified from parliament due to absence at consecutive parliamentary sittings, Peter O'Neill -- a former finance minister -- was chosen to be the interim prime minister. Given the contested political landscape, Sir Michael Somare was vowing to challenge his disqualification from parliament.

The political chaos did not end with this promise by Somare. In government itself, members of the National Alliance (NA) were expelled by the national executive. The move appeared to be oriented toward blaming the NA for Somare's removal from office and punishing them for joining the O'Neill alliance; however, Finance and Planning Minister Polye maintained that Somare's removal was not political but due to the law.

In December 2011, the Supreme Court in Papua New Guinea invalidated the position of Peter O'Neill as prime minister and reinstated Michael Somare in that post.

Months earlier, long-serving Prime Minister Somare had been dealing with heart health complications, which led to claims by his family that he had retired from power. But Somare himself had never made that claim and, once restored to health, he declared that he remained the head of government and was returning home to resume his post. With the prime ministership ruled vacant by a majority vote in parliament, and Somare disqualified from parliament due to absence at consecutive parliamentary sittings, Peter O'Neill -- a former finance minister -- was chosen to be the interim prime minister.

While the governor general backed O'Neill's initial claim on the position of head of government, this ruling by the Supreme Court changed the political landscape significantly, even leading

Governor General Michael Ogio to reverse his stance and stand in solidarity with the court.

The political power struggle was not expected to end quickly, however, as O'Neill was refusing to accept the court ruling and insisting that he was in charge of the country. As well, even with Somare now enjoying the legal support of both the highest court and the head of state, he was not guaranteed support in parliament. To that end, even though Governor General Ogio presided over the swearing in ceremony for Somare, the political impasse continued on Dec. 14, 2011, as the parliament voted to demand that O'Neill be inaugurated back into power as the prime minister. Moreover, reports emerged that O'Neill and his supporters in parliament intended to move to revoke Ogio from his position as head of state.

Presumably, they would replace him with a choice more likely to do their bidding. To this end, parliament moved quickly to suspend Governor General Ogio from his post and had Parliamentary Speaker Jeffret Nape swear O'Neill in as prime minister. Once reinstated to power as head of government, O'Neill urged parliament to reverse the legislation suspending Ogio and returned him to his post. But of course, by this point, there were two men -- O'Neill and Somare -- making the same claim of legitimacy. The scene was, therefore, ripe for conflict and, indeed, there were rowdy clashes outside the country's Government House.

By the middle of December 2011, the power struggle between O'Neill and Somare was ongoing. O'Neill was backed by a majority of members of parliament and also enjoyed a groundswell of popular support. Indeed, the people of Papua New Guinea were applauding his promise to provide free education and greater participation of women in parliament. On the other hand, Somare had the backing of the court. O'Neill claimed his legitimacy as head of government by pointing to the fact that he held the support of the majority of parliament. He said, "Parliament is the place where we make governments and where we change governments." Somare drew upon the constitution to make his counterpoint, saying in an interview with Radio Australia, "Numbers in parliament is irrelevant when we have a constitution that's supreme, and the constitution has spoken."

On Dec. 20, 2011, with the national civil service, police, armed forces, and even the newly restored Governor General Ogio now closing ranks around O'Neill, all signs pointed to an end to the political crisis. With the backing of these wings of government, O'Neill able to occupy the office of the prime minister and other government offices, and even evict the members of parliament who supported Somare. O'Neill was also able to pass a budget -- a move that served to consolidate his legitimacy as the head of government.

Still, Somare was not about to go quietly into the national history books of Papua new Guinea. On Dec. 22, 2011, Somare accused O'Neill of disrespecting the constitution and intimidating the governor-general. He also insisted that he was the rightful leader of the country. "I know very well, that there was no, either by speaker or by anyone to remove the member of parliament," he said. Somare continued, "I was discharged by parliament as a non-existing member. But court, in

its wisdom, and following our constitution, reinstated me as the head of government."

By the first week of January 2012, the situation in Papua New Guinea remained unresolved with Somare having the support of the court and O'Neill holding the support of the parliament. Sir Arnold Amet, the Attorney-General in the Somare cabinet, urged O'Neill to be guided by the legal provisions of the Supreme Court judgment and allow Somare to take his place as head of government upon the resumption of parliament. Amet said that at that point, O'Neill could conceivably move forward with a motion of no confidence, which would bring down Somare's government and trigger early elections.

For his part, O'Neill assured the people of Papua New Guinea that his government would continue to govern the country democratically and transparently until general elections could be held later in the year. Indeed, in January 2012, Papua New Guinea Prime Minister Peter O'Neill made it clear that highly anticipated elections would go forth on schedule, despite issues with compilation of the voter rolls. In fact, he indicated he would support the idea of early elections, if it was possible under the law. O'Neill said, "If it was for me, I will have called for an early election but the laws are there and that the election will be conducted as scheduled although there have been problems with the electoral roll." He also said that the heads of the military and police would remain in their posts throughout the election to ensure the stability at this crucial period. There were high hopes that the elections could bring an end to the political power struggle plaguing the country.

As January 2012 was drawing to a close, the power struggle flared again as a cadre of soldiers, led by Colonel Yaura Sasa participated in a mutiny and placed Brigadier General Francis Agwi under house arrest. Given the mutineers' allegiance to Somare, the general consensus was that the military cadre was interested in restoring Somare to power by force. That being said, Agwi was subsequently released during a raid and Sasa was taken into custody. O'Neill said that Sasa would be "dealt with" and asserted that his government had control over the defense forces.

Note that days later, O'Neill said that he would dissolve parliament in February 2012, paving the way for early elections. O'Neill said that he made the decision in light of the unstable political conditions plaguing the country.

A general election was scheduled to be held in Papua New Guinea (PNG) in mid-2012. The election was to take place in the wake of the country's constitutional crisis that has been ongoing since 2011 in which both the veteran incumbent Sir Michael Somare, as well as Peter O'Neill, claimed to be the legitimate head of government.

At issue was the fact that Peter O'Neill was sworn into office following the disqualification of Sir Michael Somare from his post. A court ruling restored Somare to the post of head of government;

however, O'Neill was later restored to the position of head of government, largely thanks to strong parliamentary support. Elections were set for mid-2012 with an eye on resolving the remaining political divisions and tensions at the ballot box.

The electoral commission in Papua New Guinea announced that elections would be held on June 23, 2012, as scheduled. Electoral Commissioner, Andrew Trawen, said that despite calls from some members of parliament for the vote to be delayed, there was no legal room to change the June election date. "To delay or defer the 2012 elections will be unconstitutional," he said. A pre-election report by Trawen noted that about 60 percent of the work to update the electoral roll was complete.

This date has since been confirmed by Prime Minister Peter O'Neill. Indeed, as April 2012 came to a close, despite a move by the parliament to defer the election by six months, Prime Minister O'Neill confirmed that the election would take place in two months. In a statement, he said: "Pursuant to law, parliament cannot extend the term of members of parliament beyond the fifth anniversary of the return of writs for the previous general election. That is illegal." He also said, "Let me state clearly and precisely that members of parliament and the executive government want to ensure all eligible voters' names are on the common roll for them to exercise their voting rights in free and fair democratic elections. Our government is not trying to change election schedules. Cabinet has no right to set election dates."

In the first week of May 2012, election officials in Papua New Guinea made clear that the electoral rolls would be ready before the June 23, 2012, election date. By the middle of the month, Prime Minister O'Neill was expressing confidence about the elections, and adopting a strong stance. He said, "The election is a go and the coalition is all in on this."

In the background were rumors of both planned military coup against the government, which reportedly did not get off the ground due to a lack of support from the security forces. There were also suggestions of a vote of no-confidence, which was unlikely to change the political scene significantly with elections already in the offing. It should be noted that on May 15, 2012, the country's parliament would enter its final session, with its dissolution imminent ahead of the elections. O'Neill would head a caretaker government until a new post-election government could be formed.

By the close of May 2012, the political crisis that was dominating the country reached new heights when the Supreme Court declared the O'Neill government to be unconstitutional. Prime Minister O'Neill said he would summon a special sitting of parliament to discuss the matter, but insisted that the election would go forward, as scheduled. In a media interview, the prime minister said that the judiciary sought to disrupt the general election, and was only creating a climate of political instability and anxiety. He noted that the only resolution to the problems facing the country was the impending vote, as leaders seek a mandate from the people of Papua New Guinea at the polls.

For his part, Governor-General Sir Michael Ogio made clear that he was washing his hands of the political conflict and that he would not be signing any documents until a new government is formed after the elections. This stance also meant that Ogio was refusing to sign documents related to the recalling of parliament for a special sitting. Functions then rested with Acting Governor-General Jeffrey Nape when Ogio left the country on a trip to the United Kingdom.

Meanwhile, in the aftermath of the decision by the court to declare the O'Neill government unconstitutional, Acting Speaker Francis Marus declared the position of the prime minister vacant. A new parliamentary vote on the prime ministership was taken but Acting Governor-General Jeffrey Nape, at first, refused to perform the swearing in ceremony for Prime Minister O'Neill. After several hours in which he reportedly reviewed the situation, Nape performed the swearing in ceremony. O'Neill subsequently advanced a caretaker government, which would attend to the country's affairs until the election were held.

In June 2012, all attention was on the impending elections. At stake would be the 109 seats in the unicameral National Parliament, where members are elected for by popular vote to five-year terms in single constituencies.

Prime Minister O'Neill was hoping for validation and ratification of his governance at the polls. According to pre-election polling data, he was positioned to accomplish just that objective. Pollster, Mell Research and Marketing, forecast that Prime Minister Peter O'Neill's People's National Congress Party (PNC) would win the most parliamentary seats, and that O'Neill's three major coalition partners -- his deputy Belden Namah's PNG Party, Don Polye's Triumph Heritage Empowerment (THE) Party, and William Duma's United Resources Party -- would also see strong election performances. Accordingly, O'Neill could well be on track to serve his first full five-year term as head of government. Polling data also showed that despite the political drama of the previous months, voters were more focused on the O'Neill-Namah government's free education policy.

It should be noted that a host of electoral and voting access problems led to rumblings that voting would be extended beyond the first week of July 2012. It was yet to be seen if this pre-polling research would prove predictive as no election results were available at the time of writing. With the election taking place over a two-week period, results would not be immediately available.

As July 2012 entered its final week, partial results indicated that Papua New Guinea's former prime minister, Michael Somare, won his seat. But this victory was not necessarily a harbinger of things to come, specifically in the form of a return to power for Somare at the helm of governance. Indeed, Michael Somare's son and political heir apparent, Arthur Somare, lost his seat. Meanwhile, Prime Minister O'Neill's People's National Congress appeared to be in the lead, having won or leading in as many as 53 seats, while the Triumph Heritage Empowerment Party of long-serving

cabinet minister, Don Polye, had the advantage in 14 seats. Michael Somare's National Alliance was on track to secure about seven seats -- hardly enough to position him to form a coalition government, or even play kingmaker amidst a future government. Former Prime Minister Julius Chan's People's Progress Party also performed well, having secured at least six seats. At the time of writing, O'Neill's deputy, Namah, and his PNG Party were struggling to secure seats.

Full election results were expected at the close of July 2012 and, according to convention, the governor-general would invite the party with the largest number of parliamentary seats to try to form a government.

It should be noted that on July 25, 2012, O'Neill seemed on track to return as prime minister. Speaking with a tone of confidence, O'Neill reportedly said: "I would rather be in my shoes than in anybody else's." He continued, "We are very confident that on current indications PNC will be called to form a government."

O'Neill's biggest rival was Polye, whose Triumph Heritage Empowerment party was also enjoying a strong election performance. That being said, Poyle soon made it clear that despite his ambitions to be prime minister, the government would be formed by the leader of the party that won the most seats, in keeping with the constitution. Polye then committed his Triumph Heritage Empowerment Party's elected members supporting a future O'Neill government.

Another sign that O'Neill would likely form the next government came when he was shown embracing his former rival -- Michael Somare. Indeed, both Somare of the National Alliance and Julius Chan of the People's Progress Party appeared to offer O'Neill their support. Somare's movement in favor of the O'Neill camp (which was apparently orchestrated by Chan) effectively ended the political impasse that plagued the nation leading up to these elections. No mention was made of that dark chapter; instead, the focus was on national unity. Somare, himself, seemed intent on making it clear that he was not interested in continuing to play the role of political spoiler; to this end, he relinquished his role as the leader of the National Alliance party.

Unity, however, did not necessarily extend to O'Neill's outgoing deputy, Namah, which was not invited to join the coalition building process within the incumbent prime minister's camp. O'Neill made his intention clear, saying, "At this stage, we know that Belden Namah has made his political bed and he and his followers can sleep in that bed." Namah offered a measured response, saying, "Peter (O'Neill) is saying that he will not accept me and my group. That is okay. He is the man with the highest number and will be called by the governor-general." Namah was also suggesting that he might be interested in forming a government, and was holding out hope that some parties might flock to him on the floor of the parliament.

Nevertheless, as August 2012 began, Papua New Guinea Governor General Sir Michael Ogio officially invited Peter O'Neill's People's National Congress Party (PNC) to form a new

government. As well, on Aug. 4, 2012, O'Neill was elected to be prime minister in an internal parliamentary vote.

Note that in Papua New Guinea, the monarch is hereditary; the governor general is appointed by the National Executive Council; the prime minister and deputy prime minister are appointed by the governor general for up to five years on the basis of majority support in National Parliament. That National Parliament is a unicameral body composed of 109 seats; members are elected for a five-year term in single constituencies; 89 are elected from open electorates and 20 from provincial electorates; members elected by popular vote to serve five-year terms. The last elections were in 2007 and were won by former Prime Minister Somare's National Alliance; however, the political landscape since 2011 (and to date in 2014) has changed significantly, as detailed here.

In June 2014, Papua New Guinea Prime Minister Peter O'Neill was under political pressure with the country moving in the direction of constitutional crisis.

At issue were corruption charges related to a questionable payment to lawyers allegedly authorized by the prime minister. As such, O'Neill was served with a warrant requiring him to submit to questioning. O'Neill's responded by sacking the attorney general, the police commissioner and assistant commissioner involved in the process, as well as other task force individuals investigating the corruption scandal; he went a step further by replacing them with more favorable figures.

These moves displayed a crass level of political self-interest, and thus spurred criticism at home and abroad. But O'Neill was in no danger of being held accountable within parliament for his transparent attempts to evade accountability, as the legislative body was dominated by members of his own People's National Congress Party (PNC).

Still, about a thousand protesters participated in a rally on June 25, 2014, at the Unagi Oval in Port Moresby. Protesters demanded that Prime Minister O'Neill resign from office, and reinstate various sacked officials including the Investigations Task Force Sweep chairman, senior police personnel, and the former attorney general. They also demanded that the investigations against O'Neill go forward.

In October 2015, a no-confidence motion brought by the opposition in Papua New Guinea against Prime Minister Peter O'Neill ended in failure when Acting Speaker Aide Ganasi rejected the move on the basis of "defects" both in terms of form and substance. Opposition Leader Don Poyle as well as Deputy Opposition Leader Sam Basil exited the chamber in anger after their motion was rejected, although they promised to advance the motion again in the future after the so-called defects were corrected. However, they were stymied by the government's countervailing move to preserve the lock on power by Prime Minister O'Neill and his People's National Congress until elections could be held in 2017.

-- November 2015

Written by Dr. Denise Youngblood Coleman, Editor in Chief, www.countrywatch.com; see Bibliography for research sources.

Political Risk Index

Political Risk Index

The **Political Risk Index** is a proprietary index measuring the level of risk posed to governments, corporations, and investors, based on a myriad of political and economic factors. The [Political Risk Index](#) is calculated using an established methodology by CountryWatch's Editor-in-Chief and is based on varied criteria* including the following consideration: political stability, political representation, democratic accountability, freedom of expression, security and crime, risk of conflict, human development, jurisprudence and regulatory transparency, economic risk, foreign investment considerations, possibility of sovereign default, and corruption. Scores are assigned from 0-10 using the aforementioned criteria. A score of 0 marks the highest political risk, while a score of 10 marks the lowest political risk. Stated differently, countries with the lowest scores pose the greatest political risk. A score of 0 marks the most dire level of political risk and an ultimate nadir, while a score of 10 marks the lowest possible level of political risk, according to this proprietary index. Rarely will there be scores of 0 or 10 due to the reality that countries contain complex landscapes; as such, the index offers a range of possibilities ranging from lesser to greater risk.

Country	Assessment
Afghanistan	2

Albania	4
Algeria	6
Andorra	9
Angola	4
Antigua	8
Argentina	4
Armenia	4-5
Australia	9.5
Austria	9.5
Azerbaijan	4
Bahamas	8.5
Bahrain	6
Bangladesh	3.5
Barbados	8.5-9
Belarus	3
Belgium	9
Belize	8
Benin	5

Bhutan	5
Bolivia	5
Bosnia-Herzegovina	4
Botswana	7
Brazil	7
Brunei	7
Bulgaria	6
Burkina Faso	4
Burma (Myanmar)	4.5
Burundi	3
Cambodia	4
Cameroon	5
Canada	9.5
Cape Verde	6
Central African Republic	3
Chad	4
Chile	9
China	7

China: Hong Kong	8
China: Taiwan	8
Colombia	7
Comoros	5
Congo DRC	3
Congo RC	4
Costa Rica	8
Cote d'Ivoire	4.5
Croatia	7
Cuba	4-4.5
Cyprus	5
Czech Republic	8
Denmark	9.5
Djibouti	4.5
Dominica	7
Dominican Republic	6
East Timor	5
Ecuador	6

Egypt	5
El Salvador	7
Equatorial Guinea	4
Eritrea	3
Estonia	8
Ethiopia	4
Fiji	5
Finland	9
Fr. Yugoslav Rep. Macedonia	5
France	9
Gabon	5
Gambia	4
Georgia	5
Germany	9.5
Ghana	6
Greece	4.5-5
Grenada	8
Guatemala	6

Guinea	3.5
Guinea-Bissau	3.5
Guyana	4.5
Haiti	3.5
Holy See (Vatican)	9
Honduras	4.5-5
Hungary	7
Iceland	8.5-9
India	7.5-8
Indonesia	6
Iran	3.5-4
Iraq	2.5-3
Ireland	8-8.5
Israel	8
Italy	7.5
Jamaica	6.5-7
Japan	9
Jordan	6.5

Kazakhstan	6
Kenya	5
Kiribati	7
Korea, North	1
Korea, South	8
Kosovo	4
Kuwait	7
Kyrgyzstan	4.5
Laos	4.5
Latvia	7
Lebanon	5.5
Lesotho	6
Liberia	3.5
Libya	2
Liechtenstein	9
Lithuania	7.5
Luxembourg	9
Madagascar	4

Malawi	4
Malaysia	8
Maldives	4.5
Mali	4
Malta	8
Marshall Islands	6
Mauritania	4.5-5
Mauritius	7
Mexico	6.5
Micronesia	7
Moldova	5
Monaco	9
Mongolia	5
Montenegro	6
Morocco	6.5
Mozambique	4.5-5
Namibia	6.5-7
Nauru	6

Nepal	4
Netherlands	9.5
New Zealand	9.5
Nicaragua	5
Niger	4
Nigeria	4.5
Norway	9.5
Oman	7
Pakistan	3.5
Palau	7
Panama	7.5
Papua New Guinea	5
Paraguay	6.5-7
Peru	7
Philippines	6
Poland	8
Portugal	7.5
Qatar	7.5

Romania	5.5
Russia	5.5
Rwanda	5
Saint Kitts and Nevis	8
Saint Lucia	8
Saint Vincent and Grenadines	8
Samoa	7
San Marino	9
Sao Tome and Principe	5.5
Saudi Arabia	6
Senegal	6
Serbia	5
Seychelles	7
Sierra Leone	4.5
Singapore	9
Slovak Republic (Slovakia)	8
Slovenia	8
Solomon Islands	6

Somalia	2
South Africa	7
Spain	7.5
Sri Lanka	5
Sudan	3.5
Suriname	5
Swaziland	5
Sweden	9.5
Switzerland	9.5
Syria	2
Tajikistan	4.5
Tanzania	6
Thailand	6.5
Togo	4.5
Tonga	7
Trinidad and Tobago	8
Tunisia	6
Turkey	7

Turkmenistan	4.5
Tuvalu	7
Uganda	6
Ukraine	3.5-4
United Arab Emirates	7
United Kingdom	9
United States	9.5
Uruguay	8
Uzbekistan	4
Vanuatu	7
Venezuela	4
Vietnam	5
Yemen	3
Zambia	4.5
Zimbabwe	3

***Methodology**

The [Political Risk Index](#) is calculated by CountryWatch's Editor-in-Chief and is based on the combined scoring of varied criteria as follows --

1. political stability (record of peaceful transitions of power, ability of government to stay in office and carry out policies as a result of productive executive-legislative relationship, perhaps with popular support vis a vis risk of government collapse)
2. political representation (right of suffrage, free and fair elections, multi-party participation, and influence of foreign powers)
3. democratic accountability (record of respect for political rights, human rights, and civil liberties, backed by constitutional protections)
4. freedom of expression (media freedom and freedom of expression, right to dissent or express political opposition, backed by constitutional protections)
5. security and crime (the degree to which a country has security mechanisms that ensures safety of citizens and ensures law and order, without resorting to extra-judicial measures)
6. risk of conflict (the presence of conflict; record of coups or civil disturbances; threat of war; threats posed by internal or external tensions; threat or record of terrorism or insurgencies)
7. human development (quality of life; access to education; socio-economic conditions; systemic concern for the status of women and children)
8. jurisprudence and regulatory transparency (the impartiality of the legal system, the degree of transparency within the regulatory system of a country and the durability of that structure)
9. economic conditions (economic stability, investment climate, degree of nationalization of industries, property rights, labor force development)
10. corruption (the degree of corruption in a country and/or efforts by the government to address graft and other irregularities)

Editor's Note:

As of 2015, the current climate of upheaval internationally -- both politically and economically -- has affected the ratings for several countries across the world.

North Korea, [Afghanistan](#), [Somalia](#), and [Zimbabwe](#) -- retain their low rankings.

Several Middle Eastern and North African countries, such as [Tunisia](#), [Egypt](#), [Libya](#), [Syria](#), [Iraq](#) and [Yemen](#) were downgraded in recent years due to political instability occurring in the "season of

unrest" sweeping the region since 2011 and continuing today. The worst downgrades affected [Syria](#) where civil war is at play, along with the rampage of terror being carried out by Islamist terrorists who have also seized control over part of Syrian territory. [Iraq](#) has been further downgraded due to the rampage of Islamist terrorists and their takeover of wide swaths of Iraqi territory. [Libya](#) has also been downgraded further due to its slippage into failed state status; at issue in [Libya](#) have been an ongoing power struggle between rival militias. [Yemen](#) continues to hold steady with a poor ranking due to continued unrest at the hands of Houthi rebels, secessionists, al-Qaida in the Arabian Peninsula, and Islamic State. Its landscape has been further complicated by the fact that it is now the site of a proxy war between [Iran](#) and [Saudi Arabia](#). Conversely, [Tunisia](#) and [Egypt](#) have seen slight upgrades as these countries stabilize.

In Africa, [Zimbabwe](#) continues to be one of the bleak spots of the world with the Mugabe regime effectively destroying the country's once vibrant economy, and miring [Zimbabwe](#) with an exceedingly high rate of inflation, debilitating unemployment, devolving public services, and critical food shortages; rampant crime and political oppression round out the landscape. [Somalia](#) also sports a poor ranking due to the continuing influence of the terror group, al-Shabab, which was not operating across the border in [Kenya](#). On the upside, [Nigeria](#), which was ineffectively dealing with the threat posed by the terror group, Boko Haram, was making some strides on the national security front with its new president at the helm. [Mali](#) was slightly upgraded due to its efforts to return to constitutional order following the 2012 coup and to neutralize the threat of separatists and Islamists. But the [Central African Republic](#) was downgraded due to the takeover of the government by Muslim Seleka rebels and a continued state of lawlessness in that country. South [Sudan](#) -- the world's newest nation state -- has not been officially included in this assessment; however, it can be unofficially assessed to be in the vicinity of "3" due to its manifold political and economic challenges. [Burkina Faso](#), [Burundi](#) and [Guinea](#) have been downgraded due to political unrest, with [Guinea](#) also having to deal with the burgeoning Ebola crisis.

In Europe, [Ukraine](#) was downgraded due to the unrest facing that country following its Maidan revolution that triggered a pro-Russian uprising in the eastern part of the country. [Russia](#) was also implicated in the Ukrainian crisis due to its intervention on behalf of pro-Russian separatists, as well as its annexation of the Ukrainian territory of Crimea. Strains on the infrastructure of southern and eastern European countries, such as [Serbia](#), [Croatia](#), and [Hungary](#), due to an influx of refugees was expected to pose social and economic challenges, and slight downgrades were made accordingly. So too, a corruption crisis for the Romanian prime minister has affected the ranking of that country. Meanwhile, the rankings for [Spain](#), [Portugal](#), [Ireland](#), and [Italy](#) were maintained due to debt woes and the concomitant effect on the euro zone. [Greece](#), another euro zone nation, was earlier downgraded due to its sovereign debt crisis; however, no further downgrade was added since the country was able to successfully forge a bailout rescue deal with creditor institutions. Cyprus' exposure to Greek banks yielded a downgrade in its case.

In Asia, [Nepal](#) was downgraded in response to continuous political instability and a constitutional

crisis that prevails well after landmark elections were held. Both [India](#) and China retain their rankings; [India](#) holds a slightly higher ranking than [China](#) due to its record of democratic representation and accountability. Increasing violence and political instability in [Pakistan](#) resulted in a downgrade for this country's already low rating. Meanwhile, [Singapore](#) retained its strong rankings due to its continued effective stewardship of the economy and political stability.

In the Americas, ongoing political and economic woes, as well as crime and corruption have affected the rankings for [Mexico](#) , [Guatemala](#), and [Brazil](#). [Argentina](#) was downgraded due to its default on debt following the failure of talks with bond holders. [Venezuela](#) was downgraded due to its mix of market unfriendly policies and political oppression. For the moment, the [United States](#) maintains a strong ranking along with [Canada](#), and most of the English-speaking countries of the Caribbean; however, a renewed debt ceiling crisis could cause the [United States](#) to be downgraded in a future edition. Finally, a small but significant upgrade was attributed to [Cuba](#) due to its recent pro-business reforms and its normalization of ties with the United States.

Source:

Dr. Denise Youngblood Coleman, Editor in Chief, CountryWatch Inc. www.countrywatch.com

Updated:

2015

Political Stability

Political Stability

The **Political Stability Index** is a proprietary index measuring a country's level of stability, standard of good governance, record of constitutional order, respect for human rights, and overall strength of democracy. The [Political Stability](#) Index is calculated using an established methodology* by CountryWatch's Editor-in-Chief and is based on a given country's record of peaceful transitions of power, ability of a government to stay in office and carry out its policies vis a vis risk credible risks of government collapse. Threats include coups, domestic violence and instability, terrorism, etc. This index measures the dynamic between the quality of a country's government and the threats that can compromise and undermine stability. Scores are assigned from 0-10 using the aforementioned criteria. A score of 0 marks the lowest level of political stability and an

ultimate nadir, while a score of 10 marks the highest level of political stability possible, according to this proprietary index. Rarely will there be scores of 0 or 10 due to the reality that countries contain complex landscapes; as such, the index offers a range of possibilities ranging from lesser to greater stability.

Country	Assessment
Afghanistan	2
Albania	4.5-5
Algeria	5
Andorra	9.5
Angola	4.5-5
Antigua	8.5-9
Argentina	7
Armenia	5.5
Australia	9.5
Austria	9.5
Azerbaijan	5
Bahamas	9
Bahrain	6

Bangladesh	4.5
Barbados	9
Belarus	4
Belgium	9
Belize	8
Benin	5
Bhutan	5
Bolivia	6
Bosnia-Herzegovina	5
Botswana	8.5
Brazil	7
Brunei	8
Bulgaria	7.5
Burkina Faso	4
Burma (Myanmar)	4.5
Burundi	4
Cambodia	4.5-5
Cameroon	6

Canada	9.5
Cape Verde	6
Central African Republic	3
Chad	4.5
Chile	9
China	7
China: Hong Kong	8
China: Taiwan	8
Colombia	7.5
Comoros	5
Congo DRC	3
Congo RC	5
Costa Rica	9.5
Cote d'Ivoire	3.5
Croatia	7.5
Cuba	4.5
Cyprus	8
Czech Republic	8.5

Denmark	9.5
Djibouti	5
Dominica	8.5
Dominican Republic	7
East Timor	5
Ecuador	7
Egypt	4.5-5
El Salvador	7.5-8
Equatorial Guinea	4.5
Eritrea	4
Estonia	9
Ethiopia	4.5
Fiji	5
Finland	9
Fr. Yugoslav Rep. Macedonia	6.5
France	9
Gabon	5
Gambia	4.5

Georgia	5
Germany	9.5
Ghana	7
Greece	6
Grenada	8.5
Guatemala	7
Guinea	3.5-4
Guinea-Bissau	4
Guyana	6
Haiti	3.5-4
Holy See (Vatican)	9.5
Honduras	6
Hungary	7.5
Iceland	9
India	8
Indonesia	7
Iran	3.5
Iraq	2.5

Ireland	9.5
Israel	8
Italy	8.5-9
Jamaica	8
Japan	9
Jordan	6
Kazakhstan	6
Kenya	5
Kiribati	8
Korea, North	2
Korea, South	8.5
Kosovo	5.5
Kuwait	7
Kyrgyzstan	5
Laos	5
Latvia	8.5
Lebanon	5.5
Lesotho	5

Liberia	3.5-4
Libya	2
Liechtenstein	9
Lithuania	9
Luxembourg	9.5
Madagascar	4
Malawi	5
Malaysia	8
Maldives	4.5-5
Mali	4.5-5
Malta	9
Marshall Islands	8
Mauritania	6
Mauritius	8
Mexico	6.5-7
Micronesia	8
Moldova	5.5
Monaco	9.5

Mongolia	6.5-7
Montenegro	8
Morocco	7
Mozambique	5
Namibia	8.5
Nauru	8
Nepal	4.5
Netherlands	9.5
New Zealand	9.5
Nicaragua	6
Niger	4.5
Nigeria	4.5
Norway	9.5
Oman	7
Pakistan	3
Palau	8
Panama	8.5
Papua New Guinea	6

Paraguay	8
Peru	7.5
Philippines	6
Poland	9
Portugal	9
Qatar	7
Romania	7
Russia	6
Rwanda	5
Saint Kitts and Nevis	9
Saint Lucia	9
Saint Vincent and Grenadines	9
Samoa	8
San Marino	9.5
Sao Tome and Principe	7
Saudi Arabia	6
Senegal	7.5
Serbia	6.5

Seychelles	8
Sierra Leone	4.5
Singapore	9.5
Slovak Republic (Slovakia)	8.5
Slovenia	9
Solomon Islands	6.5-7
Somalia	2
South Africa	7.5
Spain	9
Sri Lanka	5
Sudan	3
Suriname	5
Swaziland	5
Sweden	9.5
Switzerland	9.5
Syria	2
Tajikistan	4.5
Tanzania	6

Thailand	6
Togo	5
Tonga	7
Trinidad and Tobago	8
Tunisia	5
Turkey	7.5
Turkmenistan	5
Tuvalu	8.5
Uganda	6
Ukraine	3.5-4
United Arab Emirates	7
United Kingdom	9
United States	9
Uruguay	8.5
Uzbekistan	4
Vanuatu	8.5
Venezuela	4.5-5
Vietnam	4.5

Yemen	2.5
Zambia	5
Zimbabwe	3

*Methodology

The Political Stability Index is calculated by CountryWatch's Editor-in-Chief and is based on the combined scoring of varied criteria as follows --

1. record of peaceful transitions of power (free and fair elections; adherence to political accords)
2. record of democratic representation, presence of instruments of democracy; systemic accountability
3. respect for human rights; respect for civil rights
4. strength of the system of jurisprudence, adherence to constitutional order, and good governance
5. ability of a government to stay in office and carry out its policies vis a vis risk credible risks of government collapse (i.e. government stability versus a country being deemed "ungovernable")
6. threat of coups, insurgencies, and insurrection
7. level of unchecked crime and corruption
8. risk of terrorism and other threats to national security
9. relationship with regional powers and international community; record of bilateral or multilateral cooperation
10. degree of economic strife (i.e. economic and financial challenges)

Editor's Note:

As of 2015, the current climate of upheaval internationally -- both politically and economically --

has affected the ratings for several countries across the world. The usual suspects -- North Korea, [Afghanistan](#), and [Somalia](#) -- retain their low rankings. The reclusive and ultra-dictatorial North Korean regime, which has terrified the world with its nuclear threats, has exhibited internal instability. Of note was a cut-throat purge of hundreds of high ranking officials deemed to be a threat to Kim Jung-un. Despite their attempts to recover from years of lawlessness, war, and warlordism, both [Afghanistan](#) and [Somalia](#) continue to be beset by terrorism and turmoil. In [Afghanistan](#), while international forces have seen success in the effort against the terror group, al-Qaida, the other Islamist extremist group, the Taliban, continues to carry out a vicious insurgency using terrorism. In [Somalia](#), while the government attempts to do the nation's business, the terror group, al-Shabab continues to make its presence known not only in [Somalia](#), but across the border into [Kenya](#) with devastating results/ Also in this category is [Iraq](#), which continues to be rocked by horrific violence and terrorism at the hands of Islamic State, which has taken over wide swaths of Iraqi territory.

Syria, [Libya](#), and [Yemen](#) have been added to this unfortunate echelon of the world's most politically unstable countries. [Syria](#) has been mired by the twin hazards of 1. a civil war as rebels oppose the Assad regime; and 2. the rampage of terror being carried out by Islamic State, which also seized control over vast portions of Syrian territory. Meanwhile, the post-Qaddhafi landscape of [Libya](#) has devolved into chaos as rival militias battle for control -- the elected government of the country notwithstanding. Rounding out this grim triad is [Yemen](#), which was dealing with a Houthi rebellion, secessionists in the south, as well as the threat of terrorism from al-Qaida in the Arabian Peninsula as well as Islamic State, while also being the site of a proxy war between Shi'a [Iran](#) and Sunni [Saudi Arabia](#).

Meanwhile, several Middle Eastern and North African countries, such as [Tunisia](#), [Egypt](#), and [Bahrain](#) were downgraded in recent years due to political instability occurring in the "season of unrest" sweeping the region since 2011 and continuing today. All three of these countries have stabilized in recent years and have been upgraded accordingly. In [Bahrain](#), the landscape had calmed. In [Egypt](#), the secular military-backed government has generated criticism for its crackdown on the Muslim Brotherhood; however, the country had ratified the presidency via democratic elections and were on track to hold parliamentary elections as the country moved along the path of democratization. Perhaps the most impressive story was coming out of [Tunisia](#) -- the country whose Jasmine Revolution sparked the entire Arab Spring -- and where after a few years of strife, a new progressive constitution was passed into law and a secular government had been elected to power. [Tunisia](#), [Egypt](#), and [Bahrain](#) have seen slight upgrades as these countries stabilize.

In Africa, the [Central African Republic](#) was downgraded the previous year due to the takeover of the government by Muslim Seleka rebels. Although the country has been trying to emerge from this crisis, the fact of the matter was that it was difficult to halt the precipitous decline into lawlessness in that country. [Zimbabwe](#) has maintained its consistently poor ranking due to the

dictatorial regime of Mugabe, who continues to hold a tight grip on power, intimidates the opposition, squashes dissent, and oppresses the white farmer population of the country. Moving in a slightly improved direction is [Nigeria](#), which has sported abysmal ratings due to the government's fecklessness in dealing with the threat posed by the Islamist terror group, Boko Haram. Under its newly-elected government, there appears to be more of a concerted effort to make national security a priority action item. [Mali](#) was also slightly upgraded due to its efforts to return to constitutional order following the 2012 coup and to neutralize the threat of separatists and Islamists. Political instability has visited [Burkina Faso](#) and [Burundi](#) as the leaders of those countries attempted to side-step constitutional limits to hold onto power. In [Burundi](#), an attempted coup ensued but quelled, and the president won a (questionable) new term in office; unrest has since punctuated the landscape. In [Burkina Faso](#), the political climate has turned stormy as a result of a successful coup that ended the rule of the president, and then a putsch against the transitional government. These two African countries have been downgraded as a result.

It should be noted that the African country of South [Sudan](#) -- the world's newest nation state -- has not been officially included in this assessment; however, it can be unofficially assessed to be in the vicinity of "3" due to its manifold political and economic challenges. [Guinea](#) has endured poor rankings throughout, but was slightly downgraded further over fears of social unrest and the Ebola heath crisis.

In Europe, [Ukraine](#) was downgraded due to the unrest facing that country following its Maidan revolution that triggered a pro-Russian uprising in the eastern part of the country. [Russia](#) was also implicated in the Ukrainian crisis due to its intervention on behalf of pro-Russian separatists, as well as its annexation of the Ukrainian territory of Crimea. [Serbia](#) and [Albania](#) were slightly downgraded due to eruptions of unrest, while [Romania](#) was slightly downgraded on the basis of corruption charges against the prime minister. [Spain](#), [Portugal](#), [Ireland](#), and [Italy](#) were downgraded due to debt woes and the concomitant effect on the euro zone. [Greece](#), another euro zone nation, was downgraded the previous year due to its sovereign debt crisis; however, the country successfully forged a rescue deal with international creditors and stayed within the Euro zone. Greek voters rewarded the hitherto unknown upstart party at the polls for these efforts. As a result, [Greece](#) was actually upgraded slightly as it proved to the world that it could endure the political and economic storms. Meanwhile, [Germany](#), [France](#), [Switzerland](#), the [United Kingdom](#), the [Netherlands](#), and the Scandinavian countries continue to post impressive ranking consistent with these countries' strong records of democracy, freedom, and peaceful transfers of power.

In Asia, [Nepal](#) was downgraded in response to continuous political instability well after landmark elections that prevails today. [Cambodia](#) was very slightly downgraded due to post-election instability that has resulted in occasional flares of violence. Despite the "trifecta of tragedy" in [Japan](#) in 2011 -- the earthquake, the ensuing tsunami, and the resulting nuclear crisis -- and the appreciable destabilization of the economic and political terrain therein, this country has only slightly been downgraded. Japan's challenges have been assessed to be transient, the government

remains accountable, and there is little risk of default. Both [India](#) and China retain their rankings; [India](#) holds a slightly higher ranking than [China](#) due to its record of democratic representation and accountability. Increasing violence and political instability in [Pakistan](#) resulted in a downgrade for this country's already low rating.

In the Americas, [Haiti](#) retained its downgraded status due to ongoing political and economic woes. [Mexico](#) was downgraded due to its alarming rate of crime. [Guatemala](#) was downgraded due to charges of corruption, the arrest of the president, and uncertainty over the outcome of elections. [Brazil](#) was downgraded due to the corruption charges erupting on the political landscape, the stalling of the economy, and the increasingly loud calls for the impeachment of President Rousseff. [Argentina](#) was downgraded due to its default on debt following the failure of talks with bond holders. [Venezuela](#) was downgraded due to the fact that the country's post-Chavez government is every bit as autocratic and nationalistic, but even more inclined to oppress its political opponents. [Colombia](#) was upgraded slightly due to efforts aimed at securing a peace deal with the FARC insurgents. A small but significant upgrade was attributed to [Cuba](#) due to its recent pro-business reforms and its normalization of ties with the United States. Meanwhile, the [United States](#), [Canada](#), [Costa Rica](#), [Panama](#), and most of the English-speaking countries of the Caribbean retain their strong rankings due to their records of stability and peaceful transfers of power.

In the Pacific, [Fiji](#) was upgraded due to its return to constitutional order and democracy with the holding of the first elections in eight years.

In Oceania, [Maldives](#) has been slightly downgraded due to the government's continued and rather relentless persecution of the country's former pro-democracy leader - former President Nasheed.

Source:

Dr. Denise Youngblood Coleman, Editor in Chief, CountryWatch Inc. www.countrywatch.com

Updated:

2015

Freedom Rankings

Freedom Rankings

Freedom in the World

Editor's Note: This ranking by Freedom House quantifies political freedom and civil liberties into a single combined index on each sovereign country's level of freedom and liberty. The initials "PR" and "CL" stand for Political Rights and Civil Liberties, respectively. The number 1 represents the most free countries and the number 7 represents the least free. Several countries fall in the continuum in between. The freedom ratings reflect an overall judgment based on survey results.

Country	PR	CL	Freedom Status	Trend Arrow
Afghanistan	6 ?	6	Not Free	
Albania*	3	3	Partly Free	
Algeria	6	5	Not Free	
Andorra*	1	1	Free	
Angola	6	5	Not Free	
Antigua and Barbuda*	3 ?	2	Free	
Argentina*	2	2	Free	
Armenia	6	4	Partly Free	
Australia*	1	1	Free	
Austria*	1	1	Free	

Azerbaijan	6	5	Not Free	
Bahamas*	1	1	Free	
Bahrain	6 ?	5	Not Free ?	
Bangladesh*	3 ?	4	Partly Free	
Barbados*	1	1	Free	
Belarus	7	6	Not Free	
Belgium*	1	1	Free	
Belize*	1	2	Free	
Benin*	2	2	Free	
Bhutan	4	5	Partly Free	
Bolivia*	3	3	Partly Free	
Bosnia-Herzegovina*	4	3	Partly Free	
Botswana*	3 ?	2	Free	
Brazil*	2	2	Free	
Brunei	6	5	Not Free	
Bulgaria*	2	2	Free	
Burkina Faso	5	3	Partly Free	
Burma	7	7	Not Free	

Burundi*	4	5	Partly Free	↑
Cambodia	6	5	Not Free	↓
Cameroon	6	6	Not Free	
Canada*	1	1	Free	
Cape Verde*	1	1	Free	
Central African Republic	5	5	Partly Free	
Chad	7	6	Not Free	
Chile*	1	1	Free	
China	7	6	Not Free	
Colombia*	3	4	Partly Free	
Comoros*	3	4	Partly Free	
Congo (Brazzaville)	6	5	Not Free	↓
Congo (Kinshasa)	6	6	Not Free	↓
Costa Rica*	1	1	Free	
Cote d'Ivoire	6	5	Not Free	
Croatia*	1 ?	2	Free	
Cuba	7	6	Not Free	
Cyprus*	1	1	Free	

Czech Republic*	1	1	Free	
Denmark*	1	1	Free	
Djibouti	5	5	Partly Free	
Dominica*	1	1	Free	
Dominican Republic*	2	2	Free	↓
East Timor*	3	4	Partly Free	
Ecuador*	3	3	Partly Free	
Egypt	6	5	Not Free	
El Salvador*	2	3	Free	
Equatorial Guinea	7	7	Not Free	
Eritrea	7	7 ?	Not Free	
Estonia*	1	1	Free	
Ethiopia	5	5	Partly Free	↓
Fiji	6	4	Partly Free	
Finland*	1	1	Free	
France*	1	1	Free	
Gabon	6	5 ?	Not Free ?	
The Gambia	5	5 ?	Partly Free	

Georgia	4	4	Partly Free	
Germany*	1	1	Free	
Ghana*	1	2	Free	
Greece*	1	2	Free	
Grenada*	1	2	Free	
Guatemala*	4 ?	4	Partly Free	
Guinea	7	6 ?	Not Free	
Guinea-Bissau*	4	4	Partly Free	
Guyana*	2	3	Free	
Haiti*	4	5	Partly Free	
Honduras	4 ?	4 ?	Partly Free	
Hungary*	1	1	Free	
Iceland*	1	1	Free	
India*	2	3	Free	
Indonesia*	2	3	Free	
Iran	6	6	Not Free	↓
Iraq	5 ?	6	Not Free	
Ireland*	1	1	Free	

Israel*	1	2	Free	
Italy*	1	2	Free	
Jamaica*	2	3	Free	
Japan*	1	2	Free	
Jordan	6 ?	5	Not Free ?	
Kazakhstan	6	5	Not Free	↓
Kenya	4	4 ?	Partly Free	
Kiribati*	1	1	Free	
Kosovo	5 ?	4 ?	Partly Free ?	
Kuwait	4	4	Partly Free	
Kyrgyzstan	6 ?	5 ?	Not Free ?	
Laos	7	6	Not Free	
Latvia*	2	1	Free	
Lebanon	5	3 ?	Partly Free	
Lesotho*	3 ?	3	Partly Free ?	
Liberia*	3	4	Partly Free	
Libya	7	7	Not Free	
Liechtenstein*	1	1	Free	

Lithuania*	1	1	Free	
Luxembourg*	1	1	Free	
Macedonia*	3	3	Partly Free	↑
Madagascar	6 ?	4 ?	Partly Free	
Malawi*	3 ?	4	Partly Free	
Malaysia	4	4	Partly Free	
Maldives*	3 ?	4	Partly Free	
Mali*	2	3	Free	
Malta*	1	1	Free	↓
Marshall Islands*	1	1	Free	
Mauritania	6	5	Not Free	
Mauritius*	1	2	Free	
Mexico*	2	3	Free	
Micronesia*	1	1	Free	
Moldova*	3 ?	4	Partly Free	
Monaco*	2	1	Free	
Mongolia*	2	2	Free	↑
Montenegro*	3	2 ?	Free ?	

Morocco	5	4	Partly Free	↓
Mozambique	4 ?	3	Partly Free	
Namibia*	2	2	Free	
Nauru*	1	1	Free	
Nepal	4	4	Partly Free	
Netherlands*	1	1	Free	
New Zealand*	1	1	Free	
Nicaragua*	4	4 ?	Partly Free	
Niger	5 ?	4	Partly Free	
Nigeria	5	4	Partly Free	↓
North Korea	7	7	Not Free	↓
Norway*	1	1	Free	
Oman	6	5	Not Free	
Pakistan	4	5	Partly Free	
Palau*	1	1	Free	
Panama*	1	2	Free	
Papua New Guinea*	4	3	Partly Free	
Paraguay*	3	3	Partly Free	

Peru*	2	3	Free	
Philippines	4	3	Partly Free	↓
Poland*	1	1	Free	
Portugal*	1	1	Free	
Qatar	6	5	Not Free	
Romania*	2	2	Free	
Russia	6	5	Not Free	↓
Rwanda	6	5	Not Free	
Saint Kitts and Nevis*	1	1	Free	
Saint Lucia*	1	1	Free	
Saint Vincent and Grenadines*	2	1	Free	
Samoa*	2	2	Free	
San Marino*	1	1	Free	
Sao Tome and Principe*	2	2	Free	
Saudi Arabia	7	6	Not Free	
Senegal*	3	3	Partly Free	
Serbia*	2 ?	2	Free	
Seychelles*	3	3	Partly Free	

Sierra Leone*	3	3	Partly Free	
Singapore	5	4	Partly Free	
Slovakia*	1	1	Free	↓
Slovenia*	1	1	Free	
Solomon Islands	4	3	Partly Free	
Somalia	7	7	Not Free	
South Africa*	2	2	Free	
South Korea*	1	2	Free	
Spain*	1	1	Free	
Sri Lanka*	4	4	Partly Free	
Sudan	7	7	Not Free	
Suriname*	2	2	Free	
Swaziland	7	5	Not Free	
Sweden*	1	1	Free	
Switzerland*	1	1	Free	↓
Syria	7	6	Not Free	
Taiwan*	1 ?	2 ?	Free	
Tajikistan	6	5	Not Free	

Tanzania	4	3	Partly Free	
Thailand	5	4	Partly Free	
Togo	5	4 ?	Partly Free	
Tonga	5	3	Partly Free	
Trinidad and Tobago*	2	2	Free	
Tunisia	7	5	Not Free	
Turkey*	3	3	Partly Free	↓
Turkmenistan	7	7	Not Free	
Tuvalu*	1	1	Free	
Uganda	5	4	Partly Free	
Ukraine*	3	2	Free	
United Arab Emirates	6	5	Not Free	
United Kingdom*	1	1	Free	
United States*	1	1	Free	
Uruguay*	1	1	Free	
Uzbekistan	7	7	Not Free	
Vanuatu*	2	2	Free	
Venezuela	5 ?	4	Partly Free	

Vietnam	7	5	Not Free	↓
Yemen	6 ?	5	Not Free ?	
Zambia*	3	4 ?	Partly Free	
Zimbabwe	6 ?	6	Not Free	

Methodology:

PR and CL stand for political rights and civil liberties, respectively; 1 represents the most free and 7 the least free rating. The ratings reflect an overall judgment based on survey results.

? ? up or down indicates a change in political rights, civil liberties, or status since the last survey.

↑ ↓ up or down indicates a trend of positive or negative changes that took place but that were not sufficient to result in a change in political rights or civil liberties ratings of 1-7.

* indicates a country's status as an electoral democracy.

Source:

This data is derived from the latest edition of Freedom House's Freedom in the World 2010 edition.

Available at URL: <http://www.freedomhouse.org>

Updated:

Reviewed in 2015

Human Rights

Overview of Human Rights in Papua New Guinea

The Independent State of Papua New Guinea is a constitutional monarchy and a parliamentary

democracy. Elections in recent years gave rise to claims of voter intimidation, violence, and influence peddling. Though irregularities occurred, international monitors believe the will of the people prevailed. This government works to respect the civil and human rights of the citizens of Papua New Guinea; however, problems still exist.

The judiciary is understaffed, which causes inefficiency and long delays in bringing people to trial. Violent attacks on judges and witnesses also slow the quest for justice. Police and security forces are known to use excessive force when arresting and detaining suspects. Some of these incidences result in fatal shootings of the ‘suspects.’ The police, acting as agents of the government, are also known to infringe on citizens' privacy rights. Illegal surveillance is a known action used by the government to monitor ‘persons of question.’ Prison conditions are harsh. Inter-tribal and gun-related violent crime led to the deaths of at least 30 people in recent years. Provincial power struggles, government corruption, and reprisal killings fuel violence in the region.

Note: Rising malaria and HIV/AIDS infection rates are also a concern. In recent times, 100+ new cases of HIV/AIDS were reported each month. This prompted calls for emergency intervention from humanitarian aid organizations.

Human Development Index (HDI) Rank:

See full list in Social Overview

Human Poverty Index Rank:

78th out of 103

Gini Index:

50.9

Life Expectancy at Birth (years):

66 years

Unemployment Rate:

80% (urban); higher in rural areas

Population living on \$1 a day (%):

N/A

Population living on \$2 a day (%):

N/A

Population living beneath the Poverty Line (%):

37.5%

Internally Displaced People:

N/A

Note-7,000 refugees are currently seeking asylum in Papua New Guinea

Total Crime Rate (%):

N/A

Health Expenditure (% of GDP):

Public: 3.8%

% of GDP Spent on Education:

2.3%

Human Rights Conventions Party to:

- International Convention on the Prevention and Punishment of the Crime of Genocide
- International Convention on the Elimination of All Forms of Racial Discrimination
- Convention on the Elimination of All Forms of Discrimination against Women
- Conventions on the Rights of the Child
- Convention relating to the Status of Refugees

*Human Development Index (HDI) is a composite index that measures the level of well-being in 177 nations in the world. It uses factors such as poverty, literacy, life-expectancy, education, gross domestic product, and purchasing power parity to assess the average achievements in each nation. It has been used in the United Nation's Human Development Report since 1993.

*Human Poverty Index Ranking is based on certain indicators used to calculate the Human

Poverty Index. Probability at birth of not surviving to age 40, adult literacy rate, population without sustainable access to an improved water source, and population below income poverty line are the indicators assessed in this measure.

*The Gini Index measures inequality based on the distribution of family income or consumption. A value of 0 represents perfect equality (income being distributed equally), and a value of 100 perfect inequality (income all going to one individual).

*The calculation of the total crime rate is the % of the total population which has been effected by property crime, robbery, sexual assault, assault, or bribery (corruption) related occurrences.

Government Functions

Background

Papua New Guinea is a parliamentary democracy and member of the British Commonwealth, recognizing the Queen of England as head of state. A governor-general, elected by parliament, who performs mainly ceremonial functions, represents her. A constitution has been in effect since 1975.

Branches of Government

At the executive level, as noted above, the hereditary monarch is the head of state, and the governor general, who is nominated by parliament, acts on behalf of the monarch. Following legislative elections, the leader of majority party or leader of majority coalition usually is appointed prime minister by governor general and functions as head of government. The prime minister appoints a cabinet from members of the majority party or coalition.

At the legislative level, there are 111 seats in the parliament; 89 are filled from open electorates and 20 are filled from provinces and the national capital district; members are elected by popular vote to serve five-year terms. It should be noted that the constitution allows up to 126 seats in parliament.

Parliament introduced reforms in June 1995 to centralize the system, with regional (at-large) MPs

becoming provincial governors, while retaining their national MP seats. The nation has an independent rather than partisan-based judiciary, mandated to protect constitutional rights and interpret the laws. There are several levels, culminating in the Supreme Court.

Political Sphere

Papua New Guinea's politics are highly competitive. MPs are elected on a "first past the post" system, with winners frequently gaining less than 15 percent of the vote. Such minuscule pluralities reflect the electorate's fragmentation into about seven major parties, and a political climate in which party allegiances are not strong. No single party has ever won enough seats to form a government in its own right. When the need arises to assemble a coalition government - a frequent occurrence both after and between elections - prominent politicians court popular MPs in a fluid panorama of shifting alliances.

Government Structure

Names:

conventional long form:

Independent State of Papua New Guinea

conventional short form:

Papua New Guinea

local short form:

Papuaniugini

former:

Territory of Papua and New Guinea

abbreviation:

PNG

Type:

Constitutional monarchy with parliamentary democracy

Executive Branch:

Head of state:

Queen ELIZABETH II (since 1952) is a hereditary monarch, represented by Governor General Michael Ogio (since 2011)

Head of government:

In 2011, Peter O'Neill was sworn into office following the disqualification of Sir Michael Somare from his post, however, a court ruling restored Somare to the post of head of government. O'Neill disputed this move and worked to restore his position. Elections were set for 2012 and O'Neill's leadership as prime minister was ratified at the polls. See "Note" and "Primer" below for details.

Elections:

None; the monarch is hereditary; governor general appointed by the National Executive Council; prime minister and deputy prime minister appointed by the governor general for up to five years on the basis of majority support in National Parliament.

Note on 2012 elections:

In January 2012, Papua New Guinea Prime Minister Peter O'Neill made it clear that highly anticipated elections would go forward later in the year, despite issues with compilation of the voter rolls. He also said he would support the notion of early elections, if legally possible. It was hoped that the elections would bring an end to the political power struggle rocking the country.

The situation dated back to 2011 when the family of long-serving Prime Minister Somare said that he had retired from office due to heart health complications. But Somare himself had never made that claim and once restored to health, he declared that he remained the head of government and was returning home to resume his post. With the prime ministership ruled vacant by a majority vote in parliament, and Somare disqualified from parliament due to absence at consecutive parliamentary sittings, Peter O'Neill -- a former finance minister -- was chosen to be the interim prime minister. While the governor general backed O'Neill's initial claim on the position of head of government, a ruling by the Supreme Court changed the political landscape significantly when it invalidated the position of O'Neill as prime minister and reinstated Michael Somare in that post. Governor General Michael Ogio reversed his stance and stood in solidarity with the court.

The political power struggle did not end quickly as O'Neill refused to accept the court ruling and insisted he was in charge of the country. As well, even with Somare now enjoying the legal support of both the highest court and the head of state, he was not guaranteed support in parliament. To that end, even though Governor General Ogio presided over the swearing in ceremony for Somare, the political impasse continued on Dec. 14, 2011, as the parliament voted to demand that O'Neill be inaugurated back into power as the prime minister. Moreover, reports emerged that O'Neill and his supporters in parliament intended to move to revoke Ogio from his position as head of state. Presumably, they would replace him with a choice more likely to do their bidding. To this end, parliament moved quickly to suspend Governor General Ogio from his post and had Parliamentary Speaker Jeffret Nape swear O'Neill in as prime minister. Once reinstated to power

as head of government, O'Neill urged parliament to reverse the legislation suspending Ogio and returned him to his post. But of course, by this point, there were two men -- O'Neill and Somare -- making the same claim of legitimacy. The scene was, therefore, ripe for conflict and indeed there were rowdy clashes outside the country's Government House.

By the middle of December 2011, the power struggle between O'Neill and Somare was ongoing. O'Neill was backed by a majority of the members of parliament and also enjoyed a groundswell of popular support. Indeed, the people of Papua New Guinea applauded his promise to provide free education and greater participation of women in parliament. On the other hand, Somare had the backing of the court. O'Neill claimed his legitimacy as head of government by pointing to the fact that he held the support of the majority of parliament. He said, "Parliament is the place where we make governments and where we change governments." Somare drew upon the constitution to make his counterpoint, saying in an interview with Radio Australia, "Numbers in parliament is irrelevant when we have a constitution that's supreme, and the constitution has spoken."

On Dec. 20, 2011, with the national civil service, police, armed forces, and even the newly restored Governor General Ogio now closing ranks around O'Neill, all signs pointed to an end to the political crisis. With the backing of these wings of government, O'Neill able to occupy the office of the prime minister and other government offices, and even evict the members of parliament who supported Somare. O'Neill was also able to pass a budget -- a move that served to consolidate his legitimacy as the head of government.

Still, Somare was not about to go quietly into the national history books of Papua New Guinea. On Dec. 22, 2011, Somare accused O'Neill of disrespecting the constitution and intimidating the governor-general. He also insisted that he was the rightful leader of the country. "I know very well, that there was no, either by speaker or by anyone to remove the member of parliament," he said. Somare continued, "I was discharged by parliament as a non-existing member. But court, in its wisdom, and following our constitution, reinstated me as the head of government."

By the first week of January 2012, the situation in Papua New Guinea remained unresolved with Somare having the support of the court and O'Neill holding the support of the parliament. Sir Arnold Amet, the Attorney-General in the Somare cabinet, urged O'Neill to be guided by the legal provisions of the Supreme Court judgment and allow Somare to take his place as head of government upon the resumption of parliament. Amet said that at that point, O'Neill could conceivably move forward with a motion of no confidence, which would bring down Somare's government and trigger early elections.

For his part, O'Neill assured the people of Papua New Guinea that his government would continue to govern the country democratically and transparently until general elections could be held later in the year. As noted above, those 2012 elections were set to go forth on schedule. In fact, he indicated he would support the idea of early elections, if it was possible under the law. O'Neill

said, “If it was for me, I will have called for an early election but the laws are there and that the election will be conducted as scheduled although there have been problems with the electoral roll.” He also said that the heads of the military and police would remain in their posts throughout the election to ensure the stability at this crucial period. There were high hopes that the elections could bring an end to the political power struggle plaguing the country.

As January 2012 was drawing to a close, the power struggle flared again as a cadre of soldiers, led by Colonel Yaura Sasa participated in a mutiny and placed Brigadier General Francis Agwi under house arrest. Given the mutineers' allegiance to Somare, the general consensus was that the military cadre was interested in restoring Somare to power by force. That being said, Agwi was subsequently released during a raid and Sasa was taken into custody. O'Neill said that Sasa would be "dealt with," and asserted that his government had control over the defense forces.

Note that days later, O'Neill said that he would dissolve parliament in February 2012, paving the way for early elections. O'Neill said that he made the decision in light of the unstable political conditions plaguing the country. Those elections were set for mid-2012.

Primer on elections in Papua New Guinea

June 23, 2012 --

A general election was scheduled to be held in Papua New Guinea (PNG) in mid-2012. The election was to take place in the wake of the country's constitutional crisis that has been ongoing since 2011 in which both the veteran incumbent Sir Michael Somare, as well as Peter O'Neill, claimed to be the legitimate head of government.

At issue was the fact that Peter O'Neill was sworn into office following the disqualification of Sir Michael Somare from his post. A court ruling restored Somare to the post of head of government; however, O'Neill was later restored to the position of head of government, largely thanks to strong parliamentary support. Elections were set for mid-2012 with an eye on resolving the remaining political divisions and tensions at the ballot box.

The electoral commission in Papua New Guinea announced that elections would be held on June 23, 2012, as scheduled. Electoral Commissioner, Andrew Trawen, said that despite calls from some members of parliament for the vote to be delayed, there was no legal room to change the June election date. “To delay or defer the 2012 elections will be unconstitutional,” he said. A pre-election report by Trawen noted that about 60 percent of the work to update the electoral roll was complete.

This date has since been confirmed by Prime Minister Peter O'Neill. Indeed, as April 2012 came to a close, despite a move by the parliament to defer the election by six months, Prime Minister O'Neill confirmed that the election would take place in two months. In a statement, he said:

“Pursuant to law, parliament cannot extend the term of members of parliament beyond the fifth anniversary of the return of writs for the previous general election. That is illegal.” He also said, “Let me state clearly and precisely that members of parliament and the executive government want to ensure all eligible voters’ names are on the common roll for them to exercise their voting rights in free and fair democratic elections. Our government is not trying to change election schedules. Cabinet has no right to set election dates.”

In the first week of May 2012, election officials in Papua New Guinea made clear that the electoral rolls would be ready before the June 23, 2012, election date. By the middle of the month, Prime Minister O'Neill was expressing confidence about the elections, and adopting a strong stance. He said, “The election is a go and the coalition is all in on this.”

In the background were rumors of both planned military coup against the government, which reportedly did not get off the ground due to a lack of support from the security forces. There were also suggestions of a vote of no-confidence, which was unlikely to change the political scene significantly with elections already in the offing. It should be noted that on May 15, 2012, the country's parliament would enter its final session, with its dissolution imminent ahead of the elections. O'Neill would head a caretaker government until a new post-election government could be formed.

By the close of May 2012, the political crisis that was dominating the country reached new heights when the Supreme Court declared the O'Neill government to be unconstitutional. Prime Minister O'Neill said he would summon a special sitting of parliament to discuss the matter, but insisted that the election would go forward, as scheduled. In a media interview, the prime minister said that the judiciary sought to disrupt the general election, and was only creating a climate of political instability and anxiety. He noted that the only resolution to the problems facing the country was the impending vote, as leaders seek a mandate from the people of Papua New Guinea at the polls.

For his part, Governor-General Sir Michael Ogio made clear that he was washing his hands of the political conflict and that he would not be signing any documents until a new government is formed after the elections. This stance also meant that Ogio was refusing to sign documents related to the recalling of parliament for a special sitting. Functions then rested with Acting Governor-General Jeffrey Nape when Ogio left the country on a trip to the United Kingdom.

Meanwhile, in the aftermath of the decision by the court to declare the O'Neill government unconstitutional, Acting Speaker Francis Marus declared the position of the prime minister vacant. A new parliamentary vote on the prime ministership was taken but Acting Governor-General Jeffrey Nape, at first, refused to perform the swearing in ceremony for Prime Minister O'Neill. After several hours in which he reportedly reviewed the situation, Nape performed the swearing in ceremony. O'Neill subsequently advanced a caretaker government, which would attend to the country's affairs until the election were held.

In June 2012, all attention was on the impending elections. At stake would be the 109 seats in the unicameral National Parliament, where members are elected for by popular vote to five-year terms in single constituencies.

Prime Minister O'Neill was hoping for validation and ratification of his governance at the polls. According to pre-election polling data, he was positioned to accomplish just that objective. Pollster, Mell Research and Marketing, forecast that Prime Minister Peter O'Neill's People's National Congress Party (PNC) would win the most parliamentary seats, and that O'Neill's three major coalition partners -- his deputy Belden Namah's PNG Party, Don Polye's Triumph Heritage Empowerment (THE) Party, and William Duma's United Resources Party -- would also see strong election performances. Accordingly, O'Neill could well be on track to serve his first full five-year term as head of government. Polling data also showed that despite the political drama of the previous months, voters were more focused on the O'Neill-Namah government's free education policy.

It should be noted that a host of electoral and voting access problems led to rumblings that voting would be extended beyond the first week of July 2012. It was yet to be seen if this pre-polling research would prove predictive as no election results were available at the time of writing. With the election taking place over a two-week period, results would not be immediately available.

As July 2012 entered its final week, partial results indicated that Papua New Guinea's former prime minister, Michael Somare, won his seat. But this victory was not necessarily a harbinger of things to come, specifically in the form of a return to power for Somare at the helm of governance. Indeed, Michael Somare's son and political heir apparent, Arthur Somare, lost his seat. Meanwhile, Prime Minister O'Neill's People's National Congress appeared to be in the lead, having won or leading in as many as 53 seats, while the Triumph Heritage Empowerment Party of long-serving cabinet minister, Don Polye, had the advantage in 14 seats. Michael Somare's National Alliance was on track to secure about seven seats -- hardly enough to position him to form a coalition government, or even play kingmaker amidst a future government. Former Prime Minister Julius Chan's People's Progress Party also performed well, having secured at least six seats. At the time of writing, O'Neill's deputy, Namah, and his PNG Party were struggling to secure seats.

Full election results were expected at the close of July 2012 and, according to convention, the governor-general would invite the party with the largest number of parliamentary seats to try to form a government.

It should be noted that on July 25, 2012, O'Neill seemed on track to return as prime minister. Speaking with a tone of confidence, O'Neill reportedly said: "I would rather be in my shoes than in anybody else's." He continued, "We are very confident that on current indications PNC will be called to form a government."

O'Neill's biggest rival was Polye, whose Triumph Heritage Empowerment party was also enjoying a strong election performance. That being said, Poyle soon made it clear that despite his ambitions to be prime minister, the government would be formed by the leader of the party that won the most seats, in keeping with the constitution. Polye then committed his Triumph Heritage Empowerment Party's elected members supporting a future O'Neill government.

Another sign that O'Neill would likely form the next government came when he was shown embracing his former rival -- Michael Somare. Indeed, both Somare of the National Alliance and Julius Chan of the People's Progress Party appeared to offer O'Neill their support. Somare's movement in favor of the O'Neill camp (which was apparently orchestrated by Chan) effectively ended the political impasse that plagued the nation leading up to these elections. No mention was made of that dark chapter; instead, the focus was on national unity. Somare, himself, seemed intent on making it clear that he was not interested in continuing to play the role of political spoiler; to this end, he relinquished his role as the leader of the National Alliance party.

Unity, however, did not necessarily extend to O'Neill's outgoing deputy, Namah, which was not invited to join the coalition building process within the incumbent prime minister's camp. O'Neill made his intention clear, saying, "At this stage, we know that Belden Namah has made his political bed and he and his followers can sleep in that bed." Namah offered a measured response, saying, "Peter (O'Neill) is saying that he will not accept me and my group. That is okay. He is the man with the highest number and will be called by the governor-general." Namah was also suggesting that he might be interested in forming a government, and was holding out hope that some parties might flock to him on the floor of the parliament.

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Cabinet:

National Executive Council appointed by the governor general on recommendation of the prime

minister

Legislative Branch:

Unicameral National Parliament:

111 seats, 89 filled from open electorates and 20 from provinces and national capital district; members elected by popular vote to serve five-year terms); constitution allows up to 126 seats

Note on 2012 elections:

Early elections scheduled for 2012 due to political instability discussed above. The elections were ultimately held on from June 23, 2012 to July 27, 2012 (next to be held in June 2017).

The results of those elections were as follows --

percent of vote by party - NA

seats by party - People's National Congress Party 27, Triumph Heritage Empowerment Party 12, PNG Party 8, National Alliance Party 7, United Resources Party 7, People's Party 6, People's Progress Party 6, other parties 22, independents 16

See "Primer" below for details.

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Judicial Branch:

Supreme Court: the chief justice is appointed by the governor general on the proposal of the National Executive Council after consultation with the minister responsible for justice; other judges are appointed by the Judicial and Legal Services Commission

Constitution:

Ratified Sept. 16, 1975

Legal System:

Based on English common law

Administrative Divisions:

20 provinces, 1 autonomous region*, and 1 district**; Bougainville*, Central, Chimbu, Eastern Highlands, East New Britain, East Sepik, Enga, Gulf, Hela, Jiwaka, Madang, Manus, Milne Bay, Morobe, National Capital**, New Ireland, Northern, Southern Highlands, Western, Western Highlands, West New Britain, West Sepik

Political Parties and Leaders:

National Alliance Party or NA [Patrick PRUAITCHI]
Papua New Guinea Party or PNGP [Beldan NEMAH]
People's National Congress Party or PNC [Peter Paire O'NEILL]
People's Party or PP (merged with People's National Congress Party)
People's Progress Party or PPP [Sir Julius CHAN]
Triumph Heritage Empowerment Party or THE [Don POYLE]
United Resources Party or URP [William DUMA]

Suffrage:

18 years of age; universal

Principal Government Officials

Government of Papua New Guinea

Governor Gen.

Michael OGIO

Prime Min.

Peter Paire O'NEILL

Dep. Prime Min.

Leo DION

Min. for Agriculture & Livestock

Tommy TOMSCOLL

Min. for Bougainville Affairs

Steven Kama PIRIKA

Min. for Commerce, Trade, & Energy

Richard MARU

Min. for Communication & Information Technology

Jimmy MIRINGTORO

Min. for Community Development, Religion, & Family Affairs

Loujaya TONI

Min. for Civil Aviation

Davis STEPHEN

Min. for Correctional Services

Jim SIMATAB

Min. for Defense

Fabian POK, Dr.

Min. for Education

Nick KUMAN

Min. for Environment & Conservation

John PUNDARI

Min. for Finance

James MARAPE

Min. for Fisheries & Marine Resources

Mao ZEMMING

Min. for Foreign Affairs & Immigration

Rimbink PATO

Min. for Forestry & Climate Change
Douglas TOMURIESA
Min. for Health & HIV AIDS
Michael MALABAG
Min. for Higher Education, Research, Science, & Technology
Delilah GORE
Min. for Housing & Urban Development
Paul ISIKIEL
Min. for Justice
Kerenga KUA
Min. for Labor & Industrial Relations
Benjamin POPOWA
Min. for Lands & Physical Planning
Benny ALLAN
Min. for Mining
Byron CHAN
Min. for National Planning
Charles ABEL
Min. for Petroleum & Energy
Nixon DUBAN
Min. for Police
Robert ATIYAFI
Min. for Public Enterprises & State Investment
Ben MICAH
Min. for Public Service
Puka TEMU, Sir Dr.
Min. for Sports & the Pacific Games
Justin TKATCHENKO
Min. for Tourism, Art, & Culture
Boka KONDRA
Min. for Transport
Ano PALA
Min. for Treasury
Patrick PRUAITCH
Min. for Works & Implementation
Francis AWESA
Attorney Gen.
Ano PALA
Governor, Central Bank
Loi BAKANI
Ambassador to the US

Rupa Abraham MALINA
Permanent Representative to the UN, New York
Robert Guba AISI

-- as of 2015

Leader Biography

Leader Biography

Leadership of Papua New Guinea

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In January 2012, Papua New Guinea Prime Minister Peter O'Neill made it clear that highly anticipated elections would go forward later in the year, despite issues with compilation of the voter rolls. He also said he would support the notion of early elections, if legally possible. It was hoped that the elections would bring an end to the political power struggle rocking the country.

The situation dated back to 2011 when the family of long-serving Prime Minister Somare said that he had retired from office due to heart health complications. But Somare himself had never made that claim and once restored to health, he declared that he remained the head of government and was returning home to resume his post. With the prime ministership ruled vacant by a majority vote in parliament, and Somare disqualified from parliament due to absence at consecutive parliamentary sittings, Peter O'Neill -- a former finance minister -- was chosen to be the interim prime minister. While the governor general backed O'Neill's initial claim on the position of head of government, a ruling by the Supreme Court changed the political landscape significantly when it invalidated the position of O'Neill as prime minister and reinstated Michael Somare in that post. Governor General Michael Ogio reversed his stance and stood in solidarity with the court.

The political power struggle did not end quickly as O'Neill refused to accept the court ruling and insisted he was in charge of the country. As well, even with Somare now enjoying the legal support of both the highest court and the head of state, he was not guaranteed support in parliament. To that end, even though Governor General Ogio presided over the swearing in ceremony for Somare, the political impasse continued on Dec. 14, 2011, as the parliament voted to demand that O'Neill be inaugurated back into power as the prime minister. Moreover, reports emerged that O'Neill and his supporters in parliament intended to move to revoke Ogio from his position as head of state. Presumably, they would replace him with a choice more likely to do their bidding. To this end, parliament moved quickly to suspend Governor General Ogio from his post and had Parliamentary Speaker Jeffret Nape swear O'Neill in as prime minister. Once reinstated to power as head of government, O'Neill urged parliament to reverse the legislation suspending Ogio and

returned him to his post. But of course, by this point, there were two men -- O'Neill and Somare -- making the same claim of legitimacy. The scene was, therefore, ripe for conflict and indeed there were rowdy clashes outside the country's Government House.

By the middle of December 2011, the power struggle between O'Neill and Somare was ongoing. O'Neill was backed by a majority of the members of parliament and also enjoyed a groundswell of popular support. Indeed, the people of Papua New Guinea applauded his promise to provide free education and greater participation of women in parliament. On the other hand, Somare had the backing of the court. O'Neill claimed his legitimacy as head of government by pointing to the fact that he held the support of the majority of parliament. He said, "Parliament is the place where we make governments and where we change governments." Somare drew upon the constitution to make his counterpoint, saying in an interview with Radio Australia, "Numbers in parliament is irrelevant when we have a constitution that's supreme, and the constitution has spoken."

On Dec. 20, 2011, with the national civil service, police, armed forces, and even the newly restored Governor General Ogio now closing ranks around O'Neill, all signs pointed to an end to the political crisis. With the backing of these wings of government, O'Neill able to occupy the office of the prime minister and other government offices, and even evict the members of parliament who supported Somare. O'Neill was also able to pass a budget -- a move that served to consolidate his legitimacy as the head of government.

Still, Somare was not about to go quietly into the national history books of Papua New Guinea. On Dec. 22, 2011, Somare accused O'Neill of disrespecting the constitution and intimidating the governor-general. He also insisted that he was the rightful leader of the country. "I know very well, that there was no, either by speaker or by anyone to remove the member of parliament," he said. Somare continued, "I was discharged by parliament as a non-existing member. But court, in its wisdom, and following our constitution, reinstated me as the head of government."

By the first week of January 2012, the situation in Papua New Guinea remained unresolved with Somare having the support of the court and O'Neill holding the support of the parliament. Sir

Arnold Amet, the Attorney-General in the Somare cabinet, urged O'Neill to be guided by the legal provisions of the Supreme Court judgment and allow Somare to take his place as head of government upon the resumption of parliament. Amet said that at that point, O'Neill could conceivably move forward with a motion of no confidence, which would bring down Somare's government and trigger early elections.

For his part, O'Neill assured the people of Papua New Guinea that his government would continue to govern the country democratically and transparently until general elections could be held later in the year. As noted above, those 2012 elections were set to go forth on schedule. In fact, he indicated he would support the idea of early elections, if it was possible under the law. O'Neill said, "If it was for me, I will have called for an early election but the laws are there and that the election will be conducted as scheduled although there have been problems with the electoral roll." He also said that the heads of the military and police would remain in their posts throughout the election to ensure the stability at this crucial period. There were high hopes that the elections could bring an end to the political power struggle plaguing the country.

As January 2012 was drawing to a close, the power struggle flared again as a cadre of soldiers, led by Colonel Yaura Sasa participated in a mutiny and placed Brigadier General Francis Agwi under house arrest. Given the mutineers' allegiance to Somare, the general consensus was that the military cadre was interested in restoring Somare to power by force. That being said, Agwi was subsequently released during a raid and Sasa was taken into custody. O'Neill said that Sasa would be "dealt with," and asserted that his government had control over the defense forces.

Note that days later, O'Neill said that he would dissolve parliament in February 2012, paving the way for early elections. O'Neill said that he made the decision in light of the unstable political conditions plaguing the country. Those elections were set for mid-2012.

Primer on elections in Papua New Guinea

June 23, 2012 --

A general election was scheduled to be held in Papua New Guinea (PNG) in mid-2012. The election was to take place in the wake of the country's constitutional crisis that has been ongoing since 2011 in which both the veteran incumbent Sir Michael Somare, as well as Peter O'Neill, claimed to be the legitimate head of government.

At issue was the fact that Peter O'Neill was sworn into office following the disqualification of Sir Michael Somare from his post. A court ruling restored Somare to the post of head of government; however, O'Neill was later restored to the position of head of government, largely thanks to strong parliamentary support. Elections were set for mid-2012 with an eye on resolving the remaining political divisions and tensions at the ballot box.

The electoral commission in Papua New Guinea announced that elections would be held on June 23, 2012, as scheduled. Electoral Commissioner, Andrew Trawen, said that despite calls from some members of parliament for the vote to be delayed, there was no legal room to change the June election date. "To delay or defer the 2012 elections will be unconstitutional," he said. A pre-election report by Trawen noted that about 60 percent of the work to update the electoral roll was complete.

This date has since been confirmed by Prime Minister Peter O'Neill. Indeed, as April 2012 came to a close, despite a move by the parliament to defer the election by six months, Prime Minister O'Neill confirmed that the election would take place in two months. In a statement, he said: "Pursuant to law, parliament cannot extend the term of members of parliament beyond the fifth anniversary of the return of writs for the previous general election. That is illegal." He also said, "Let me state clearly and precisely that members of parliament and the executive government want to ensure all eligible voters' names are on the common roll for them to exercise their voting rights in free and fair democratic elections. Our government is not trying to change election schedules. Cabinet has no right to set election dates."

In the first week of May 2012, election officials in Papua New Guinea made clear that the electoral rolls would be ready before the June 23, 2012, election date. By the middle of the month, Prime

Minister O'Neill was expressing confidence about the elections, and adopting a strong stance. He said, "The election is a go and the coalition is all in on this."

In the background were rumors of both planned military coup against the government, which reportedly did not get off the ground due to a lack of support from the security forces. There were also suggestions of a vote of no-confidence, which was unlikely to change the political scene significantly with elections already in the offing. It should be noted that on May 15, 2012, the country's parliament would enter its final session, with its dissolution imminent ahead of the elections. O'Neill would head a caretaker government until a new post-election government could be formed.

By the close of May 2012, the political crisis that was dominating the country reached new heights when the Supreme Court declared the O'Neill government to be unconstitutional. Prime Minister O'Neill said he would summon a special sitting of parliament to discuss the matter, but insisted that the election would go forward, as scheduled. In a media interview, the prime minister said that the judiciary sought to disrupt the general election, and was only creating a climate of political instability and anxiety. He noted that the only resolution to the problems facing the country was the impending vote, as leaders seek a mandate from the people of Papua New Guinea at the polls.

For his part, Governor-General Sir Michael Ogio made clear that he was washing his hands of the political conflict and that he would not be signing any documents until a new government is formed after the elections. This stance also meant that Ogio was refusing to sign documents related to the recalling of parliament for a special sitting. Functions then rested with Acting Governor-General Jeffrey Nape when Ogio left the country on a trip to the United Kingdom.

Meanwhile, in the aftermath of the decision by the court to declare the O'Neill government unconstitutional, Acting Speaker Francis Marus declared the position of the prime minister vacant. A new parliamentary vote on the prime ministership was taken but Acting Governor-General Jeffrey Nape, at first, refused to perform the swearing in ceremony for Prime Minister O'Neill. After several hours in which he reportedly reviewed the situation, Nape performed the swearing in

ceremony. O'Neill subsequently advanced a caretaker government, which would attend to the country's affairs until the election were held.

In June 2012, all attention was on the impending elections. At stake would be the 109 seats in the unicameral National Parliament, where members are elected for by popular vote to five-year terms in single constituencies.

Prime Minister O'Neill was hoping for validation and ratification of his governance at the polls. According to pre-election polling data, he was positioned to accomplish just that objective. Pollster, Mell Research and Marketing, forecast that Prime Minister Peter O'Neill's People's National Congress Party (PNC) would win the most parliamentary seats, and that O'Neill's three major coalition partners -- his deputy Belden Namah's PNG Party, Don Polye's Triumph Heritage Empowerment (THE) Party, and William Duma's United Resources Party -- would also see strong election performances. Accordingly, O'Neill could well be on track to serve his first full five-year term as head of government. Polling data also showed that despite the political drama of the previous months, voters were more focused on the O'Neill-Namah government's free education policy.

It should be noted that a host of electoral and voting access problems led to rumblings that voting would be extended beyond the first week of July 2012. It was yet to be seen if this pre-polling research would prove predictive as no election results were available at the time of writing. With the election taking place over a two-week period, results would not be immediately available.

As July 2012 entered its final week, partial results indicated that Papua New Guinea's former prime minister, Michael Somare, won his seat. But this victory was not necessarily a harbinger of things to come, specifically in the form of a return to power for Somare at the helm of governance. Indeed, Michael Somare's son and political heir apparent, Arthur Somare, lost his seat. Meanwhile, Prime Minister O'Neill's People's National Congress appeared to be in the lead, having won or leading in as many as 53 seats, while the Triumph Heritage Empowerment Party of long-serving cabinet minister, Don Polye, had the advantage in 14 seats. Michael Somare's National Alliance

was on track to secure about seven seats -- hardly enough to position him to form a coalition government, or even play kingmaker amidst a future government. Former Prime Minister Julius Chan's People's Progress Party also performed well, having secured at least six seats. At the time of writing, O'Neill's deputy, Namah, and his PNG Party were struggling to secure seats.

Full election results were expected at the close of July 2012 and, according to convention, the governor-general would invite the party with the largest number of parliamentary seats to try to form a government.

It should be noted that on July 25, 2012, O'Neill seemed on track to return as prime minister. Speaking with a tone of confidence, O'Neill reportedly said: "I would rather be in my shoes than in anybody else's." He continued, "We are very confident that on current indications PNC will be called to form a government."

O'Neill's biggest rival was Polye, whose Triumph Heritage Empowerment party was also enjoying a strong election performance. That being said, Poyle soon made it clear that despite his ambitions to be prime minister, the government would be formed by the leader of the party that won the most seats, in keeping with the constitution. Polye then committed his Triumph Heritage Empowerment Party's elected members supporting a future O'Neill government.

Another sign that O'Neill would likely form the next government came when he was shown embracing his former rival -- Michael Somare. Indeed, both Somare of the National Alliance and Julius Chan of the People's Progress Party appeared to offer O'Neill their support. Somare's movement in favor of the O'Neill camp (which was apparently orchestrated by Chan) effectively ended the political impasse that plagued the nation leading up to these elections. No mention was made of that dark chapter; instead, the focus was on national unity. Somare, himself, seemed intent on making it clear that he was not interested in continuing to play the role of political spoiler; to this end, he relinquished his role as the leader of the National Alliance party.

Unity, however, did not necessarily extend to O'Neill's outgoing deputy, Namah, which was not

invited to join the coalition building process within the incumbent prime minister's camp . O'Neill made his intention clear, saying, "At this stage, we know that Belden Namah has made his political bed and he and his followers can sleep in that bed." Namah offered a measured response, saying, "Peter (O'Neill) is saying that he will not accept me and my group. That is okay. He is the man with the highest number and will be called by the governor-general." Namah was also suggesting that he might be interested in forming a government, and was holding out hope that some parties might flock to him on the floor of the parliament.

Nevertheless, as August 2012 began, Papua New Guinea Governor General Sir Michael Ogio officially invited Peter O'Neill's People's National Congress Party (PNC) to form a new government. As well, on Aug. 4, 2012, O'Neill was elected to be prime minister in an internal parliamentary vote.

Note that in Papua New Guinea, the monarch is hereditary; the governor general is appointed by the National Executive Council; the prime minister and deputy prime minister are appointed by the governor general for up to five years on the basis of majority support in National Parliament. That National Parliament is a unicameral body composed of 109 seats; members are elected for a five-year term in single constituencies; 89 are elected from open electorates and 20 from provincial electorates; members elected by popular vote to serve five-year terms. The last elections were in 2007 and were won by former Prime Minister Somare's National Alliance; however, the political landscape since 2011 (and to date in 2014) has changed significantly, as detailed here.

Cabinet:

National Executive Council appointed by the governor general on recommendation of the prime minister.

Foreign Relations

General Relations

Papua New Guinea's relations with neighboring countries have been strained due to border disputes and also due to the recent civil strife in Bougainville.

Indonesia and Australia are the two biggest neighbors of Papua New Guinea and the relations with both are tentative at best and tense otherwise. Australia, for example, contemplated sending troops to Bougainville to evacuate Australian nationals. Indonesia is grappling with rebels who flee across the border into Papua New Guinea.

Regional Relations

The relations with Australia revolve around the question of the safety of Australian investments and expatriates in the country. Accounting for almost a third of the total foreign investments made in the country, Australia is the country's largest foreign direct investor, with an estimated A\$2.7 billion invested mainly in the mining, petroleum and services sectors.

Using this influence, the Australian government has, for several years, pushed the PNG government to "reform" the PNG Defence Forces because it feels that it is not the most reliable force to protect the investments made by large Australian and Western businesses. The Australians also believe that the PNGDF has been structured and trained to deal with largely non-existent "foreign" threats and does not tackle the internal security threats. The Australian government's preferred alternative to a large PNGDF has been the creation of a small, well-trained and disciplined elite force that could be trusted to act against "internal" enemies who threaten its business interests.

The utter failure of the PNGDF to defeat the independence fighters on Bougainville reinforced Canberra's distrust of the army. For a long time, Canberra concentrated on building up the PNG police. Between 1987 and 1998, some A\$105 million in aid money was channelled to the PNG police by Australia.

In 2003, more than 200 Australian police were to be deployed to Papua New Guinea, after the signing of a bilateral agreement. With the country often suffering from political and economic strife, John Howard's government in Australia wanted to ensure greater accountability in regard to how the aid money was spent. Australia's intensified interest in other countries in the world, such as Papua New Guinea, has come as a consequence of recent acts of global terrorism. Australia's prime minister has cautioned that countries in crisis are potential breeding grounds for terrorists.

The year 2007 was also marked by scandal involving the prime minister's intervention on the

former Attorney-General of Solomon Islands Julian Moti's Inquiry. Moti was a close associate of the prime minister of the Solomon Islands, Manasseh Sogavare. He was arrested in Papua New Guinea in 2006 under an Australian extradition request. At issue were child sex charges that allegedly occurred in Vanuatu in 197. Moti reportedly was able to vitiate existing bail regulations and flown out of the country and back home to the Solomon Islands on an aircraft belonging to the Papua New Guinea Defense Force. The situation sparked a diplomatic conflict with Australia, even leading to the outraged Australian government from banning Papua New Guinea officials from entering Australia. Despite denying that he authorized the flight, Somare has nonetheless been implicated in the international scandal.

The relations with Indonesia are, by comparison, far more explosive, potentially. The two countries share a common land border and Indonesia, a Southeast Asian giant has been struggling to suppress revolts in the various parts of the world's largest archipelago. Indonesia is also facing separatist insurgency in its province of West Papua, which shares the border with PNG. Indonesia complains that the insurgents often escape into the territory of PNG after conducting attacks in Indonesia and that they also use PNG territory to train and build their forces.

The two countries have signed a cooperation agreement to check such insurgency, and under the agreement, PNG is duty bound to arrest insurgents and try them in the local courts. However, if the violence in West Papua mounts, the Indonesian army may be tempted to chase the insurgents into PNG territory, creating a crisis.

In December 2000, several hundred West Papuans fled into PNG, claiming they were being threatened by the Indonesian military and refused to go back. However, in order not to arouse the ire of Indonesia, PNG did not grant them refugee status and even six months after having fled their homes. West Papuans have been campaigning for independence since Indonesia occupied the former Dutch colony in 1963.

In 1998, Papua New Guinea signed an agreement with the Solomon Islands demarcating sea boundaries and laying the grounds for cooperation between the two countries concerning conservation, customs, immigration, natural disasters, quarantine and security issues.

Other Significant Relations

Papua New Guinea's relations with China also grew tense in July 1999, when Prime Minister Bill Skate officially recognized Taiwan. The official recognition came after Papua New Guinea had received more than \$2 billion in loans from Taiwan and dealt a fatal blow to the government. The uproar was powerful enough to topple the Skate government in a matter of days.

Newly installed Prime Minister Mekere Morauta quickly retracted the recognition and restored his

country's longstanding "One China" policy, which, in essence, views China as the authority of Taiwan. The invitation was a reaffirmation by China of the reestablished bilateral ties. Then in October 2001, Prime Minister Morauta went to Shanghai to attend the APEC summit meeting. During the meeting, Prime Minister Morauta and Chinese President Jiang Zemin held a very warm talk, both reiterating their countries' commitment to strengthening their bilateral relationship through further economic cooperation and other cooperation.

It is assumed that the successor leaders to Papua New Guinea and China, as of 2003, will continue the trend toward positive relations.

The United States (U.S.) and Papua New Guinea established diplomatic relations upon the latter's independence on Sept. 16, 1975. The two nations participate in a variety of regional organizations, including the Asia-Pacific Economic Cooperation forum; the ASEAN Regional Forum; the South Pacific Commission and the South Pacific Regional Environmental Program.

One of the most successful cooperative multilateral efforts linking the U.S. and Papua New Guinea is the U.S.-Pacific Islands Multilateral Tuna Fisheries Treaty, under which the U.S. grants \$14 million per year to Pacific island parties in exchange for access of its waters to U.S. fishing vessels.

U.S. military forces, through the Pacific Theater Command in Honolulu, Hawaii, carry out annual bilateral meetings as well as small-scale exercises with the Papua New Guinea Defense Force. The U.S. also provides military education and training courses to security force officials.

Written by Dr. Denise Youngblood Coleman, Editor in Chief, www.countrywatch.com; see Bibliography for research sources.

National Security

External Threats

Papua New Guinea does not face any immediate military threats from external sources. The periodic incursions of Indonesian squatters, secessionists, drug traffickers and smugglers into Papua New Guinea pose a threat to security along its border, however.

Crime

Papua New Guinea crime rate is considered high. Incidences of theft, armed robbery, and assault are quite prevalent in the nation. It is believed that Papua New Guinea's traditionally weak government and policing has allowed organized crime gangs to relocate from Southeast Asia in recent years, thus helping to increase the overall crime rate in the region.

Insurgencies

Government forces and separatist insurgents on the island of Bougainville signed a truce in 1997, effectively ending a 10-year conflict that claimed the lives of approximately 20,000 individuals. In April 1998, the two sides signed a permanent cease-fire. In August 2001, the government signed a peace agreement with the ex-combatants. Bougainville has adopted its own constitution and in 2005, elected Joseph Kabui as president. In addition to the separatist movement in Bougainville, tribal warfare is common in Papua New Guinea's rural interior.

Terrorism

There is no specific threat of a terrorist attack against targets in Papua New Guinea or its interests abroad. Papua New Guinea is party to four of the 21 global and regional treaties pertaining to terrorism.

Defense Forces

Military Data

Military Branches:

Papua New Guinea Defense Force (PNGDF; includes Maritime Operations Element, Air Operations Element)

Eligible age to enter service:

16 years of age for voluntary service

Mandatory Service Terms:

No conscription

Manpower in general population-fit for military service:

N/A

Manpower reaching eligible age annually:

N/A

Military Expenditures-Percent of GDP:

0.54%

Chapter 3

Economic Overview

Economic Overview

Overview

Papua New Guinea is a Pacific island country that is richly endowed with natural resources, particularly minerals, forests and fisheries. But rugged terrain and inadequate infrastructure have hampered the exploitation and development of these resources. About 75 percent of the population engages in agriculture, mostly at a traditional subsistence level, although commercial export-oriented agriculture is gaining in importance. Conversely, the mineral sector - including oil, copper and gold - is by far Papua New Guinea's largest source of export earnings (about 70 percent) and the biggest contributor to gross national product. In recent years, Papua New Guinea has made good progress in achieving macroeconomic stability underpinned by fiscal consolidation, a supportive monetary policy, and favorable export commodity prices. Also, in recent years, the government has opened up markets in telecommunications and air transport – making both more affordable to the citizens. However, the country remains poor and vulnerable to world commodity price fluctuations. An unattractive investment environment, including weak infrastructure and governance, constrains more rapid and sustained growth of the non-mineral sector. Also, as of 2010, Papua New Guinea had the second highest HIV/AIDS infection rate in all of East Asia and the Pacific, an epidemic which could impact the economy.

In contrast to many other Pacific island countries (PICs), Papua New Guinea's economic growth held up relatively well during the global economic crisis with its real GDP slowing modestly in 2009. A number of factors contributed to this favorable outcome. Continued foreign demand for PNG's commodities led to the country's financial sector being insulated from the turmoil in global capital markets. Domestic credit continued to grow, though at a slower pace. External demand also remained strong as stimulus measures in other Asian countries supported demand for its main export commodities. The country relies less on remittances and tourism income than other PICs which were significantly impacted by the global crisis; and booming commodity prices and prudent fiscal policy in previous years left the government in a position to fund significant fiscal expansion that helped support domestic demand. However, spending from accumulated mineral revenue for the fiscal stimulus in 2009 was larger than warranted, shifting the fiscal balance from years of surpluses into a large deficit. The International Monetary Fund issued a 2010 report on Papua New Guinea, reinforcing that the global financial crisis had only a mild impact on PNG. However, the organization warned that the country's crisis management framework, including the lack of an effective mechanism for providing central bank liquidity, could pose significant challenges in the event of a systemic event. Also, improving access to financial services remains a significant

developmental challenge with about 85 percent of the adult population excluded from the formal sector, mainly those in rural communities. In August 2011, Standard & Poor's Rating Services affirmed Papua New Guinea's foreign currency long-term rating at B+ and said its long-term rating outlook was "stable." However, S&P cited concerns such as the country's heavy dependence on its mineral sector, its fragmented political structure, and lack of transparency. However, by January 2012, S&P had revised its long-term sovereign credit rating on Papua New Guinea to "negative" from "stable." The agency noted that the political scene had weakened after the defense force chief was detained by elements of PNG's military seeking the reinstatement of Sir Michael Somare as prime minister.

While Papua New Guinea remains a low-income country, its resource wealth gives it an opportunity to raise living standards for all. To achieve its development targets, the government is focusing on public services, including education, health, law and order, and infrastructure. Reforms are under way to raise the efficiency of public enterprises and increase competition in the private sector. In 2011 and 2012, the National Parliament passed legislation that created an offshore Sovereign Wealth Fund (SWF) to manage government surpluses from mineral, oil, and natural gas projects. In recent years, the government has opened up markets in telecommunications and air transport, making both more affordable to the people. In August 2012, Peter O'Neill took over as prime minister of Papua New Guinea, pledging to make the government more transparent and "stamp out corruption wherever it occurs." Indeed, in 2012, Transparency International ranked Papua New Guinea as the 150th most corrupt country in the world, out of 176 surveyed.

In November 2012, Standard & Poor's noted Papua New Guinea's weak policy environment and shortcomings in governance. The ratings agency also said that the country's infrastructure shortcomings and security risks impede investment needed to diversify the economy, which remained highly concentrated in the resources sector. In January 2013, Prime Minister O'Neill banned ministers and other government officials from traveling overseas for work in an effort to cut costs and ensure officials stay focused on their work. He said that investigations revealed that travel funds had been abused for trips that were not necessarily beneficial to the country.

After a decade of strong growth, Papua New Guinea in 2013 faced a sharp slowdown in the nonmineral sector as construction wound down on a large, \$20 billion liquefied natural gas (LNG) project. Growth in construction fell in half to 12 percent from 24 percent in 2012. This slowed growth in wholesale and retail trade to 5 percent in 2013 compared to 20 percent in 2012. But by June 2014, the Papua New Guinea kina had spiked 18 percent on after traders said the country had introduced new trading band restrictions following a steep and prolonged fall in the currency. While growth was forecast at 6 percent in 2014, the Asian Development Bank was predicting a record 21 percent growth in 2015 thanks mainly to the commencement of gas exports in late 2014.

In March 2015, heavy rain caused flooding and landslides in Papua New Guinea as farmers saw

their food gardens swept away. But by early September, a severe drought had engulfed the country, affecting nearly a million people in the highlands and leaving many facing severe food shortages until rains return at the end of the year. The Papua New Guinea government's National Disaster Centre estimated that providing food to families that need it would cost \$12 million through the end of the year, as the country endured what some are calling the strongest El Nino climate phenomenon in memory, according to the International Organization for Migration.

In April 2015, Papua New Guinea's National Petroleum Company (NPCP) said it was looking to raise billions of dollars to help fund new oil and gas projects, as the country struggled with a sharp slump in forecast revenue from a drop in prices for the commodities.

Economic Performance

Underpinned by sound economic policies and favorable export commodity prices, real GDP growth accelerated in 2007 and 2008. Economic activity was relatively unaffected by the global downturn, and growth slowed only modestly in 2009 before it rebounded in 2010. Growth was brisk in 2011 before slowing in 2012.

According to CountryWatch estimated calculations for 2014:

Real GDP growth rate was: 8.5 percent

The fiscal deficit/surplus as percent of GDP (%) was: -3.0 percent

Inflation was measured at: 3.1 percent

Updated in 2015

**Please note that the figures in our Economic Performance section are estimates or forecasts based on IMF-based data that are formulated using CountryWatch models of analysis.*

Supplementary Sources: International Monetary Fund, BBC News, Asian Development Bank, Thomson Reuters Foundation and Reuters

Nominal GDP and Components

Nominal GDP and Components

	2011	2012	2013	2014	2015

	2011	2012	2013	2014	2015
Nominal GDP (LCU billions)	30.522	32.070	34.595	37.319	47.019
Nominal GDP Growth Rate (%)	15.522	5.072	7.873	7.873	23.522
Consumption (LCU billions)	12.819	13.469	14.530	15.674	30.188
Government Expenditure (LCU billions)	3.968	4.169	4.497	4.851	9.344
Gross Capital Formation (LCU billions)	13.124	13.790	14.876	16.047	3.647
Exports of Goods & Services (LCU billions)	9.157	9.621	10.378	11.196	14.007
Imports of Goods & Services (LCU billions)	7.936	8.338	8.995	9.703	10.167

Population and GDP Per Capita

Population and GDP Per Capita					
	2011	2012	2013	2014	2015
Population, total (million)	6.880	7.167	7.346	7.530	7.718
Population growth (%)	4.179	4.172	2.498	2.505	2.497
Nominal GDP per Capita (LCU 1000s)	4,436.34	4,474.68	4,709.37	4,956.02	6,092.12

Real GDP and Inflation

Real GDP and Inflation					
	2011	2012	2013	2014	2015
Real Gross Domestic Product (LCU billions 2005 base)	12.748	13.779	14.541	14.136	17.725
Real GDP Growth Rate (%)	10.670	8.089	5.531	-2.7882	25.388
GDP Deflator (2005=100.0)	239.422	232.739	237.906	263.998	265.272
Inflation, GDP Deflator (%)	4.384	-2.7913	2.220	10.967	0.4826

Government Spending and Taxation

Government Spending and Taxation					
	2011	2012	2013	2014	2015
Government Fiscal Budget (billions)	8.764	10.383	12.500	14.357	13.895
Fiscal Budget Growth Rate (percentage)	17.780	18.473	20.389	14.856	-3.2179
National Tax Rate Net of Transfers (%)	30.404	29.180	28.154	30.454	23.765
Government Revenues Net of Transfers (LCU billions)	9.280	9.358	9.740	11.365	11.174
Government Surplus(-) Deficit(+) (LCU billions)	0.5160	-1.0250	-2.7600	-2.9920	-2.7210
Government Surplus(+) Deficit(-) (%GDP)	1.691	-3.1961	-7.9780	-8.0174	-5.7870

Money Supply, Interest Rates and Unemployment

Money Supply, Interest Rates and Unemployment					
	2011	2012	2013	2014	2015
Money and Quasi-Money (M2) (LCU billions)	15.293	16.967	18.104	18.716	23.581
Money Supply Growth Rate (%)	17.335	10.942	6.702	3.383	25.993
Lending Interest Rate (%)	10.808	10.815	10.130	9.376	13.933
Unemployment Rate (%)	2.156	2.309	2.301	2.289	2.090

Foreign Trade and the Exchange Rate

Foreign Trade and the Exchange Rate					
	2011	2012	2013	2014	2015
Official Exchange Rate (LCU/\$US)	2.371	2.084	2.245	2.220	2.613
Trade Balance NIPA (\$US billions)	0.5149	0.6156	0.6165	0.6724	1.470
Trade Balance % of GDP	4.000	4.000	4.000	4.000	8.167
Total Foreign Exchange Reserves (\$US billions)	4.353	4.035	2.851	2.330	4.027

Data in US Dollars

Data in US Dollars					
	2011	2012	2013	2014	2015
Nominal GDP (\$US billions)	12.873	15.391	15.413	16.809	17.995
Exports (\$US billions)	3.862	4.617	4.624	5.043	5.361
Imports (\$US billions)	3.347	4.002	4.007	4.370	3.891

Energy Consumption and Production Standard Units

Energy Consumption and Production Standard Units					
	2011	2012	2013	2014	2015
Petroleum Consumption (TBDP)	19.728	19.728	20.000	20.737	21.649
Petroleum Production (TBDP)	30.161	27.303	28.160	33.598	35.146
Petroleum Net Exports (TBDP)	10.433	7.575	8.160	12.861	13.497
Natural Gas Consumption (bcf)	3.532	3.532	3.885	3.800	4.256
Natural Gas Production (bcf)	3.535	3.543	3.893	4.738	5.183
Natural Gas Net Exports (bcf)	0.0034	0.0115	0.0080	0.9373	0.9270
Coal Consumption (1000s st)	0.0000	0.0000	0.0000	0.0000	0.0000
Coal Production (1000s st)	0.0000	0.0000	0.0000	0.0000	0.0000
Coal Net Exports (1000s st)	0.0000	0.0000	0.0000	0.0000	0.0000
Nuclear Production (bil kwh)	0.0000	0.0000	0.0000	0.0000	0.0000
Hydroelectric Production (bil kwh)	0.7250	0.7000	0.8457	0.7684	0.7835
Renewables Production (bil kwh)	0.4000	0.4000	0.4502	0.5068	0.5484

Energy Consumption and Production QUADS

Energy Consumption and Production QUADS					
	2011	2012	2013	2014	2015
Petroleum Consumption (Quads)	0.0421	0.0421	0.0427	0.0443	0.0462
Petroleum Production (Quads)	0.0644	0.0587	0.0603	0.0734	0.0600
Petroleum Net Exports (Quads)	0.0223	0.0166	0.0176	0.0291	0.0138
Natural Gas Consumption (Quads)	0.0036	0.0036	0.0040	0.0039	0.0043
Natural Gas Production (Quads)	0.0036	0.0036	0.0040	0.0049	0.0045
Natural Gas Net Exports (Quads)	0.0000	0.0000	0.0000	0.0010	0.0002
Coal Consumption (Quads)	0.0000	0.0000	0.0000	0.0000	0.0000
Coal Production (Quads)	0.0000	0.0000	0.0000	0.0000	0.0000
Coal Net Exports (Quads)	0.0000	0.0000	0.0000	0.0000	0.0000
Nuclear Production (Quads)	0.0000	0.0000	0.0000	0.0000	0.0000
Hydroelectric Production (Quads)	0.0072	0.0070	0.0085	0.0077	0.0078
Renewables Production (Quads)	0.0040	0.0040	0.0045	0.0051	0.0055

World Energy Price Summary

World Energy Price Summary					
	2011	2012	2013	2014	2015
Petroleum-WTI (\$/bbl)	95.054	94.159	97.943	93.112	48.709
Natural Gas-Henry Hub (\$/mmbtu)	3.999	2.752	3.729	4.369	2.614
Coal Thermal-Australian (\$/mt)	121.448	96.364	84.562	70.130	57.511

CO2 Emissions

CO2 Emissions					
	2011	2012	2013	2014	2015
Petroleum Based (mm mt C)	0.9411	0.9411	0.9541	0.9892	1.033
Natural Gas Based (mm mt C)	0.0573	0.0573	0.0630	0.0617	0.0690
Coal Based (mm mt C)	0.0000	0.0000	0.0000	0.0000	0.0000
Total CO2 Emissions (mm mt C)	0.9984	0.9984	1.017	1.051	1.102

Agriculture Consumption and Production

Agriculture Consumption and Production					
	2011	2012	2013	2014	2015
Corn Total Consumption (1000 metric tons)	13.295	10.491	12.655	13.318	13.346
Corn Production (1000 metric tons)	12.976	9.970	11.951	12.539	11.686
Corn Net Exports (1000 metric tons)	-0.3191	-0.5214	-0.7039	-0.7790	-1.6597
Soybeans Total Consumption (1000 metric tons)	0.0000	0.0000	0.0000	0.0000	0.0000
Soybeans Production (1000 metric tons)	0.0000	0.0000	0.0000	0.0000	0.0000
Soybeans Net Exports (1000 metric tons)	0.0000	0.0000	0.0000	0.0000	0.0000
Rice Total Consumption (1000 metric tons)	1.007	1.200	1.300	1.300	1.270
Rice Production (1000 metric tons)	1.001	1.200	1.299	1.299	1.280

	2011	2012	2013	2014	2015
Rice Net Exports (1000 metric tons)	-0.0066	-0.0002	-0.0006	-0.0005	0.0096
Coffee Total Consumption (metric tons)	21,121.00	16,967.00	12,813.00	18,978.51	19,430.44
Coffee Production (metric tons)	82,119.93	42,169.05	58,756.05	62,221.85	56,367.68
Coffee Net Exports (metric tons)	60,998.93	25,202.05	45,943.05	43,243.34	36,937.23
Cocoa Beans Total Consumption (metric tons)	309.000	338.000	384.000	5,463.87	5,752.49
Cocoa Beans Production (metric tons)	48,128.54	40,170.51	43,707.77	43,617.06	44,193.42
Cocoa Beans Net Exports (metric tons)	47,819.54	39,832.51	43,323.77	38,153.19	38,440.93
Wheat Total Consumption (1000 metric tons)	165.644	168.380	166.723	162.322	148.229
Wheat Production (1000 metric tons)	0.0000	0.0000	0.0000	0.0000	0.0000
Wheat Net Exports (1000 metric tons)	-165.6440	-168.3800	-166.7230	-162.3217	-148.2294

World Agriculture Pricing Summary

World Agriculture Pricing Summary					
	2011	2012	2013	2014	2015
Corn Pricing Summary (\$/metric ton)	291.684	298.417	259.389	192.881	169.750
Soybeans Pricing Summary (\$/metric ton)	540.667	591.417	538.417	491.771	390.417
Rice Pricing Summary (\$/metric ton)	458.558	525.071	473.989	425.148	386.033
Coffee Pricing Summary (\$/kilogram)	5.976	4.111	3.076	4.424	3.526
Cocoa Beans Pricing Summary (\$/kilogram)	2.980	2.392	2.439	3.062	3.135
Wheat Pricing Summary (\$/metric ton)	316.264	313.242	312.248	284.895	203.177

Metals Consumption and Production

Metals Consumption and Production					
	2011	2012	2013	2014	2015
Copper Consumption (1000 mt)	5,211.00	9,777.05	7,494.02	7,494.02	7,494.02
Copper Production (1000 mt)	0.0000	0.0000	0.0000	0.0000	0.0000
Copper Net Exports (1000 mt)	-5211.0000	-9777.0500	-7494.0250	-7494.0250	-7494.0250
Zinc Consumption (1000 mt)	120.966	120.966	120.966	120.966	120.966
Zinc Production (1000 mt)	0.0000	0.0000	0.0000	0.0000	0.0000
Zinc Exports (1000 mt)	-120.9660	-120.9660	-120.9660	-120.9660	-120.9660
Lead Consumption (1000 mt)	285.152	285.152	285.152	285.152	285.152
Lead Production (1000 mt)	0.0000	0.0000	0.0000	0.0000	0.0000

	2011	2012	2013	2014	2015
Lead Exports (1000 mt)	-285.1520	-285.1520	-285.1520	-285.1520	-285.1520
Tin Consumption (1000 mt)	138.000	95.000	116.500	116.500	116.500
Tin Production (1000 mt)	0.0000	0.0000	0.0000	0.0000	0.0000
Tin Exports (1000 mt)	-138.0000	-95.0000	-116.5000	-116.5000	-116.5000
Nickel Consumption (1000 mt)	0.0000	0.0000	0.0000	0.0000	0.0000
Nickel Production (1000 mt)	0.0000	0.0000	0.0000	0.0000	0.0000
Nickel Exports (1000 mt)	0.0000	0.0000	0.0000	0.0000	0.0000
Gold Consumption (kg)	61,841.86	52,179.40	56,787.17	54,865.26	52,949.43
Gold Production (kg)	63,695.09	54,094.61	58,955.56	57,358.68	55,084.92
Gold Exports (kg)	1,853.24	1,915.21	2,168.39	2,493.42	2,135.49

	2011	2012	2013	2014	2015
Silver Consumption (mt)	101,280.00	105,241.00	100,000.00	102,632.78	92,514.25
Silver Production (mt)	82,740.49	85,689.02	82,080.95	83,845.08	77,148.58
Silver Exports (mt)	-18539.5111	-19551.9846	-17919.0451	-18787.7029	-15365.6693

World Metals Pricing Summary

World Metals Pricing Summary					
	2011	2012	2013	2014	2015
Copper (\$/mt)	8,828.19	7,962.35	7,332.10	6,863.40	5,510.46
Zinc (\$/mt)	2,193.90	1,950.41	1,910.26	2,160.97	1,931.68
Tin (\$/mt)	26,053.68	21,125.99	22,282.80	21,898.87	16,066.63
Lead (\$/mt)	2,400.81	2,064.64	2,139.79	2,095.46	1,787.82
Nickel (\$/mt)	22,910.36	17,547.55	15,031.80	16,893.38	11,862.64
Gold (\$/oz)	1,569.21	1,669.52	1,411.46	1,265.58	1,160.66
Silver (\$/oz)	35.224	31.137	23.850	19.071	15.721

Economic Performance Index

Economic Performance Index

The Economic Performance rankings are calculated by CountryWatch's editorial team, and are based on criteria including sustained economic growth, monetary stability, current account deficits, budget surplus, unemployment and structural imbalances. Scores are assessed from 0 to 100 using this aforementioned criteria as well as CountryWatch's proprietary economic research data and models.

	Bank stability risk	Monetary/ Currency stability	Government Finances	Empl./ Unempl.	Econ.GNP growth or decline/ forecast
	0 - 100	0 - 100	0 - 100	0 - 100	%
North Americas					
Canada	92	69	35	38	3.14%
United States	94	76	4	29	3.01%
Western Europe					
Austria	90	27	30	63	1.33%
Belgium	88	27	19	23	1.15%
Cyprus	81	91	16	80	-0.69%
Denmark	97	70	45	78	1.20%
Finland	89	27	41	33	1.25%

France	87	27	18	27	1.52%
Germany	86	27	22	21	1.25%
Greece	79	27	5	24	-2.00%
Iceland	90	17	2	34	-3.04%
Italy	85	27	37	24	0.84%
Ireland	92	27	11	10	-1.55%
Luxembourg	99	27	28	66	2.08%
Malta	77	27	41	51	0.54%
Netherlands	91	27	26	74	1.30%
Norway	98	44	10	76	1.08%
Portugal	77	27	13	20	0.29%
Spain	83	27	9	3	-0.41%
Sweden	94	72	54	32	1.23%
Switzerland	97	86	55	77	1.53%
United Kingdom	85	12	9	37	1.34%
Central and Eastern Europe					
Albania	44	60	33	6	2.30%
Armenia	45	59	49	30	1.80%

Azerbaijan	56	4	84	99	2.68%
Belarus	59	21	83	98	2.41%
Bosnia and Herzegovina	34	68	69	N/A	0.50%
Bulgaria	58	75	88	49	0.20%
Croatia	69	68	94	9	0.18%
Czech Republic	80	89	29	70	1.67%
Estonia	72	90	66	92	0.80%
Georgia	36	60	53	56	2.00%
Hungary	70	66	26	54	-0.16%
Latvia	67	100	65	44	-3.97%
Lithuania	65	91	87	79	-1.65%
Macedonia (FYR)	53	69	56	2	2.03%
Moldova	23	36	81	67	2.50%
Poland	74	74	38	12	2.72%
Romania	62	56	70	62	0.75%
Russia	73	18	90	8	4.00%
Serbia	48	49	52	5	1.97%

Montenegro	39	27	73	1	-1.70%
Slovak Republic	80	62	30	14	4.06%
Slovenia	81	27	36	65	1.12%
Ukraine	41	11	57	N/A	3.68%
Africa					
Algeria	57	18	96	7	4.55%
Angola	49	1	97	N/A	7.05%
Benin	19	91	20	N/A	3.22%
Botswana	68	58	76	N/A	6.33%
Burkina Faso	16	91	13	N/A	4.41%
Burundi	2	91	6	N/A	3.85%
Cameroon	26	91	91	N/A	2.58%
Cape Verde	52	87	4	N/A	4.96%
Central African Republic	9	91	32	N/A	3.18%
Chad	22	91	89	N/A	4.42%
Congo	52	87	87	N/A	12.13%
Côte d'Ivoire	25	91	82	28	2.98%
Dem. Republic					

Congo	4	91	47	N/A	5.44%
Djibouti	31	76	50	N/A	4.47%
Egypt	37	20	24	69	5.01%
Equatorial Guinea	82	91	85	N/A	0.94%
Eritrea	1	3	1	18	1.81%
Ethiopia	6	45	8	N/A	6.96%
Gabon	64	91	96	N/A	5.36%
Gambia	8	48	86	N/A	4.82%
Ghana	9	11	69	N/A	4.50%
Guinea	10	7	91	N/A	3.03%
Guinea-Bissau	5	91	46	N/A	3.47%
Kenya	20	41	59	N/A	4.11%
Lesotho	13	40	12	N/A	2.98%
Liberia	12	73	74	N/A	5.92%
Libya	73	2	94	N/A	5.22%
Madagascar	4	22	24	N/A	-1.02%
Malawi	7	25	55	N/A	5.96%
Mali	20	91	82	N/A	5.12%

Mauritania	15	13	93	N/A	4.58%
Mauritius	65	52	56	55	4.10%
Morocco	37	72	48	26	3.23%
Mozambique	12	23	71	N/A	6.45%
Namibia	40	39	62	N/A	1.70%
Niger	10	91	21	N/A	4.41%
Nigeria	30	6	61	N/A	6.98%
Rwanda	21	40	68	N/A	5.39%
Sao Tome & Principe	1	61	100	N/A	3.40%
Senegal	24	91	63	N/A	3.44%
Seychelles	60	67	97	N/A	4.01%
Sierra Leone	5	10	39	N/A	4.77%
Somalia	2	38	59	N/A	3.19%
South Africa	61	37	70	N/A	2.59%
Sudan	16	5	73	N/A	5.52%
Swaziland	32	44	79	N/A	1.09%
Tanzania	15	45	32	N/A	6.17%
Togo	8	91	92	N/A	2.56%

Tunisia	50	61	44	39	4.00%
Uganda	11	17	54	N/A	5.59%
Zambia	29	20	49	N/A	5.84%
Zimbabwe	0	8	16	N/A	2.24%
South and Central America					
Argentina	66	3	80	36	3.50%
Belize	47	76	80	N/A	1.00%
Bolivia	32	51	61	81	3.99%
Brazil	71	47	78	11	5.50%
Chile	78	25	92	73	4.72%
Columbia	47	52	34	47	2.25%
Costa Rica	60	42	39	57	3.45%
Ecuador	43	76	75	64	2.51%
El Salvador	35	76	67	N/A	1.04%
Guatemala	46	59	58	N/A	2.52%
Honduras	27	47	58	N/A	2.00%
Mexico	69	42	52	61	4.07%
Nicaragua	23	49	42	N/A	1.75%

Panama	66	76	72	45	5.00%
Paraguay	35	46	66	16	5.27%
Peru	59	66	75	22	6.33%
Suriname	58	26	81	59	4.02%
Uruguay	70	26	27	N/A	5.71%
Venezuela	55	1	28	13	-2.63%
Caribbean					
Antigua & Barbuda	72	76	15	N/A	-2.01%
Bahamas	74	76	45	87	-0.50%
Barbados	67	76	33	15	-0.50%
Bermuda	N/A	N/A	N/A	N/A	N/A
Cuba	45	76	18	95	0.25%
Dominica	53	76	65	N/A	1.40%
Dominican Republic	54	39	43	4	3.50%
Grenada	63	76	48	N/A	0.80%
Guyana	28	56	17	N/A	4.36%
Haiti	11	27	89	N/A	-8.50%
Jamaica	42	9	85	19	-0.28%

St Lucia	55	76	67	N/A	1.14%
St Vincent & Grenadines	49	76	95	N/A	0.50%
Trinidad & Tobago	82	37	77	72	2.13%
Middle East					
Bahrain	84	76	62	91	3.48%
Iran	51	19	40	58	3.01%
Iraq	48	9	8	N/A	7.27%
Israel	87	62	12	48	3.20%
Jordan	41	51	3	N/A	4.10%
Kuwait	96	4	99	N/A	3.10%
Lebanon	63	54	2	N/A	6.00%
Oman	76	16	88	N/A	4.71%
Qatar	99	16	83	N/A	18.54%
Saudi Arabia	76	8	98	N/A	3.70%
Syria	61	24	40	N/A	5.00%
Turkey	75	23	27	60	5.20%
United Arab Emirates	96	24	98	94	1.29%

Yemen	28	2	78	N/A	7.78%
Asia					
Afghanistan	17	70	74	N/A	8.64%
Bangladesh	13	43	25	N/A	5.38%
Bhutan	24	55	5	N/A	6.85%
Brunei	78	19	99	75	0.48%
Cambodia	18	67	42	N/A	4.77%
China	54	90	19	68	11.03%
Hong Kong	89	76	14	82	5.02%
India	31	38	34	35	8.78%
Indonesia	42	46	37	31	6.00%
Japan	88	89	6	71	1.90%
Kazakhstan	62	13	76	42	2.40%
Korea North	18	65	23	N/A	1.50%
Korea South	83	63	22	85	4.44%
Kyrgyz Republic	24	15	84	88	4.61%
Laos	17	54	7	N/A	7.22%
Macao	91	76	14	82	3.00%

Malaysia	68	65	44	90	4.72%
Maldives	44	55	17	N/A	3.45%
Mongolia	33	5	77	93	7.22%
Myanmar	3	41	72	N/A	5.26%
Nepal	3	14	25	N/A	2.97%
Pakistan	19	15	31	41	3.00%
Papua New Guinea	75	50	11	N/A	7.96%
Philippines	30	48	53	43	3.63%
Singapore	93	75	63	40	5.68%
Sri Lanka	38	22	10	N/A	5.50%
Taiwan	84	88	35	89	6.50%
Tajikistan	6	6	60	97	4.00%
Thailand	56	64	90	96	5.46%
Turkmenistan	51	53	68	N/A	12.00%
Uzbekistan	40	10	60	100	8.00%
Vietnam	25	12	20	N/A	6.04%
Pacific					
Australia	96	63	31	46	2.96%

Fiji	46	53	3	N/A	2.06%
Marshall Islands	27	76	46	N/A	1.08%
Micronesia (Fed. States)	N/A	N/A	N/A	N/A	N/A
New Caledonia	96	73	51	52	2.00%
New Zealand	98	73	51	52	2.00%
Samoa	34	88	64	N/A	-2.77%
Solomon Islands	14	71	1	N/A	3.36%
Tonga	26	57	38	N/A	0.60%
Vanuatu	33	58	47	N/A	3.80%

Source:

CountryWatch Inc. www.countrywatch.com

Updated:

This material was produced in 2010; it is subject to updating in 2012.

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Chapter 4

Investment Overview

Foreign Investment Climate

Background

Papua New Guinea is richly endowed with natural resources, but exploitation has been hampered by rugged terrain and the high cost of developing infrastructure. Agriculture provides a subsistence livelihood for 85% of the population. Mineral deposits, including copper, gold, and oil, account for nearly two-thirds of export earnings. A consortium led by a major American oil company plans to begin the commercialization of the country's estimated 227 billion cubic meters of natural gas reserves through the construction of a liquefied natural gas (LNG) production facility, which could begin exporting in 2013 or 2014; the largest investment project in the country's history, it received a green light in December 2009 and has the potential to double GDP in the near-term and triple Papua New Guinea's export revenue. The government faces the challenge of ensuring transparency and accountability for revenues flowing from this and other large LNG projects.

Numerous challenges still face the government, including providing physical security for foreign investors, regaining investor confidence, restoring integrity to state institutions, promoting economic efficiency by privatizing moribund state institutions, and balancing relations with Australia, its former colonial ruler. Other socio-cultural challenges could upend the economy including an HIV/AIDS epidemic, with the highest infection rate in all of East Asia and the Pacific, and chronic law and order and land tenure issues. The global financial crisis had little impact because of continued high demand for Papua New Guinea's commodities exports.

Foreign Investment Assessment

The government welcomes foreign investment consistent with the conditions set forth in the Investment Promotion Act. PNG is also rich in renewable natural resources and the government seeks to increase the development of these resources through foreign investment. Indeed, significant investment tends to be concentrated in the mining and petroleum sectors. Still, investors are often faced with difficulties of a cumbersome bureaucratic process, such as difficulties and delay in obtaining necessary clearances. Large developments are transformed quickly into political issues even requiring cabinet-level decisions. Further complicating the scene have been reports in the local and regional media about possible corruption on the part of decision-makers. Officially,

the government eschews such criticism and points to the creation of the Investment Promotion Authority (IPA) in 1992 which was intended to help with the development and certification of foreign investment.

Agriculture and Industry

Agriculture -- coffee, cocoa, coconuts, palm kernels, tea, rubber, sweet potatoes, fruit, vegetables, poultry, pork; Industries -- copra crushing, palm oil processing, plywood production, wood chip production; mining of gold, silver, and copper; crude oil production; construction, tourism

Import Commodities and Export Partners

Commodities -- machinery and transport equipment, manufactured goods, food, fuels, chemicals; Partners -- Australia 44.6%, Singapore 20.6%, New Zealand 7.7%, China 5%

Export Commodities and Export Partners

Commodities -- oil, gold, copper ore, logs, palm oil, coffee, cocoa, crayfish, prawns; Partners -- Australia 25.6%, Japan 7.4%, China 5.8%

Ports and Harbors

Kieta, Lae, Madang, Port Moresby, Rabaul

Telephone System

General assessment -- services are adequate; facilities provide radiotelephone and telegraph, coastal radio, aeronautical radio, and international radio communication services; domestic: mostly radiotelephone; international: country code - 675

Internet Users

75,000 in recent years; on the increase

Labor Force

3.25 million in recent years; labor force by occupation -- agriculture, industry, services

Legal System and Considerations

The legal system is based on English common law, which was primarily inherited from Australia. The courts are supposed to be insulated from government interference, for the purpose of providing the enforcement of property and contractual rights. However, in practice, there is a great deal of politicization and charges of corruption have been recorded in the media. Meanwhile, the bureaucratic procedure for resolving disputes is cumbersome, resulting in delay and frustration for many investors. Officially, the country is a member of the International Center for the Settlement of Investment Disputes and the New York Convention of 1958 on the Recognition and Enforcement of Foreign Arbitral Awards.

Corruption Perception Ranking

See Corruption Perception Index, as reported by Transparency International, elsewhere in this Country Review for Papua New Guinea's current ranking. Typically, Papua New Guinea is one of the more corrupt countries in the world, according to this index.

Cultural Considerations

An awareness of tribal culture is useful; this is a country with a rich and complex culture that embraces ancestral bonds, ritual and symbolism.

Country Website

N/A

Foreign Investment Index

Foreign Investment Index

The Foreign Investment Index is a proprietary index measuring attractiveness to international

investment flows. The Foreign Investment Index is calculated using an established methodology by CountryWatch's Editor-in-Chief and is based on a given country's economic stability (sustained economic growth, monetary stability, current account deficits, budget surplus), economic risk (risk of non-servicing of payments for goods or services, loans and trade-related finance, risk of sovereign default), business and investment climate (property rights, labor force and laws, regulatory transparency, openness to foreign investment, market conditions, and stability of government). Scores are assigned from 0-10 using the aforementioned criteria. A score of 0 marks the lowest level of foreign investment viability, while a score of 10 marks the highest level of foreign investment viability, according to this proprietary index.

Country	Assessment
Afghanistan	2
Albania	4.5
Algeria	6
Andorra	9
Angola	4.5-5
Antigua	8.5
Argentina	5
Armenia	5
Australia	9.5
Austria	9-9.5
Azerbaijan	5

Bahamas	9
Bahrain	7.5
Bangladesh	4.5
Barbados	9
Belarus	4
Belgium	9
Belize	7.5
Benin	5.5
Bhutan	4.5
Bolivia	4.5
Bosnia-Herzegovina	5
Botswana	7.5-8
Brazil	8
Brunei	7
Bulgaria	5.5
Burkina Faso	4
Burma (Myanmar)	4.5
Burundi	4

Cambodia	4.5
Cameroon	5
Canada	9.5
Cape Verde	6
Central African Republic	3
Chad	4
Chile	9
China	7.5
China: Hong Kong	8.5
China: Taiwan	8.5
Colombia	7
Comoros	4
Congo DRC	4
Congo RC	5
Costa Rica	8
Cote d'Ivoire	4.5
Croatia	7
Cuba	4.5

Cyprus	7
Czech Republic	8.5
Denmark	9.5
Djibouti	4.5
Dominica	6
Dominican Republic	6.5
East Timor	4.5
Ecuador	5.5
Egypt	4.5-5
El Salvador	6
Equatorial Guinea	4.5
Eritrea	3.5
Estonia	8
Ethiopia	4.5
Fiji	5
Finland	9
Former Yugoslav Rep. of Macedonia	5
France	9-9.5

Gabon	5.5
Gambia	5
Georgia	5
Germany	9-9.5
Ghana	5.5
Greece	5
Grenada	7.5
Guatemala	5.5
Guinea	3.5
Guinea-Bissau	3.5
Guyana	4.5
Haiti	4
Holy See (Vatican)	n/a
Hong Kong (China)	8.5
Honduras	5.5
Hungary	8
Iceland	8-8.5
India	8

Indonesia	5.5
Iran	4
Iraq	3
Ireland	8
Israel	8.5
Italy	8
Jamaica	5.5
Japan	9.5
Jordan	6
Kazakhstan	6
Kenya	5
Kiribati	5.5
Korea, North	1
Korea, South	9
Kosovo	4.5
Kuwait	8.5
Kyrgyzstan	4.5
Laos	4

Latvia	7
Lebanon	5
Lesotho	5.5
Liberia	3.5
Libya	3
Liechtenstein	9
Lithuania	7.5
Luxembourg	9-9.5
Madagascar	4.5
Malawi	4.5
Malaysia	8.5
Maldives	6.5
Mali	5
Malta	9
Marshall Islands	5
Mauritania	4.5
Mauritius	7.5-8
Mexico	6.5-7

Micronesia	5
Moldova	4.5-5
Monaco	9
Mongolia	5
Montenegro	5.5
Morocco	7.5
Mozambique	5
Namibia	7.5
Nauru	4.5
Nepal	4
Netherlands	9-9.5
New Zealand	9.5
Nicaragua	5
Niger	4.5
Nigeria	4.5
Norway	9-9.5
Oman	8
Pakistan	4

Palau	4.5-5
Panama	7
Papua New Guinea	5
Paraguay	6
Peru	6
Philippines	6
Poland	8
Portugal	7.5-8
Qatar	9
Romania	6-6.5
Russia	6
Rwanda	4
Saint Kitts and Nevis	8
Saint Lucia	8
Saint Vincent and Grenadines	7
Samoa	7
San Marino	8.5
Sao Tome and Principe	4.5-5

Saudi Arabia	7
Senegal	6
Serbia	6
Seychelles	5
Sierra Leone	4
Singapore	9.5
Slovak Republic (Slovakia)	8.5
Slovenia	8.5-9
Solomon Islands	5
Somalia	2
South Africa	8
Spain	7.5-8
Sri Lanka	5.5
Sudan	4
Suriname	5
Swaziland	4.5
Sweden	9.5
Switzerland	9.5

Syria	2.5
Tajikistan	4
Taiwan (China)	8.5
Tanzania	5
Thailand	7.5-8
Togo	4.5-5
Tonga	5.5-6
Trinidad and Tobago	8-8.5
Tunisia	6
Turkey	6.5-7
Turkmenistan	4
Tuvalu	7
Uganda	5
Ukraine	4.5-5
United Arab Emirates	8.5
United Kingdom	9
United States	9
Uruguay	6.5-7

Uzbekistan	4
Vanuatu	6
Venezuela	5
Vietnam	5.5
Yemen	3
Zambia	4.5-5
Zimbabwe	3.5

Editor's Note:

As of 2015, the global economic crisis (emerging in 2008) had affected many countries across the world, resulting in changes to their rankings. Among those countries affected were top tier economies, such as the [United Kingdom](#), [Iceland](#), [Switzerland](#) and [Austria](#). However, in all these cases, their rankings have moved back upward in the last couple of years as anxieties have eased. Other top tier countries, such as [Spain](#), [Portugal](#), [Ireland](#), and [Italy](#), suffered some effects due to debt woes and the concomitant effect on the euro zone. Greece, another euro zone nation, was also downgraded due to its sovereign debt crisis; however, Greece's position on the precipice of default incurred a sharper downgrade than the other four euro zone countries mentioned above. Cyprus' exposure to Greek bank yielded a downgrade in its case. Slovenia and [Latvia](#) have been slightly downgraded due to a mix of economic and political concerns but could easily be upgraded in a future assessment, should these concerns abate. Meanwhile, the crisis in eastern [Ukraine](#) fueled downgrades in that country and neighboring [Russia](#).

Despite the "trifecta of tragedy" in [Japan](#) in 2011 -- the earthquake, the ensuing tsunami, and the resulting nuclear crisis -- and the appreciable destabilization of the economic and political terrain therein, this country has only slightly been downgraded. Japan's challenges have been assessed to be transient, the government remains accountable, and there is little risk of default. Both [India](#) and China retain their rankings; [India](#) holds a slightly higher ranking than [China](#) due to its record of democratic representation and accountability.

There were shifts in opposite directions for [Mali](#) and [Nigeria](#) versus the [Central African Republic](#),

[Burkina Faso](#), and [Burundi](#). [Mali](#) was slightly upgraded due to its efforts to return to constitutional order following the 2012 coup and to neutralize the threat of separatists and Islamists. Likewise, a new government in [Nigeria](#) generated a slight upgrade as the country attempts to confront corruption, crime, and terrorism. But the [Central African Republic](#) was downgraded due to the takeover of the government by Seleka rebels and the continued decline into lawlessness in that country. Likewise, the attempts by the leaders of [Burundi](#) and [Burkina Faso](#) to hold onto power by by-passing the constitution raised eyebrows and resulted in downgrades.

Political unrest in [Libya](#) and [Algeria](#) have contributed to a decision to marginally downgrade these countries as well. [Syria](#) incurred a sharper downgrade due to the devolution into de facto civil war and the dire security threat posed by Islamist terrorists. [Iraq](#) saw a similar downgrade as a result of the takeover of wide swaths of territory and the threat of genocide at the hands of Islamist terrorists. [Yemen](#), likewise, has been downgraded due to political instability at the hands of secessionists, terrorists, Houthi rebels, and the intervention of external parties. Conversely, [Egypt](#) and [Tunisia](#) saw slight upgrades as their political environments stabilize.

At the low end of the spectrum, devolving security conditions and/or economic crisis have resulted in countries like [Pakistan](#), [Afghanistan](#), [Somalia](#), and [Zimbabwe](#) maintaining their low ratings.

The [United States](#) continues to retain its previous slight downgrade due to the enduring threat of default surrounding the debt ceiling in that country, matched by a conflict-ridden political climate. In the case of [Mexico](#), there is limited concern about default, but increasing alarm over the security situation in that country and the government's ability to contain it. In [Argentina](#), a default to bond holders resulted in a downgrade to that country. Finally, a small but significant upgrade was attributed to [Cuba](#) due to its recent pro-business reforms and its normalization of ties with the United States.

Source:

CountryWatch Inc. www.countrywatch.com

Updated:

2015

Corruption Perceptions Index

Corruption Perceptions Index

Transparency International: [Corruption Perceptions Index](#)Editor's Note:

Transparency International's [Corruption Perceptions Index](#) is a composite index which ranks countries in terms of the degree to which corruption is perceived to exist among public officials. This index indicates the views of national and international business people and analysts about the levels of corruption in each country. The highest (and best) level of transparency is indicated by the number, 10. The lower (and worse) levels of transparency are indicated by lower numbers.

Rank	Country/Territory	CPI 2009 Score	Surveys Used	Confidence Range
1	New Zealand	9.4	6	9.1 - 9.5
2	Denmark	9.3	6	9.1 - 9.5
3	Singapore	9.2	9	9.0 - 9.4
3	Sweden	9.2	6	9.0 - 9.3
5	Switzerland	9.0	6	8.9 - 9.1
6	Finland	8.9	6	8.4 - 9.4
6	Netherlands	8.9	6	8.7 - 9.0
8	Australia	8.7	8	8.3 - 9.0
8	Canada	8.7	6	8.5 - 9.0
8	Iceland	8.7	4	7.5 - 9.4
11	Norway	8.6	6	8.2 - 9.1

12	Hong Kong	8.2	8	7.9 - 8.5
12	Luxembourg	8.2	6	7.6 - 8.8
14	Germany	8.0	6	7.7 - 8.3
14	Ireland	8.0	6	7.8 - 8.4
16	Austria	7.9	6	7.4 - 8.3
17	Japan	7.7	8	7.4 - 8.0
17	United Kingdom	7.7	6	7.3 - 8.2
19	United States	7.5	8	6.9 - 8.0
20	Barbados	7.4	4	6.6 - 8.2
21	Belgium	7.1	6	6.9 - 7.3
22	Qatar	7.0	6	5.8 - 8.1
22	Saint Lucia	7.0	3	6.7 - 7.5
24	France	6.9	6	6.5 - 7.3
25	Chile	6.7	7	6.5 - 6.9
25	Uruguay	6.7	5	6.4 - 7.1
27	Cyprus	6.6	4	6.1 - 7.1
27	Estonia	6.6	8	6.1 - 6.9
27	Slovenia	6.6	8	6.3 - 6.9

30	United Arab Emirates	6.5	5	5.5 - 7.5
31	Saint Vincent and the Grenadines	6.4	3	4.9 - 7.5
32	Israel	6.1	6	5.4 - 6.7
32	Spain	6.1	6	5.5 - 6.6
34	Dominica	5.9	3	4.9 - 6.7
35	Portugal	5.8	6	5.5 - 6.2
35	Puerto Rico	5.8	4	5.2 - 6.3
37	Botswana	5.6	6	5.1 - 6.3
37	Taiwan	5.6	9	5.4 - 5.9
39	Brunei Darussalam	5.5	4	4.7 - 6.4
39	Oman	5.5	5	4.4 - 6.5
39	Korea (South)	5.5	9	5.3 - 5.7
42	Mauritius	5.4	6	5.0 - 5.9
43	Costa Rica	5.3	5	4.7 - 5.9
43	Macau	5.3	3	3.3 - 6.9
45	Malta	5.2	4	4.0 - 6.2
46	Bahrain	5.1	5	4.2 - 5.8
46	Cape Verde	5.1	3	3.3 - 7.0

46	Hungary	5.1	8	4.6 - 5.7
49	Bhutan	5.0	4	4.3 - 5.6
49	Jordan	5.0	7	3.9 - 6.1
49	Poland	5.0	8	4.5 - 5.5
52	Czech Republic	4.9	8	4.3 - 5.6
52	Lithuania	4.9	8	4.4 - 5.4
54	Seychelles	4.8	3	3.0 - 6.7
55	South Africa	4.7	8	4.3 - 4.9
56	Latvia	4.5	6	4.1 - 4.9
56	Malaysia	4.5	9	4.0 - 5.1
56	Namibia	4.5	6	3.9 - 5.1
56	Samoa	4.5	3	3.3 - 5.3
56	Slovakia	4.5	8	4.1 - 4.9
61	Cuba	4.4	3	3.5 - 5.1
61	Turkey	4.4	7	3.9 - 4.9
63	Italy	4.3	6	3.8 - 4.9
63	Saudi Arabia	4.3	5	3.1 - 5.3
65	Tunisia	4.2	6	3.0 - 5.5

66	Croatia	4.1	8	3.7 - 4.5
66	Georgia	4.1	7	3.4 - 4.7
66	Kuwait	4.1	5	3.2 - 5.1
69	Ghana	3.9	7	3.2 - 4.6
69	Montenegro	3.9	5	3.5 - 4.4
71	Bulgaria	3.8	8	3.2 - 4.5
71	FYR Macedonia	3.8	6	3.4 - 4.2
71	Greece	3.8	6	3.2 - 4.3
71	Romania	3.8	8	3.2 - 4.3
75	Brazil	3.7	7	3.3 - 4.3
75	Colombia	3.7	7	3.1 - 4.3
75	Peru	3.7	7	3.4 - 4.1
75	Suriname	3.7	3	3.0 - 4.7
79	Burkina Faso	3.6	7	2.8 - 4.4
79	China	3.6	9	3.0 - 4.2
79	Swaziland	3.6	3	3.0 - 4.7
79	Trinidad and Tobago	3.6	4	3.0 - 4.3
83	Serbia	3.5	6	3.3 - 3.9

84	El Salvador	3.4	5	3.0 - 3.8
84	Guatemala	3.4	5	3.0 - 3.9
84	India	3.4	10	3.2 - 3.6
84	Panama	3.4	5	3.1 - 3.7
84	Thailand	3.4	9	3.0 - 3.8
89	Lesotho	3.3	6	2.8 - 3.8
89	Malawi	3.3	7	2.7 - 3.9
89	Mexico	3.3	7	3.2 - 3.5
89	Moldova	3.3	6	2.7 - 4.0
89	Morocco	3.3	6	2.8 - 3.9
89	Rwanda	3.3	4	2.9 - 3.7
95	Albania	3.2	6	3.0 - 3.3
95	Vanuatu	3.2	3	2.3 - 4.7
97	Liberia	3.1	3	1.9 - 3.8
97	Sri Lanka	3.1	7	2.8 - 3.4
99	Bosnia and Herzegovina	3.0	7	2.6 - 3.4
99	Dominican Republic	3.0	5	2.9 - 3.2
99	Jamaica	3.0	5	2.8 - 3.3

99	Madagascar	3.0	7	2.8 - 3.2
99	Senegal	3.0	7	2.5 - 3.6
99	Tonga	3.0	3	2.6 - 3.3
99	Zambia	3.0	7	2.8 - 3.2
106	Argentina	2.9	7	2.6 - 3.1
106	Benin	2.9	6	2.3 - 3.4
106	Gabon	2.9	3	2.6 - 3.1
106	Gambia	2.9	5	1.6 - 4.0
106	Niger	2.9	5	2.7 - 3.0
111	Algeria	2.8	6	2.5 - 3.1
111	Djibouti	2.8	4	2.3 - 3.2
111	Egypt	2.8	6	2.6 - 3.1
111	Indonesia	2.8	9	2.4 - 3.2
111	Kiribati	2.8	3	2.3 - 3.3
111	Mali	2.8	6	2.4 - 3.2
111	Sao Tome and Principe	2.8	3	2.4 - 3.3
111	Solomon Islands	2.8	3	2.3 - 3.3
111	Togo	2.8	5	1.9 - 3.9

120	Armenia	2.7	7	2.6 - 2.8
120	Bolivia	2.7	6	2.4 - 3.1
120	Ethiopia	2.7	7	2.4 - 2.9
120	Kazakhstan	2.7	7	2.1 - 3.3
120	Mongolia	2.7	7	2.4 - 3.0
120	Vietnam	2.7	9	2.4 - 3.1
126	Eritrea	2.6	4	1.6 - 3.8
126	Guyana	2.6	4	2.5 - 2.7
126	Syria	2.6	5	2.2 - 2.9
126	Tanzania	2.6	7	2.4 - 2.9
130	Honduras	2.5	6	2.2 - 2.8
130	Lebanon	2.5	3	1.9 - 3.1
130	Libya	2.5	6	2.2 - 2.8
130	Maldives	2.5	4	1.8 - 3.2
130	Mauritania	2.5	7	2.0 - 3.3
130	Mozambique	2.5	7	2.3 - 2.8
130	Nicaragua	2.5	6	2.3 - 2.7
130	Nigeria	2.5	7	2.2 - 2.7

130	Uganda	2.5	7	2.1 - 2.8
139	Bangladesh	2.4	7	2.0 - 2.8
139	Belarus	2.4	4	2.0 - 2.8
139	Pakistan	2.4	7	2.1 - 2.7
139	Philippines	2.4	9	2.1 - 2.7
143	Azerbaijan	2.3	7	2.0 - 2.6
143	Comoros	2.3	3	1.6 - 3.3
143	Nepal	2.3	6	2.0 - 2.6
146	Cameroon	2.2	7	1.9 - 2.6
146	Ecuador	2.2	5	2.0 - 2.5
146	Kenya	2.2	7	1.9 - 2.5
146	Russia	2.2	8	1.9 - 2.4
146	Sierra Leone	2.2	5	1.9 - 2.4
146	Timor-Leste	2.2	5	1.8 - 2.6
146	Ukraine	2.2	8	2.0 - 2.6
146	Zimbabwe	2.2	7	1.7 - 2.8
154	Côte d'Ivoire	2.1	7	1.8 - 2.4
154	Papua New Guinea	2.1	5	1.7 - 2.5

154	Paraguay	2.1	5	1.7 - 2.5
154	Yemen	2.1	4	1.6 - 2.5
158	Cambodia	2.0	8	1.8 - 2.2
158	Central African Republic	2.0	4	1.9 - 2.2
158	Laos	2.0	4	1.6 - 2.6
158	Tajikistan	2.0	8	1.6 - 2.5
162	Angola	1.9	5	1.8 - 1.9
162	Congo Brazzaville	1.9	5	1.6 - 2.1
162	Democratic Republic of Congo	1.9	5	1.7 - 2.1
162	Guinea-Bissau	1.9	3	1.8 - 2.0
162	Kyrgyzstan	1.9	7	1.8 - 2.1
162	Venezuela	1.9	7	1.8 - 2.0
168	Burundi	1.8	6	1.6 - 2.0
168	Equatorial Guinea	1.8	3	1.6 - 1.9
168	Guinea	1.8	5	1.7 - 1.8
168	Haiti	1.8	3	1.4 - 2.3
168	Iran	1.8	3	1.7 - 1.9
168	Turkmenistan	1.8	4	1.7 - 1.9

174	Uzbekistan	1.7	6	1.5 - 1.8
175	Chad	1.6	6	1.5 - 1.7
176	Iraq	1.5	3	1.2 - 1.8
176	Sudan	1.5	5	1.4 - 1.7
178	Myanmar	1.4	3	0.9 - 1.8
179	Afghanistan	1.3	4	1.0 - 1.5
180	Somalia	1.1	3	0.9 - 1.4

Methodology:

As noted above, the highest (and best) level of transparency with the least perceived corruption is indicated by the number, 10. The lower (and worse) levels of transparency are indicated by lower numbers.

According to Transparency International, the [Corruption Perceptions Index](#) (CPI) table shows a country's ranking and score, the number of surveys used to determine the score, and the confidence range of the scoring.

The rank shows how one country compares to others included in the index. The CPI score indicates the perceived level of public-sector corruption in a country/territory.

The CPI is based on 13 independent surveys. However, not all surveys include all countries. The surveys used column indicates how many surveys were relied upon to determine the score for that country.

The confidence range indicates the reliability of the CPI scores and tells us that allowing for a margin of error, we can be 90% confident that the true score for this country lies within this range.

Note:

Kosovo, which separated from the Yugoslav successor state of [Serbia](#), is not listed above. No

calculation is available for [Kosovo](#) at this time, however, a future corruption index by Transparency International may include the world's newest country in its tally. Taiwan has been listed above despite its contested status; while Taiwan claims sovereign status, [China](#) claims ultimate jurisdiction over Taiwan. Hong Kong, which is also under the rubric of Chinese sovereignty, is listed above. Note as well that Puerto Rico, which is a [United States](#) domain, is also included in the list above. These inclusions likely have to do with the size and fairly autonomous status of their economies.

Source:

Transparency International's Corruption Perception Index; available at URL: <http://www.transparency.org>

Updated:

Uploaded in 2011 using most recent ranking available; reviewed in 2015.

Competitiveness Ranking

Competitiveness Ranking

Editor's Note:

The Global Competitiveness Report's competitiveness ranking is based on the Global Competitiveness Index (GCI), which was developed for the World Economic Forum. The GCI is based on a number of competitiveness considerations, and provides a comprehensive picture of the competitiveness landscape in countries around the world. The competitiveness considerations are: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication, and innovation. The rankings are calculated from both publicly available data and the Executive Opinion Survey.

Country/Economy	GCI 2010 Rank	GCI 2010 Score	GCI 2009 Rank	Change 2009-2010
Switzerland	1	5.63	1	0

Sweden	2	5.56	4	2
Singapore	3	5.48	3	0
United States	4	5.43	2	-2
Germany	5	5.39	7	2
Japan	6	5.37	8	2
Finland	7	5.37	6	-1
Netherlands	8	5.33	10	2
Denmark	9	5.32	5	-4
Canada	10	5.30	9	-1
Hong Kong SAR	11	5.30	11	0
United Kingdom	12	5.25	13	1
Taiwan, China	13	5.21	12	-1
Norway	14	5.14	14	0
France	15	5.13	16	1
Australia	16	5.11	15	-1
Qatar	17	5.10	22	5
Austria	18	5.09	17	-1
Belgium	19	5.07	18	-1

Luxembourg	20	5.05	21	1
Saudi Arabia	21	4.95	28	7
Korea, Rep.	22	4.93	19	-3
New Zealand	23	4.92	20	-3
Israel	24	4.91	27	3
United Arab Emirates	25	4.89	23	-2
Malaysia	26	4.88	24	-2
China	27	4.84	29	2
Brunei Darussalam	28	4.75	32	4
Ireland	29	4.74	25	-4
Chile	30	4.69	30	0
Iceland	31	4.68	26	-5
Tunisia	32	4.65	40	8
Estonia	33	4.61	35	2
Oman	34	4.61	41	7
Kuwait	35	4.59	39	4
Czech Republic	36	4.57	31	-5
Bahrain	37	4.54	38	1

Thailand	38	4.51	36	-2
Poland	39	4.51	46	7
Cyprus	40	4.50	34	-6
Puerto Rico	41	4.49	42	1
Spain	42	4.49	33	-9
Barbados	43	4.45	44	1
Indonesia	44	4.43	54	10
Slovenia	45	4.42	37	-8
Portugal	46	4.38	43	-3
Lithuania	47	4.38	53	6
Italy	48	4.37	48	0
Montenegro	49	4.36	62	13
Malta	50	4.34	52	2
India	51	4.33	49	-2
Hungary	52	4.33	58	6
Panama	53	4.33	59	6
South Africa	54	4.32	45	-9
Mauritius	55	4.32	57	2

Costa Rica	56	4.31	55	-1
Azerbaijan	57	4.29	51	-6
Brazil	58	4.28	56	-2
Vietnam	59	4.27	75	16
Slovak Republic	60	4.25	47	-13
Turkey	61	4.25	61	0
Sri Lanka	62	4.25	79	17
Russian Federation	63	4.24	63	0
Uruguay	64	4.23	65	1
Jordan	65	4.21	50	-15
Mexico	66	4.19	60	-6
Romania	67	4.16	64	-3
Colombia	68	4.14	69	1
Iran	69	4.14	n/a	n/a
Latvia	70	4.14	68	-2
Bulgaria	71	4.13	76	5
Kazakhstan	72	4.12	67	-5
Peru	73	4.11	78	5

Namibia	74	4.09	74	0
Morocco	75	4.08	73	-2
Botswana	76	4.05	66	-10
Croatia	77	4.04	72	-5
Guatemala	78	4.04	80	2
Macedonia, FYR	79	4.02	84	5
Rwanda	80	4.00	n/a	n/a
Egypt	81	4.00	70	-11
El Salvador	82	3.99	77	-5
Greece	83	3.99	71	-12
Trinidad and Tobago	84	3.97	86	2
Philippines	85	3.96	87	2
Algeria	86	3.96	83	-3
Argentina	87	3.95	85	-2
Albania	88	3.94	96	8
Ukraine	89	3.90	82	-7
Gambia, The	90	3.90	81	-9
Honduras	91	3.89	89	-2

Lebanon	92	3.89	n/a	n/a
Georgia	93	3.86	90	-3
Moldova	94	3.86	n/a	n/a
Jamaica	95	3.85	91	-4
Serbia	96	3.84	93	-3
Syria	97	3.79	94	-3
Armenia	98	3.76	97	-1
Mongolia	99	3.75	117	18
Libya	100	3.74	88	-12
Dominican Republic	101	3.72	95	-6
Bosnia and Herzegovina	102	3.70	109	7
Benin	103	3.69	103	0
Senegal	104	3.67	92	-12
Ecuador	105	3.65	105	0
Kenya	106	3.65	98	-8
Bangladesh	107	3.64	106	-1
Bolivia	108	3.64	120	12
Cambodia	109	3.63	110	1

Guyana	110	3.62	104	-6
Cameroon	111	3.58	111	0
Nicaragua	112	3.57	115	3
Tanzania	113	3.56	100	-13
Ghana	114	3.56	114	0
Zambia	115	3.55	112	-3
Tajikistan	116	3.53	122	6
Cape Verde	117	3.51	n/a	n/a
Uganda	118	3.51	108	-10
Ethiopia	119	3.51	118	-1
Paraguay	120	3.49	124	4
Kyrgyz Republic	121	3.49	123	2
Venezuela	122	3.48	113	-9
Pakistan	123	3.48	101	-22
Madagascar	124	3.46	121	-3
Malawi	125	3.45	119	-6
Swaziland	126	3.40	n/a	n/a
Nigeria	127	3.38	99	-28

Lesotho	128	3.36	107	-21
Côte d'Ivoire	129	3.35	116	-13
Nepal	130	3.34	125	-5
Mozambique	131	3.32	129	-2
Mali	132	3.28	130	-2
Timor-Leste	133	3.23	126	-7
Burkina Faso	134	3.20	128	-6
Mauritania	135	3.14	127	-8
Zimbabwe	136	3.03	132	-4
Burundi	137	2.96	133	-4
Angola	138	2.93	n/a	n/a
Chad	139	2.73	131	-8

Methodology:

The competitiveness rankings are calculated from both publicly available data and the Executive Opinion Survey, a comprehensive annual survey conducted by the World Economic Forum together with its network of Partner Institutes (leading research institutes and business organizations) in the countries covered by the Report.

Highlights according to WEF --

- The [United States](#) falls two places to fourth position, overtaken by [Sweden](#) and [Singapore](#) in the rankings of the World Economic Forum's Global Competitiveness Report 2010-2011

- The People's Republic of [China](#) continues to move up the rankings, with marked improvements in several other Asian countries
- [Germany](#) moves up two places to fifth place, leading the Eurozone countries
- [Switzerland](#) tops the rankings

Source:

World Economic Forum; available at URL: <http://www.weforum.org>

Updated:

2011 using most recent ranking available; reviewed in 2015.

Taxation

Corporate income tax

Corporate income tax is applied at 30 percent on taxable income.

Value added tax

Value added tax (general sales tax) is applied at 10 percent on most transactions.

Stock Market

After many years of preparation the Port Moresby Stock Exchange opened on April 29, 1999 for a

trial period. The first four companies to be listed were Oil Search, Orogen Minerals, Lihir Gold, and Steamships Trading, all listed on the Australian Stock Exchange as well. Full operations began the next month. By the next year, Port Moresby Stock exchange listings had more than doubled to nine. The new entrants were: Cardec, CUE, Highlands Pacific Ltd., and IOC.

For more information on the Port Moresby Stock Exchange, see URL: <http://www.pomsox.com.pg/default.htm>.

Partner Links

Partner Links

Chapter 5

Social Overview

People

Demography

The island of New Guinea is composed of the nation of Papua New Guinea in the east and Irian Jaya, declared a province of Indonesia in 1969, in the west. The term "New Guinea" commonly refers to both the northern two-thirds of the main island of Papua New Guinea and to the entire island.

The overall population density is low, although pockets of overpopulation exist. Papua, with almost half the area of Papua New Guinea, has only 20 percent of the population. The Western Province of Papua averages one person per square kilometer (2.6 per sq. mi.). Chimbu province in the New Guinea highlands averages 20 people per square kilometer (52 per sq. mi.), and has some areas containing up to 200 people per square kilometer of land. The highlands have 40 percent of the population.

A considerable urban drift toward Port Moresby and other major centers has occurred in recent years. Between 1978 and 1988, Port Moresby grew nearly eight percent per year, Lae six percent, Mount Haven 6.5 percent, Goroka four percent, and Madang three percent. The trend towards urbanization accelerated in the 1990s and early 2000s, bringing in its wake squatter settlements, unemployment and social problems.

Foreign residents are just over one percent of the population. More than half are Australian; others are from the United Kingdom, New Zealand, the Philippines and the United States. Since independence in 1975, about 900 foreigners have become naturalized citizens.

Ethnicity, Language, Religion

The indigenous population of Papua New Guinea is one of the most heterogeneous in the world. Papua New Guinea has several thousand separate communities, most with only a few hundred people. The isolation created by mountainous terrain is so great that some communities, until recently, were unaware of the existence of neighboring groups only a few kilometers away.

Divided by language, customs and tradition, some of these communities have engaged in tribal warfare with their neighbors for centuries. In terms of ethnicity, the range includes Papuan, Melanesian, Polynesian, Micronesian and Negrito groups.

A few hundred to a few thousand speak native languages, although some 130,000 people speak Enga - primarily in its namesake province. Most native languages are extremely complex grammatically. In New Guinea, about 650 different languages are spoken; of these, only 350-450 are related. The remainder seem to be totally unrelated either to each other or to the other major groupings. A folk saying, "For each village, a different culture," reflects this tremendous diversity. Melanesian Pidgin serves as a lingua franca. English is spoken by educated people and in the Milne Bay province.

Almost two-thirds of the population is nominally Christian, though many retain aspects of indigenous religious practices and beliefs. Of the Christian population, more than 700,000 are Catholic, more than 500,000 Lutheran, and the balance are members of other Protestant groups. Although the major churches are under indigenous leadership, a large number of missionaries remain in the country.

An estimated 2,500 people from the United States reside in Papua New Guinea, the bulk of them missionaries and their families. The non-Christian portion of the indigenous population practices a wide variety of religions, which are an integral part of traditional culture and consist mainly of animism (spirit worship) and ancestor cults.

Society and Culture

The traditional Papua New Guinea social structure includes the following characteristics:

1. The practice of subsistence economy;
2. Recognition of bonds of kinship with obligations extending beyond the immediate family group;
3. Generally egalitarian relationships with an emphasis on acquired, rather than inherited, status;
4. The people's strong attachment to land.

Most Papua New Guineans still adhere strongly to this traditional social structure, which has its roots in village life.

Health and Welfare

The population of Papua New Guinea has a life expectancy at birth of 66 years of age (*male*: 63.76 years; *female*: 68.35 years), and an infant mortality rate of 46.67 deaths per 1,000 live

births, according to recent estimates. In terms of literacy, 57 percent of the population, age 15 and over, can read and write; the literacy rate of females is lower, hovering between 50 and 52 percent.

Health expenditures in this country amount to 3.1 percent of GDP. Availability of drinkable water is reasonably good although more of a challenge in rural areas; access to sanitation facilities is far more of a problem, especially in rural areas.

Human Development

One notable indicator used to measure a country's quality of life is the Human Development Index (HDI), which is compiled annually since 1990 by the United Nations Development Programme (UNDP). The HDI is a composite of several indicators, which measure a country's achievements in three main arenas of human development: longevity, knowledge and education, as well as economic standard of living. In a recent ranking of 169 countries, the HDI placed Papua New Guinea in the low human development category, at 137th place.

Although the concept of human development is complicated and cannot be properly captured by values and indices, the HDI, which is calculated and updated annually, offers a wide-ranging assessment of human development in certain countries, not based solely upon traditional economic and financial indicators.

Written by Dr. Denise Youngblood Coleman, Editor in Chief, www.countrywatch.com; see Bibliography for research sources.

Human Development Index

Human Development Index

Human Development Index (Ranked Numerically)

The [Human Development Index](#) (HDI) is used to measure quality of life in countries across the world. The HDI has been compiled since 1990 by the United Nations Development Programme (UNDP) on a regular basis. The HDI is a composite of several indicators, which measure a country's achievements in three main arenas of human development: longevity, education, and economic standard of living. Although the concept of human development is complicated and cannot be properly captured by values and indices, the HDI offers a wide-ranging assessment of human development in certain countries, not based solely upon traditional economic and financial

indicators. For more information about the methodology used to calculate the HDI, please see the "Source Materials" in the appendices of this review.

Very High Human Development	High Human Development	Medium Human Development	Low Human Development
1. Norway	43. Bahamas	86. Fiji	128. Kenya
2. Australia	44. Lithuania	87. Turkmenistan	129. Bangladesh
3. New Zealand	45. Chile	88. Dominican Republic	130. Ghana
4. United States	46. Argentina	89. China	131. Cameroon
5. Ireland	47. Kuwait	90. El Salvador	132. Myanmar (Burma)
6. Liechtenstein	48. Latvia	91. Sri Lanka	133. Yemen
7. Netherlands	49. Montenegro	92. Thailand	134. Benin
8. Canada	50. Romania	93. Gabon	135. Madagascar
9. Sweden	51. Croatia	94. Suriname	136. Mauritania
10. Germany	52. Uruguay	95. Bolivia	137. Papua New Guinea
11. Japan	53. Libya	96. Paraguay	138. Nepal
12. South Korea	54. Panama	97. Philippines	139. Togo
13. Switzerland	55. Saudi Arabia	98. Botswana	140. Comoros

14. France	56. Mexico	99. Moldova	141. Lesotho
15. Israel	57. Malaysia	100. Mongolia	142. Nigeria
16. Finland	58. Bulgaria	101. Egypt	143. Uganda
17. Iceland	59. Trinidad and Tobago	102. Uzbekistan	144. Senegal
18. Belgium	60. Serbia	103. Micronesia	145. Haiti
19. Denmark	61. Belarus	104. Guyana	146. Angola
20. Spain	62. Costa Rica	105. Namibia	147. Djibouti
21. Hong King	63. Peru	106. Honduras	148. Tanzania
22. Greece	64. Albania	107. Maldives	149. Cote d'Ivoire
23. Italy	65. Russian Federation	108. Indonesia	150. Zambia
24. Luxembourg	66. Kazakhstan	109. Kyrgyzstan	151. Gambia
25. Austria	67. Azerbaijan	110. South Africa	152. Rwanda
26. United Kingdom	68. Bosnia and Herzegovina	111. Syria	153. Malawi
27. Singapore	69. Ukraine	112. Tajikistan	154. Sudan
28. Czech Republic	70. Iran	113. Vietnam	155. Afghanistan
29. Slovenia	71. The former Yugoslav Republic of Macedonia	114. Morocco	156. Guinea

30. Andorra	72. Mauritius	115. Nicaragua	157. Ethiopia
31. Slovakia	73. Brazil	116. Guatemala	158. Sierra Leone
32. United Arab Emirates	74. Georgia	117. Equatorial Guinea	159. Central African Republic
33. Malta	75. Venezuela	118. Cape Verde	160. Mali
34. Estonia	76. Armenia	119. India	161. Burkina Faso
35. Cyprus	77. Ecuador	120. East Timor	162. Liberia
36. Hungary	78. Belize	121. Swaziland	163. Chad
37. Brunei	79. Colombia	122. Laos	164. Guinea-Bissau
38. Qatar	80. Jamaica	123. Solomon Islands	165. Mozambique
39. Bahrain	81. Tunisia	124. Cambodia	166. Burundi
40. Portugal	82. Jordan	125. Pakistan	167. Niger
41. Poland	83. Turkey	126. Congo RC	168. Congo DRC
42. Barbados	84. Algeria	127. Sao Tome and Principe	169. Zimbabwe
	85. Tonga		

Methodology:

For more information about the methodology used to calculate the HDI, please see the "Source Materials" in the appendices of this Country Review.

Reference:

As published in United Nations Development Programme's Human Development Report 2010.

Source:

United Nations Development Programme's [Human Development Index](http://hdr.undp.org/en/statistics/) available at URL: <http://hdr.undp.org/en/statistics/>

Updated:

Uploaded in 2011 using ranking available; reviewed in 2015

Life Satisfaction Index

Life Satisfaction Index

Life Satisfaction Index

Created by Adrian G. White, an Analytic Social Psychologist at the University of Leicester, the "Satisfaction with Life Index" measures subjective life satisfaction across various countries. The data was taken from a metastudy (see below for source) and associates the notion of subjective happiness or life satisfaction with qualitative parameters such as health, wealth, and access to basic education. This assessment serves as an alternative to other measures of happiness that tend to rely on traditional and quantitative measures of policy on quality of life, such as GNP and GDP. The methodology involved the responses of 80,000 people across the globe.

Rank	Country	Score
1	Denmark	273.4

2	Switzerland	273.33
3	Austria	260
4	Iceland	260
5	The Bahamas	256.67
6	Finland	256.67
7	Sweden	256.67
8	Iran	253.33
9	Brunei	253.33
10	Canada	253.33
11	Ireland	253.33
12	Luxembourg	253.33
13	Costa Rica	250
14	Malta	250
15	Netherlands	250
16	Antiguaand Barbuda	246.67
17	Malaysia	246.67
18	New Zealand	246.67
19	Norway	246.67

20	Seychelles	246.67
21	Saint Kitts and Nevis	246.67
22	United Arab Emirates	246.67
23	United States	246.67
24	Vanuatu	246.67
25	Venezuela	246.67
26	Australia	243.33
27	Barbados	243.33
28	Belgium	243.33
29	Dominica	243.33
30	Oman	243.33
31	Saudi Arabia	243.33
32	Suriname	243.33
33	Bahrain	240
34	Colombia	240
35	Germany	240
36	Guyana	240
37	Honduras	240

38	Kuwait	240
39	Panama	240
40	Saint Vincent and the Grenadines	240
41	United Kingdom	236.67
42	Dominican Republic	233.33
43	Guatemala	233.33
44	Jamaica	233.33
45	Qatar	233.33
46	Spain	233.33
47	Saint Lucia	233.33
48	Belize	230
49	Cyprus	230
50	Italy	230
51	Mexico	230
52	Samoa	230
53	Singapore	230
54	Solomon Islands	230
55	Trinidad and Tobago	230

56	Argentina	226.67
57	Fiji	223.33
58	Israel	223.33
59	Mongolia	223.33
60	São Tomé and Príncipe	223.33
61	El Salvador	220
62	France	220
63	Hong Kong	220
64	Indonesia	220
65	Kyrgyzstan	220
66	Maldives	220
67	Slovenia	220
68	Taiwan	220
69	East Timor	220
70	Tonga	220
71	Chile	216.67
72	Grenada	216.67
73	Mauritius	216.67

74	Namibia	216.67
75	Paraguay	216.67
76	Thailand	216.67
77	Czech Republic	213.33
78	Philippines	213.33
79	Tunisia	213.33
80	Uzbekistan	213.33
81	Brazil	210
82	China	210
83	Cuba	210
84	Greece	210
85	Nicaragua	210
86	Papua New Guinea	210
87	Uruguay	210
88	Gabon	206.67
89	Ghana	206.67
90	Japan	206.67
91	Yemen	206.67

92	Portugal	203.33
93	Sri Lanka	203.33
94	Tajikistan	203.33
95	Vietnam	203.33
96	Bhutan	200
97	Comoros	196.67
98	Croatia	196.67
99	Poland	196.67
100	Cape Verde	193.33
101	Kazakhstan	193.33
102	South Korea	193.33
103	Madagascar	193.33
104	Bangladesh	190
105	Republic of the Congo	190
106	The Gambia	190
107	Hungary	190
108	Libya	190
109	South Africa	190

110	Cambodia	186.67
111	Ecuador	186.67
112	Kenya	186.67
113	Lebanon	186.67
114	Morocco	186.67
115	Peru	186.67
116	Senegal	186.67
117	Bolivia	183.33
118	Haiti	183.33
119	Nepal	183.33
120	Nigeria	183.33
121	Tanzania	183.33
122	Benin	180
123	Botswana	180
124	Guinea-Bissau	180
125	India	180
126	Laos	180
127	Mozambique	180

128	Palestinian Authority	180
129	Slovakia	180
130	Myanmar	176.67
131	Mali	176.67
132	Mauritania	176.67
133	Turkey	176.67
134	Algeria	173.33
135	Equatorial Guinea	173.33
136	Romania	173.33
137	Bosnia and Herzegovina	170
138	Cameroon	170
139	Estonia	170
140	Guinea	170
141	Jordan	170
142	Syria	170
143	Sierra Leone	166.67
144	Azerbaijan	163.33
145	Central African Republic	163.33

146	Republic of Macedonia	163.33
147	Togo	163.33
148	Zambia	163.33
149	Angola	160
150	Djibouti	160
151	Egypt	160
152	Burkina Faso	156.67
153	Ethiopia	156.67
154	Latvia	156.67
155	Lithuania	156.67
156	Uganda	156.67
157	Albania	153.33
158	Malawi	153.33
159	Chad	150
160	Côte d'Ivoire	150
161	Niger	150
162	Eritrea	146.67
163	Rwanda	146.67

164	Bulgaria	143.33
165	Lesotho	143.33
166	Pakistan	143.33
167	Russia	143.33
168	Swaziland	140
169	Georgia	136.67
170	Belarus	133.33
171	Turkmenistan	133.33
172	Armenia	123.33
173	Sudan	120
174	Ukraine	120
175	Moldova	116.67
176	Democratic Republic of the Congo	110
177	Zimbabwe	110
178	Burundi	100

Commentary:

European countries, such as [Denmark](#), [Iceland](#), [Finland](#), [Sweden](#), [Switzerland](#), [Austria](#) resided at the top of the ranking with highest levels of self-reported life satisfaction. Conversely, European countries such as [Latvia](#), [Lithuania](#), [Moldova](#), [Belarus](#) and [Ukraine](#) ranked low on the index.

African countries such as Democratic Republic of Congo, [Zimbabwe](#) and [Burundi](#) found themselves at the very bottom of the ranking, and indeed, very few African countries could be found in the top 100. [Japan](#) was at the mid-way point in the ranking, however, other Asian countries such as [Brunei](#) and [Malaysia](#) were in the top tier, while [Pakistan](#) was close to the bottom with a low level of self-identified life satisfaction. As a region, the Middle East presented a mixed bag with Saudi Arabians reporting healthy levels of life satisfaction and Egyptians near the bottom of the ranking. As a region, Caribbean countries were ranked highly, consistently demonstrating high levels of life satisfaction. The findings showed that health was the most crucial determining factor in life satisfaction, followed by prosperity and education.

Source:

White, A. (2007). A Global Projection of Subjective Well-being: A Challenge To Positive Psychology? *Psychiatry* 56, 17-20. The data was extracted from a meta-analysis by Marks, Abdallah, Simms & Thompson (2006).

Uploaded:

Based on study noted above in "Source" ; reviewed in 2015

Happy Planet Index

Happy Planet Index

The Happy Planet Index (HPI) is used to measure human well-being in conjunction with environmental impact. The HPI has been compiled since 2006 by the New Economics Foundation. The index is a composite of several indicators including subjective life satisfaction, life expectancy at birth, and ecological footprint per capita.

As noted by NEFA, the HPI "reveals the ecological efficiency with which human well-being is delivered." Indeed, the index combines environmental impact with human well-being to measure the environmental efficiency with which, country by country, people live long and happy lives. The countries ranked highest by the HPI are not necessarily the ones with the happiest people overall, but the ones that allow their citizens to live long and fulfilling lives, without negatively impacting this opportunity for either future generations or citizens of other countries. Accordingly, a country like the [United States](#) will rank low on this list due to its large per capital ecological

footprint, which uses more than its fair share of resources, and will likely cause planetary damage.

It should be noted that the HPI was designed to be a counterpoint to other well-established indices of countries' development, such as Gross Domestic Product (GDP), which measures overall national wealth and economic development, but often obfuscates the realities of countries with stark variances between the rich and the poor. Moreover, the objective of most of the world's people is not to be wealthy but to be happy. The HPI also differs from the [Human Development Index](#) (HDI), which measures quality of life but not ecology, since it [HPI] also includes sustainability as a key indicator.

Rank	Country	HPI
1	Costa Rica	76.1
2	Dominican Republic	71.8
3	Jamaica	70.1
4	Guatemala	68.4
5	Vietnam	66.5
6	Colombia	66.1
7	Cuba	65.7
8	El Salvador	61.5
9	Brazil	61.0
10	Honduras	61.0
11	Nicaragua	60.5
12	Egypt	60.3

13	Saudi Arabia	59.7
14	Philippines	59.0
15	Argentina	59.0
16	Indonesia	58.9
17	Bhutan	58.5
18	Panama	57.4
19	Laos	57.3
20	China	57.1
21	Morocco	56.8
22	Sri Lanka	56.5
23	Mexico	55.6
24	Pakistan	55.6
25	Ecuador	55.5
26	Jordan	54.6
27	Belize	54.5
28	Peru	54.4
29	Tunisia	54.3
30	Trinidad and Tobago	54.2

31	Bangladesh	54.1
32	Moldova	54.1
33	Malaysia	54.0
34	Tajikistan	53.5
35	India	53.0
36	Venezuela	52.5
37	Nepal	51.9
38	Syria	51.3
39	Burma	51.2
40	Algeria	51.2
41	Thailand	50.9
42	Haiti	50.8
43	Netherlands	50.6
44	Malta	50.4
45	Uzbekistan	50.1
46	Chile	49.7
47	Bolivia	49.3
48	Armenia	48.3

49	Singapore	48.2
50	Yemen	48.1
51	Germany	48.1
52	Switzerland	48.1
53	Sweden	48.0
54	Albania	47.9
55	Paraguay	47.8
56	Palestinian Authority	47.7
57	Austria	47.7
58	Serbia	47.6
59	Finland	47.2
60	Croatia	47.2
61	Kyrgyzstan	47.1
62	Cyprus	46.2
63	Guyana	45.6
64	Belgium	45.4
65	Bosnia and Herzegovina	45.0
66	Slovenia	44.5

67	Israel	44.5
68	South Korea	44.4
69	Italy	44.0
70	Romania	43.9
71	France	43.9
72	Georgia	43.6
73	Slovakia	43.5
74	United Kingdom	43.3
75	Japan	43.3
76	Spain	43.2
77	Poland	42.8
78	Ireland	42.6
79	Iraq	42.6
80	Cambodia	42.3
81	Iran	42.1
82	Bulgaria	42.0
83	Turkey	41.7
84	Hong Kong	41.6

85	Azerbaijan	41.2
86	Lithuania	40.9
87	Djibouti	40.4
88	Norway	40.4
89	Canada	39.4
90	Hungary	38.9
91	Kazakhstan	38.5
92	Czech Republic	38.3
93	Mauritania	38.2
94	Iceland	38.1
95	Ukraine	38.1
96	Senegal	38.0
97	Greece	37.6
98	Portugal	37.5
99	Uruguay	37.2
100	Ghana	37.1
101	Latvia	36.7
102	Australia	36.6

103	New Zealand	36.2
104	Belarus	35.7
105	Denmark	35.5
106	Mongolia	35.0
107	Malawi	34.5
108	Russia	34.5
109	Chad	34.3
110	Lebanon	33.6
111	Macedonia	32.7
112	Republic of the Congo	32.4
113	Madagascar	31.5
114	United States	30.7
115	Nigeria	30.3
116	Guinea	30.3
117	Uganda	30.2
118	South Africa	29.7
119	Rwanda	29.6
120	Democratic Republic of the Congo	29.0

121	Sudan	28.5
122	Luxembourg	28.5
123	United Arab Emirates	28.2
124	Ethiopia	28.1
125	Kenya	27.8
126	Cameroon	27.2
127	Zambia	27.2
128	Kuwait	27.0
129	Niger	26.9
130	Angola	26.8
131	Estonia	26.4
132	Mali	25.8
133	Mozambique	24.6
134	Benin	24.6
135	Togo	23.3
136	Sierra Leone	23.1
137	Central African Republic	22.9
138	Burkina Faso	22.4

139	Burundi	21.8
140	Namibia	21.1
141	Botswana	20.9
142	Tanzania	17.8
143	Zimbabwe	16.6

Source: This material is derived from the Happy Planet Index issued by the New Economics Foundation (NEF).

Methodology: The methodology for the calculations can be found at URL: <http://www.happyplanetindex.org/>

Status of Women

Gender Related Development Index (GDI) Rank:

103rd out of 140

Gender Empowerment Measure (GEM) Rank:

Not Ranked

Female Population:

2.9 million

Female Life Expectancy at birth:

68 years

Total Fertility Rate:

4.1

Maternal Mortality Ratio (2000):

300

Total Number of Women Living with HIV/AIDS:

16,000-85,000

Ever Married Women, Ages 15-19 (%):

21%

Mean Age at Time of Marriage:

21

Contraceptive Use Among Married Women, Any Method (%):

26%

Female Adult Literacy Rate:

50.9%

Combined Female Gross enrollment ratio for Primary, Secondary and Tertiary schools:

37%

Female-Headed Households (%):

8%

Economically Active Females (%):

67.6%

Female Contributing Family Workers (%):

N/A

Female Estimated Earned Income:

\$1,896

Seats in Parliament held by women (%):

Lower or Single House: 0.9%

Upper House or Senate: N/A

Year Women Received the Right to Vote:

1964

Year Women Received the Right to Stand for Election:

1963

*The Gender Development Index (GDI) is a composite index which measures the average achievement in a country. While very similar to the Human Development Index in its use of the same variables, the GDI adjusts the average achievement of each country in terms of life expectancy, enrollment in schools, income, and literacy in accordance to the disparities between males and females.

*The Gender Empowerment Measure (GEM) is a composite index measuring gender inequality in three of the basic dimensions of empowerment; economic participation and decision-making, political participation and decision-making, and power over economic resources.

*Total Fertility Rate (TFR) is defined as the average number of babies born to women during their reproductive years. A TFR of 2.1 is considered the replacement rate; once a TFR of a population reaches 2.1 the population will remain stable assuming no immigration or emigration takes place. When the TFR is greater than 2.1 a population will increase and when it is less than 2.1 a population will eventually decrease, although due to the age structure of a population it will take years before a low TFR is translated into lower population.

*Maternal Mortality Rate is the number of deaths to women per 100,000 live births that resulted from conditions related to pregnancy and or delivery related complications.

*Economically Active Females are the share of the female population, ages 15 and above, whom supply, or are able to supply, labor for the production of goods and services.

*Female Contributing Family Workers are those females who work without pay in an economic enterprise operated by a relative living in the same household.

*Estimated Earned Income is measured according to Purchasing Power Parity (PPP) in US dollars.

Global Gender Gap Index

Global Gender Gap Index

Editor's Note:

The Global Gender Gap Index by the World Economic Forum ranks most of the world's countries in terms of the division of resources and opportunities among males and females. Specifically, the ranking assesses the gender inequality gap in these four arenas:

1. Economic participation and opportunity (salaries and high skilled employment participation levels)
2. Educational attainment (access to basic and higher level education)
3. Political empowerment (representation in decision-making structures)
4. Health and survival (life expectancy and sex ratio)

	2010 rank	2010 score	2010 rank among 2009 countries	2009 rank	2009 score	2008 rank	2008 score	2007 rank
Country								
Iceland	1	0.8496	1	1	0.8276	4	0.7999	4

Norway	2	0.8404	2	3	0.8227	1	0.8239	2
Finland	3	0.8260	3	2	0.8252	2	0.8195	3
Sweden	4	0.8024	4	4	0.8139	3	0.8139	1
New Zealand	5	0.7808	5	5	0.7880	5	0.7859	5
Ireland	6	0.7773	6	8	0.7597	8	0.7518	9
Denmark	7	0.7719	7	7	0.7628	7	0.7538	8
Lesotho	8	0.7678	8	10	0.7495	16	0.7320	26
Philippines	9	0.7654	9	9	0.7579	6	0.7568	6
Switzerland	10	0.7562	10	13	0.7426	14	0.7360	40
Spain	11	0.7554	11	17	0.7345	17	0.7281	10
South Africa	12	0.7535	12	6	0.7709	22	0.7232	20
Germany	13	0.7530	13	12	0.7449	11	0.7394	7
Belgium	14	0.7509	14	33	0.7165	28	0.7163	19
United Kingdom	15	0.7460	15	15	0.7402	13	0.7366	11
Sri Lanka	16	0.7458	16	16	0.7402	12	0.7371	15
Netherlands	17	0.7444	17	11	0.7490	9	0.7399	12
Latvia	18	0.7429	18	14	0.7416	10	0.7397	13

United States	19	0.7411	19	31	0.7173	27	0.7179	31
Canada	20	0.7372	20	25	0.7196	31	0.7136	18
Trinidad and Tobago	21	0.7353	21	19	0.7298	19	0.7245	46
Mozambique	22	0.7329	22	26	0.7195	18	0.7266	43
Australia	23	0.7271	23	20	0.7282	21	0.7241	17
Cuba	24	0.7253	24	29	0.7176	25	0.7195	22
Namibia	25	0.7238	25	32	0.7167	30	0.7141	29
Luxembourg	26	0.7231	26	63	0.6889	66	0.6802	58
Mongolia	27	0.7194	27	22	0.7221	40	0.7049	62
Costa Rica	28	0.7194	28	27	0.7180	32	0.7111	28
Argentina	29	0.7187	29	24	0.7211	24	0.7209	33
Nicaragua	30	0.7176	30	49	0.7002	71	0.6747	90
Barbados	31	0.7176	31	21	0.7236	26	0.7188	n/a
Portugal	32	0.7171	32	46	0.7013	39	0.7051	37
Uganda	33	0.7169	33	40	0.7067	43	0.6981	50
Moldova	34	0.7160	34	36	0.7104	20	0.7244	21
Lithuania	35	0.7132	35	30	0.7175	23	0.7222	14

Bahamas	36	0.7128	36	28	0.7179	n/a	n/a	n/a
Austria	37	0.7091	37	42	0.7031	29	0.7153	27
Guyana	38	0.7090	38	35	0.7108	n/a	n/a	n/a
Panama	39	0.7072	39	43	0.7024	34	0.7095	38
Ecuador	40	0.7072	40	23	0.7220	35	0.7091	44
Kazakhstan	41	0.7055	41	47	0.7013	45	0.6976	32
Slovenia	42	0.7047	42	52	0.6982	51	0.6937	49
Poland	43	0.7037	43	50	0.6998	49	0.6951	60
Jamaica	44	0.7037	44	48	0.7013	44	0.6980	39
Russian Federation	45	0.7036	45	51	0.6987	42	0.6994	45
France	46	0.7025	46	18	0.7331	15	0.7341	51
Estonia	47	0.7018	47	37	0.7094	37	0.7076	30
Chile	48	0.7013	48	64	0.6884	65	0.6818	86
Macedonia, FYR	49	0.6996	49	53	0.6950	53	0.6914	35
Bulgaria	50	0.6983	50	38	0.7072	36	0.7077	25
Kyrgyz Republic	51	0.6973	51	41	0.7058	41	0.7045	70
Israel	52	0.6957	52	45	0.7019	56	0.6900	36

Croatia	53	0.6939	53	54	0.6944	46	0.6967	16
Honduras	54	0.6927	54	62	0.6893	47	0.6960	68
Colombia	55	0.6927	55	56	0.6939	50	0.6944	24
Singapore	56	0.6914	56	84	0.6664	84	0.6625	77
Thailand	57	0.6910	57	59	0.6907	52	0.6917	52
Greece	58	0.6908	58	85	0.6662	75	0.6727	72
Uruguay	59	0.6897	59	57	0.6936	54	0.6907	78
Peru	60	0.6895	60	44	0.7024	48	0.6959	75
China	61	0.6881	61	60	0.6907	57	0.6878	73
Botswana	62	0.6876	62	39	0.7071	63	0.6839	53
Ukraine	63	0.6869	63	61	0.6896	62	0.6856	57
Venezuela	64	0.6863	64	69	0.6839	59	0.6875	55
Czech Republic	65	0.6850	65	74	0.6789	69	0.6770	64
Tanzania	66	0.6829	66	73	0.6797	38	0.7068	34
Romania	67	0.6826	67	70	0.6805	70	0.6763	47
Malawi	68	0.6824	68	76	0.6738	81	0.6664	87
Paraguay	69	0.6804	69	66	0.6868	100	0.6379	69
Ghana	70	0.6782	70	80	0.6704	77	0.6679	63

Slovak Republic	71	0.6778	71	68	0.6845	64	0.6824	54
Vietnam	72	0.6776	72	71	0.6802	68	0.6778	42
Dominican Republic	73	0.6774	73	67	0.6859	72	0.6744	65
Italy	74	0.6765	74	72	0.6798	67	0.6788	84
Gambia, The	75	0.6762	75	75	0.6752	85	0.6622	95
Bolivia	76	0.6751	76	82	0.6693	80	0.6667	80
Brueni Darussalem	77	0.6748	77	94	0.6524	99	0.6392	n/a
Albania	78	0.6726	78	91	0.6601	87	0.6591	66
Hungary	79	0.6720	79	65	0.6879	60	0.6867	61
Madagascar	80	0.6713	80	77	0.6732	74	0.6736	89
Angola	81	0.6712	81	106	0.6353	114	0.6032	110
Bangladesh	82	0.6702	82	93	0.6526	90	0.6531	100
Malta	83	0.6695	83	88	0.6635	83	0.6634	76
Armenia	84	0.6669	84	90	0.6619	78	0.6677	71
Brazil	85	0.6655	85	81	0.6695	73	0.6737	74
Cyprus	86	0.6642	86	79	0.6706	76	0.6694	82

Indonesia	87	0.6615	87	92	0.6580	93	0.6473	81
Georgia	88	0.6598	88	83	0.6680	82	0.6654	67
Tajikistan	89	0.6598	89	86	0.6661	89	0.6541	79
El Salvador	90	0.6596	90	55	0.6939	58	0.6875	48
Mexico	91	0.6577	91	98	0.6503	97	0.6441	93
Zimbabwe	92	0.6574	92	95	0.6518	92	0.6485	88
Belize	93	0.6536	93	87	0.6636	86	0.6610	94
Japan	94	0.6524	94	101	0.6447	98	0.6434	91
Mauritius	95	0.6520	95	96	0.6513	95	0.6466	85
Kenya	96	0.6499	96	97	0.6512	88	0.6547	83
Cambodia	97	0.6482	97	104	0.6410	94	0.6469	98
Malaysia	98	0.6479	98	100	0.6467	96	0.6442	92
Maldives	99	0.6452	99	99	0.6482	91	0.6501	99
Azerbaijan	100	0.6446	100	89	0.6626	61	0.6856	59
Senegal	101	0.6414	101	102	0.6427	n/a	n/a	n/a
Suriname	102	0.6407	102	78	0.6726	79	0.6674	56
United Arab Emirates	103	0.6397	103	112	0.6198	105	0.6220	105
Korea, Rep.	104	0.6342	104	115	0.6146	108	0.6154	97

Kuwait	105	0.6318	105	105	0.6356	101	0.6358	96
Zambia	106	0.6293	106	107	0.6310	106	0.6205	101
Tunisia	107	0.6266	107	109	0.6233	103	0.6295	102
Fiji	108	0.6256	108	103	0.6414	n/a	n/a	n/a
Guatemala	109	0.6238	109	111	0.6209	112	0.6072	106
Bahrain	110	0.6217	110	116	0.6136	121	0.5927	115
Burkina Faso	111	0.6162	111	120	0.6081	115	0.6029	117
India	112	0.6155	112	114	0.6151	113	0.6060	114
Mauritania	113	0.6152	113	119	0.6103	110	0.6117	111
Cameroon	114	0.6110	114	118	0.6108	117	0.6017	116
Nepal	115	0.6084	115	110	0.6213	120	0.5942	125
Lebanon*	116	0.6084	n/a	n/a	n/a	n/a	n/a	n/a
Qatar	117	0.6059	116	125	0.5907	119	0.5948	109
Nigeria	118	0.6055	117	108	0.6280	102	0.6339	107
Algeria	119	0.6052	118	117	0.6119	111	0.6111	108
Jordan	120	0.6048	119	113	0.6182	104	0.6275	104
Ethiopia	121	0.6019	120	122	0.5948	122	0.5867	113
Oman	122	0.5950	121	123	0.5938	118	0.5960	119

Iran	123	0.5933	122	128	0.5839	116	0.6021	118
Syria	124	0.5926	123	121	0.6072	107	0.6181	103
Egypt	125	0.5899	124	126	0.5862	124	0.5832	120
Turkey	126	0.5876	125	129	0.5828	123	0.5853	121
Morocco	127	0.5767	126	124	0.5926	125	0.5757	122
Benin	128	0.5719	127	131	0.5643	126	0.5582	123
Saudi Arabia	129	0.5713	128	130	0.5651	128	0.5537	124
Côte d'Ivoire*	130	0.5691	n/a	n/a	n/a	n/a	n/a	n/a
Mali	131	0.5680	129	127	0.5860	109	0.6117	112
Pakistan	132	0.5465	130	132	0.5458	127	0.5549	126
Chad	133	0.5330	131	133	0.5417	129	0.5290	127
Yemen	134	0.4603	132	134	0.4609	130	0.4664	128
Belarus	n/a	n/a	n/a	34	0.7141	33	0.7099	23
Uzbekistan	n/a	n/a	n/a	58	0.6913	55	0.6906	41

*new country 2010

Commentary:

According to the report's index, Nordic countries, such as [Iceland](#), [Norway](#), [Finland](#), and [Sweden](#) have continued to dominate at the top of the ranking for gender equality. Meanwhile, [France](#) has seen a notable decline in the ranking, largely as a result of decreased number of women holding ministerial portfolios in that country. In the Americas, the [United States](#) has risen in the ranking to top the region, predominantly as a result of a decreasing wage gap, as well as higher number of women holding key positions in the current Obama administration. [Canada](#) has continued to remain as one of the top ranking countries of the Americas, followed by the small Caribbean island nation of Trinidad and Tobago, which has the distinction of being among the top three countries of the Americans in the realm of gender equality. [Lesotho](#) and South African ranked highly in the index, leading not only among African countries but also in global context. Despite [Lesotho](#) still lagging in the area of life expectancy, its high ranking was attributed to high levels of female participation in the labor force and female literacy. The [Philippines](#) and [Sri Lanka](#) were the top ranking countries for gender equality for Asia, ranking highly also in global context. The [Philippines](#) has continued to show strong performance in all strong performance on all four dimensions (detailed above) of the index. Finally, in the Arab world, the [United Arab Emirates](#) held the highest-rank within that region of the world; however, its placement near the bottom of the global list highlights the fact that Arab countries are generally poor performers when it comes to the matter of gender equality in global scope.

Source:

This data is derived from the latest edition of The Global Gender Gap Report by the World Economic Forum.

Available at URL:

<http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/Gende>

Updated:

Based on latest available data as set forth in chart; reviewed in 2014

Culture and Arts

Content coming soon.

Etiquette

Cultural Dos and Taboos

1. In general, a handshake is the acceptable form of greeting.
2. Dress is casual but always dress modestly in villages.
3. Never eat while walking in public, especially when visiting the more traditional villages.
4. Except during feasts, unrelated members of a community will rarely eat together.
5. Never walk around in public eating.
6. Within certain homes, men will eat before the women and children.
7. If visiting villages during the planting season, be aware that men and women will work on empty stomachs, as they believe that their ancestral spirits will deny their aid and blessings to gardeners who already have food inside their stomachs.
8. Haggling over goods is not always appreciated.

Travel Information

Please Note

This is a generalized travel guide and it is intended to coalesce several resources, which a traveler might find useful, regardless of a particular destination. As such, it does not

include travel warnings for specific "hot spot" destinations.

For travel alerts and warnings, please see the United States Department of State's listings available at URL:

<http://travel.state.gov/content/passports/english/alertswarnings.html>

Please note that travel to the following countries, based on these warnings, is ill-advised, or should be undertaken with the utmost precaution:

Afghanistan, Algeria, Burundi, Cameroon, Central African Republic, Chad, Colombia, Democratic Republic of Congo, Djibouti, El Salvador, Eritrea, Ethiopia, Guinea, Honduras, Iraq, Iran, Lebanon, Liberia, Libya, Mali, Mauritania, Mexico, Nepal, Niger, Nigeria, North Korea, Pakistan, Palestinian Territories of West Bank and Gaza, Philippines areas of Sulu Archipelago, Mindanao, and southern Sulu Sea, Saudi Arabia, Sierra Leone, Somalia, South Sudan, Sudan, Syria, Ukraine, Venezuela, and Yemen.

International Travel Guide

Checklist for Travelers

- 1.** Take out travel insurance to cover hospital treatment or medical evacuation. Overseas medical costs are expensive to most international travelers, where one's domestic, nationalized or even private health insurance plans will not provide coverage outside one's home country. Learn about "reciprocal insurance plans" that some international health care companies might offer.
- 2.** Make sure that one's travel insurance is appropriate. If one intends to indulge in adventurous activities, such as parasailing, one should be sure that one is fully insured in such cases. Many traditional insurance policies do not provide coverage in cases of extreme circumstances.
- 3.** Take time to learn about one's destination country and culture. Read and learn about the place one is traveling. Also check political, economic and socio-cultural developments at the destination by reading country-specific travel reports and fact sheets noted below.
- 4.** Get the necessary visas for the country (or countries) one intends to visit - but be aware that a visa does not guarantee entry. A number of useful sites regarding visa and other entry requirements are noted below.
- 5.** Keep in regular contact with friends and relatives back at home by phone or email, and be sure to leave a travel itinerary.
- 6.** Protect one's personal information by making copies of one's passport details, insurance policy, travelers checks and credit card numbers. Taking copies of such documents with you, while leaving another collection copies with someone at home is also good practice for travelers. Taking copies of one's passport photograph is also recommended.

- 7.** Stay healthy by taking all possible precautions against illness. Also, be sure to take extra supplies of prescription drugs along for the trip, while also taking time to pack general pharmaceutical supplies, such as aspirin and other such painkillers, bandages, stomach ailment medication, anti-inflammatory medication and anti-bacterial medication.
- 8.** Do not carry illicit drugs. Understand that the punishment for possession or use of illegal drugs in some countries may be capital punishment. Make sure your prescription drugs are legal in the countries you plan to visit.
- 9.** Know the laws of one's destination country and culture; be sure to understand the repercussions of breaking those laws and regulations. Often the transparency and freedoms of the juridical system at home is not consistent with that of one's destination country. Become aware of these complexities and subtleties before you travel.
- 10.** For longer stays in a country, or where the security situation is volatile, one should register one's self and traveling companions at the local embassy or consulate of one's country of citizenship.
- 11.** Women should take care to be prepared both culturally and practically for traveling in a different country and culture. One should be sure to take sufficient supplies of personal feminine products and prescription drugs. One should also learn about local cultural standards for women, including norms of dressing. Be aware that it is simply inappropriate and unsafe for women to travel alone in some countries, and take the necessary precautions to avoid risk-filled situations.
- 12.** If one is traveling with small children, one should pack extra supplies, make arrangements with the travel carrier for proper seating that would adequately accommodate children, infants or toddlers. Note also that whether one is male or female, traveling with children means that one's hands are thus not free to carry luggage and bags. Be especially aware that this makes one vulnerable to pickpockets, thieves and other sorts of crime.
- 13.** Make proper arrangements for accommodations, well in advance of one's arrival at a destination. Some countries have limited accommodation, while others may have culturally distinctive facilities. Learning about these practicalities before one travels will greatly aid the enjoyment of one's trip.
- 14.** Travel with different forms of currency and money (cash, traveler's checks and credit cards) in anticipation that venues may not accept one or another form of money. Also, ensuring that one's financial resources are not contained in one location, or by one person (if one is traveling with others) can be a useful measure, in the event that one loses a wallet or purse.
- 15.** Find out about transportation in the destination country. In some places, it might be advisable to hire a local driver or taxi guide for safety reasons, while in other countries, enjoying one's travel experience may well be enhanced by renting a vehicle and seeing the local sights and culture independently. Costs may also be prohibitive for either of these choices, so again, prior planning is suggested.

Tips for Travelers

- Check with your embassy, consulate, or appropriate government institution related to travel before traveling.
- Take out comprehensive travel/medical insurance which covers full medical evacuation to Australia. Malaria is rife. Ensure you take anti-malaria tablets before, during and after your visit to PNG.
- Keep valuables, cash, passports etc in a safe place.
- Register your presence in the country at the your country's diplomatic mission in PGN.
- Leave details of dates and locations with a reliable source if traveling out of Port Moresby.
- Enter next of kin details into the back of your passport.
- Beware of pickpockets in crowded places. Women should exercise caution when carrying handbags; bag snatching is common everywhere. Handbags and wallets should not be carried when visiting local markets.
- Drivers must carry their driving license at all times when driving. Roadblocks are common.
- Do not walk anywhere during the hours of darkness. Caution should be used during daylight hours

Note: This information is directly quoted from the United Kingdom Foreign and Commonwealth Office.

Sources: *United Kingdom Foreign and Commonwealth Office*

Business Culture: Information for Business Travelers

The workday is 8:00 a.m. to 4:30 p.m. Monday to Friday for most people. Banks are open from 9:00 a.m. until 2:00 p.m. from Monday to Thursday and from 9:00 a.m. to 5:00 p.m. on Fridays. Most business and government offices do not open on the weekends.

Business dress is moderately casual, befitting PNG's tropical climate. Work attire usually consists of shirt and tie or sport shirt for men, and light business suit or dress for women. In most areas, lightweight clothing is appropriate year round, but warmer clothes may be necessary in the Highlands, especially in the evening.

Sources: *United States Department of State Commercial Guides*

Online Resources Regarding Entry Requirements and Visas

Foreign Entry Requirements for Americans from the United States Department of State
http://travel.state.gov/travel/cis_pa_tw/cis/cis_1765.html

Visa Services for Non-Americans from the United States Department of State
http://travel.state.gov/visa/visa_1750.html

Visa Bulletins from the United States Department of State
http://travel.state.gov/visa/frvi/bulletin/bulletin_1360.html

Visa Waivers from the United States Department of State
http://travel.state.gov/visa/temp/without/without_1990.html - new

Passport and Visa Information from the Government of the United Kingdom
<http://www.bia.homeoffice.gov.uk/>

Visa Information from the Government of Australia
<http://www.dfat.gov.au/visas/index.html>

Passport Information from the Government of Australia
<https://www.passports.gov.au/Web/index.aspx>

Passport Information from the Government of Canada
http://www.voyage.gc.ca/preparation_information/passport_passeport-eng.asp

Visa Information from the Government of Canada
http://www.voyage.gc.ca/preparation_information/visas-eng.asp

Online Visa Processing by Immigration Experts by VisaPro
<http://www.visapro.com>

Sources: United States Department of State, United Kingdom Foreign and Commonwealth Office, Government of Australia: Department of Foreign Affairs and Trade, Government of Canada Department of Foreign Affairs and International Trade

Useful Online Resources for Travelers

Country-Specific Travel Information from United States

http://travel.state.gov/travel/cis_pa_tw/cis/cis_1765.html

Travel Advice by Country from Government of United Kingdom

<http://www.fco.gov.uk/en/travelling-and-living-overseas/travel-advice-by-country/>

General Travel Advice from Government of Australia

<http://www.smartraveller.gov.au/zw-cgi/view/Advice/General>

Travel Bulletins from the Government of Australia

<http://www.smartraveller.gov.au/zw-cgi/view/TravelBulletins/>

Travel Tips from Government of Australia

<http://www.smartraveller.gov.au/tips/index.html>

Travel Checklist by Government of Canada

http://www.voyage.gc.ca/preparation_information/checklist_sommaire-eng.asp

Travel Checklist from Government of United Kingdom

<http://www.fco.gov.uk/en/travelling-and-living-overseas/staying-safe/checklist>

Your trip abroad from United States Department of State

http://travel.state.gov/travel/tips/brochures/brochures_1225.html

A safe trip abroad from United States Department of State

http://travel.state.gov/travel/tips/safety/safety_1747.html

Tips for expatriates abroad from United States Department of State

http://travel.state.gov/travel/living/residing/residing_1235.html

Tips for students from United States Department of State

http://travel.state.gov/travel/living/studying/studying_1238.html http://travel.state.gov/travel/tips/brochures/brochures_1225.html

Medical information for travelers from United States Department of State

http://travel.state.gov/travel/tips/health/health_1185.html

US Customs Travel information

<http://www.customs.gov/xp/cgov/travel/>

Sources: United States Department of State; United States Customs Department, United Kingdom Foreign and Commonwealth Office, Foreign and Commonwealth Office, Government of Australia; Government of Canada: Department of Foreign Affairs and International Trade

Other Practical Online Resources for Travelers

Foreign Language Phrases for Travelers

<http://www.travlang.com/languages/>

<http://www.omniglot.com/language/phrases/index.htm>

World Weather Forecasts

<http://www.intellicast.com/>

<http://www.wunderground.com/>

<http://www.worldweather.org/>

Worldwide Time Zones, Map, World Clock

<http://www.timeanddate.com/>

<http://www.worldtimezone.com/>

International Airport Codes

<http://www.world-airport-codes.com/>

International Dialing Codes

<http://www.kropla.com/dialcode.htm>

<http://www.countrycallingcodes.com/>

International Phone Guide

<http://www.kropla.com/phones.htm>

International Mobile Phone Guide

<http://www.kropla.com/mobilephones.htm>

International Internet Café Search Engine

<http://cybercaptive.com/>

Global Internet Roaming

<http://www.kropla.com/roaming.htm>

World Electric Power Guide

<http://www.kropla.com/electric.htm>

<http://www.kropla.com/electric2.htm>

World Television Standards and Codes

<http://www.kropla.com/tv.htm>

International Currency Exchange Rates

<http://www.xe.com/ucc/>

Banking and Financial Institutions Across the World

<http://www.123world.com/banks/index.html>

International Credit Card or Automated Teller Machine (ATM) Locator

<http://visa.via.infonow.net/locator/global/>

<http://www.mastercard.com/us/personal/en/cardholderservices/atmlocations/index.html>

International Chambers of Commerce

<http://www.123world.com/chambers/index.html>

World Tourism Websites

<http://123world.com/tourism/>

Diplomatic and Consular Information

United States Diplomatic Posts Around the World

<http://www.usembassy.gov/>

United Kingdom Diplomatic Posts Around the World

<http://www.fco.gov.uk/en/about-the-fco/embassies-and-posts/find-an-embassy-overseas/>

Australia's Diplomatic Posts Around the World

<http://www.dfat.gov.au/missions/>

<http://www.dfat.gov.au/embassies.html>

Canada's Embassies and High Commissions

<http://www.international.gc.ca/ciw-cdm/embassies-ambassades.aspx>

Resources for Finding Embassies and other Diplomatic Posts Across the World

<http://www.escapeartist.com/embassy1/embassy1.htm>

Safety and Security

Travel Warnings by Country from Government of Australia

<http://www.smartraveller.gov.au/zw-cgi/view/Advice/>

Travel Warnings and Alerts from United States Department of State

http://travel.state.gov/travel/cis_pa_tw/tw/tw_1764.html

http://travel.state.gov/travel/cis_pa_tw/pa/pa_1766.html

Travel Reports and Warnings by Government of Canada

http://www.voyage.gc.ca/countries_pays/menu-eng.asp

http://www.voyage.gc.ca/countries_pays/updates_mise-a-jour-eng.asp

Travel Warnings from Government of United Kingdom

<http://www.fco.gov.uk/en/travelling-and-living-overseas/travel-advice-by-country/>

<http://www.fco.gov.uk/en/travelling-and-living-overseas/travel-advice-by-country/?>

[action=noTravelAll#noTravelAll](http://www.fco.gov.uk/en/travelling-and-living-overseas/travel-advice-by-country/?action=noTravelAll#noTravelAll)

Sources: United Kingdom Foreign and Commonwealth Office, the United States Department of State, the Government of Canada: Department of Foreign Affairs and International Trade, Government of Australia: Department of Foreign Affairs and Trade

Other Safety and Security Online Resources for Travelers

United States Department of State Information on Terrorism

<http://www.state.gov/s/ct/>

Government of the United Kingdom Resource on the Risk of Terrorism

<http://www.fco.gov.uk/servlet/Front?>

[pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1044011304926](http://www.fco.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1044011304926)

Government of Canada Terrorism Guide

<http://www.international.gc.ca/crime/terrorism-terrorisme.aspx?lang=eng>

Information on Terrorism by Government of Australia

<http://www.dfat.gov.au/icat/index.html>

FAA Resource on Aviation Safety

<http://www.faasafety.gov/>

In-Flight Safety Information for Air Travel (by British Airways crew trainer, Anna Warman)

<http://www.warman.demon.co.uk/anna/inflight.html>

Hot Spots: Travel Safety and Risk Information

<http://www.airsecurity.com/hotspots/HotSpots.asp>

Information on Human Rights

<http://www.state.gov/g/drl/hr/>

Sources: The United States Department of State, the United States Customs Department, the Government of Canada, the Government of United Kingdom, the Government of Australia, the Federal Aviation Authority, Anna Warman's In-flight Website, Hot Spots Travel and Risk Information

Diseases/Health Data

Please Note: Most of the entry below constitutes a generalized health advisory, which a traveler might find useful, regardless of a particular destination.

As a supplement, however, the reader will also find below a list of countries flagged with current health notices and alerts issued by the Centers for Disease Control and Prevention (CDC). Please note that travel to the following countries, based on these 3 levels of warnings, is ill-advised, or should be undertaken with the utmost precaution:

Level 3 (highest level of concern; avoid non-essential travel) --

Guinea - Ebola

Liberia - Ebola

Nepal - Earthquake zone

Sierra Leone - Ebola

Level 2 (intermediate level of concern; use utmost caution during travel) --

Cameroon - Polio

Somalia - Polio

Vanuatu - Tropical Cyclone zone

Throughout Middle East and Arabia Peninsula - MERS ((Middle East Respiratory Syndrome)

Level 1 (standard level of concern; use practical caution during travel) -

Australia - Ross River disease

Bosnia-Herzegovina - Measles

Brazil - Dengue Fever

Brazil - Malaria

Brazil - Zika

China - H7N9 Avian flu

Cuba - Cholera

Egypt - H5N1 Bird flu

Ethiopia - Measles

Germany - Measles

Japan - Hand, foot, and mouth disease (HFMD)

Kyrgyzstan - Measles

Malaysia -Dengue Fever

Mexico - Chikungunya

Mexico - Hepatitis A

Nigeria - Meningitis

Philippines - Measles

Scotland - Mumps

Singapore - Hand, foot, and mouth disease (HFMD)

South Korea - MERS ((Middle East Respiratory Syndrome)

Throughout Caribbean - Chikungunya

Throughout Central America - Chikungunya

Throughout South America - Chikungunya

Throughout Pacific Islands - Chikungunya

For specific information related to these health notices and alerts please see the CDC's listing available at URL:

<http://wwwnc.cdc.gov/travel/notices>

Health Information for Travelers to Papua New Guinea

The preventive measures you need to take while traveling in this region depend on the areas you visit and the length of time you stay. You should observe the precautions listed in this document in most areas of this region. However, in highly developed areas of Australia and New Zealand, you should observe health precautions similar to those that would apply while traveling in the United States.

Travelers' diarrhea, the number one illness in travelers, can be caused by viruses, bacteria, or parasites, which can contaminate food or water. Infections may cause diarrhea and vomiting (*E. coli*, *Salmonella*, cholera, and parasites), fever (typhoid fever and toxoplasmosis), or liver damage (hepatitis). Make sure your food and drinking water are safe (see below).

Malaria is a preventable infection that can be fatal if left untreated. Prevent infection by taking prescription antimalarial drugs and protecting yourself against mosquito bites (see below). A high risk for malaria exists all year in Papua New Guinea, the Solomon Islands, and Vanuatu. Travelers to these areas should take mefloquine for malaria prevention. For more detailed information about specific locations, see Malaria Information for Travelers to Australia and the South Pacific (<http://www.cdc.gov/travel/regionalmalaria/austspac.htm>).

A certificate of yellow fever vaccination may be required for entry into certain of these countries if you are coming from a tropical South American or sub-Saharan African country. (There is no risk of yellow fever in Australia and the South Pacific.) For detailed information, see Comprehensive Yellow Fever Vaccination Requirements (<http://www.cdc.gov/travel/yelfever.htm>).

Dengue, filariasis, Ross River virus, and Murray Valley encephalitis are diseases carried by insects that also occur in this region. Protecting yourself against insect bites (see below) will help to prevent these diseases.

CDC Recommends the Following Vaccines (as Appropriate for Age):

See your doctor at least 4-6 weeks before your trip to allow time for shots to take effect.

- Hepatitis A or immune globulin (IG) (except for Australia and New Zealand).
- Rabies, if you might be exposed to wild or domestic animals through your work or recreation.
- Typhoid (except for Australia and New Zealand), particularly if you are visiting developing countries in this region.
- As needed, booster doses for tetanus-diphtheria and measles, and a one-time dose of polio for adults. Hepatitis B vaccine is now recommended for all infants and for children 11-12 years of age who did not receive the series as infants.

All travelers should take the following precautions, no matter the destination:

- Wash hands often with soap and water.

- Because motor vehicle crashes are a leading cause of injury among travelers, walk and drive defensively. Avoid travel at night if possible and always use seat belts.
- Always use latex condoms to reduce the risk of HIV and other sexually transmitted diseases.
- Don't eat or drink dairy products unless you know they have been pasteurized.
- Don't share needles with anyone.
- Eat only thoroughly cooked food or fruits and vegetables you have peeled yourself. Remember: boil it, cook it, peel it, or forget it.
- Never eat undercooked ground beef and poultry, raw eggs, and unpasteurized dairy products. Raw shellfish is particularly dangerous to persons who have liver disease or compromised immune systems.

Travelers visiting undeveloped areas should take the following precautions:

To Stay Healthy, Do:

- Drink only bottled or boiled water, or carbonated (bubbly) drinks in cans or bottles. Avoid tap water, fountain drinks, and ice cubes. If this is not possible, make water safer by BOTH filtering through an "absolute 1-micron or less" filter AND adding iodine tablets to the filtered water. "Absolute 1-micron filters" are found in camping/outdoor supply stores.
- If you visit an area where there is risk for malaria, take your malaria prevention medication before, during, and after travel, as directed. (See your doctor for a prescription.)
- Protect yourself from insects by remaining in well-screened areas, using repellents (applied sparingly at 4-hour intervals), and wearing long-sleeved shirts and long pants from dusk through dawn.
- To prevent fungal and parasitic infections, keep feet clean and dry, and do not go barefoot.

To Avoid Getting Sick:

- Don't eat food purchased from street vendors.
- Don't drink beverages with ice.
- Don't share needles with anyone.
- Don't handle animals (especially monkeys, dogs, and cats), to avoid bites and serious diseases (including rabies and plague).

What You Need To Bring with You:

- Long-sleeved shirt and long pants to wear while outside whenever possible, to prevent illnesses carried by insects.
- Insect repellent containing DEET (diethylmethyltoluamide), in 30%-35% strength for adults and 6%-10% for children, as well as a bed net impregnated with the insecticide permethrin. (Bed nets can be purchased in camping or military supply stores.)
- Over-the-counter antidiarrheal medicine to take if you have diarrhea.
- Iodine tablets and portable water filters to purify water if bottled water is not available.
- Sunblock, sunglasses, hat.

- Prescription medications: make sure you have enough to last during your trip, as well as a copy of the prescription(s).

After You Return Home:

If you have visited an area where there is risk for malaria, continue taking your malaria medication weekly for 4 weeks after you leave the area.

If you become ill—even as long as a year after your trip—tell your doctor the areas you have visited.

For More Information:

Ask your doctor or check CDC web sites for more information about how to protect yourself against diseases that occur in Australia and the South Pacific, such as:

For information about diseases-

Carried by Insects

Dengue, Malaria, Murray Valley Encephalitis

Carried in Food or Water

Escherichia coli, diarrhea, Hepatitis A, Typhoid Fever

Person-to-Person Contact

Hepatitis B, HIV/AIDS

For more information about these and other diseases, please check the Diseases (<http://www.cdc.gov/travel/diseases.htm>) section and the Health Topics A-Z (<http://www.cdc.gov/health/diseases.htm>).

Note:

Papua New Guinea is located in the Australia and the Pacific health region.

Sources:

The Center for Disease Control Destinations Website:

<http://www.cdc.gov/travel/destinat.htm>

Chapter 6

Environmental Overview

Environmental Issues

General Overview:

Papua New Guinea is home to diverse landscapes, and an exceptional degree of bio-diversity. By one estimate, this island nation--approximately 15 percent larger in area than the state of California --harbors 5 percent of the species diversity on the planet. A varied landscape fosters this extraordinary range of life forms.

Papua New Guinea 's terrain runs the gamut from coastal mangrove swamps, to tropical rain forest, to highland cloud forest and grassland. Mt. Wilhelm in Western Highlands province is the highest point of elevation, at 4,509 meters (13,290 feet). Climate varies more with respect to elevation than seasonal factors. Although lowland areas adjacent to the coast, such as the capital Port Moresby, experience consistently hot tropical weather, the highest inhabited alpine regions are subject to occasional frosts, which have intermittently damaged agricultural production.

Current Issues:

- rain forest subject to deforestation as a result of growing commercial demand for tropical timber
- pollution from mining projects
- severe drought

Total Greenhouse Gas Emissions (Mtc):

2.4

Country Rank (GHG output):

132nd

Natural Hazards:

- active volcanoes
- tsunamis
- mudslides
- frequent and severe earthquakes

Environmental Policy

Regulation and Jurisdiction:

The regulation and protection of the environment in Papua New Guinea is under the jurisdiction of the following:

- Ministry for the Environment
- Ministry of Agriculture and Livestock
- Ministry of Mining
- In 1999, the government set up a Conservation Trust Fund, the first of its kind in the Asia Pacific Region

Major Non-Governmental Organizations:

- Foundation for the Peoples of the South Pacific, Research Conservation Foundation of Papua New Guinea and Wildlife Conservation International
- Papua New Guinea Forestry College in Morobe
- Greenpeace
- World Wildlife

International Environmental Accords:

Party to:

- Antarctic Treaty
- Biodiversity
- Climate Change
- Climate Change-Kyoto Protocol

- Desertification
- Endangered Species
- Environmental Modification
- Hazardous Wastes
- Law of the Sea
- Marine Dumping
- Nuclear Test Ban
- Ozone Layer Protection
- Ship Pollution
- Tropical Timber 83
- Tropical Timber 94
- Wetlands

Signed but not ratified:

- None

Kyoto Protocol Status (year ratified):

2002

Greenhouse Gas Ranking

Greenhouse Gas Ranking

GHG Emissions Rankings

Country Rank	Country
1	United States
2	China
4	Russia

5	Japan
6	India
7	Germany
8	United Kingdom
9	Canada
10	Korea, South
11	Italy
12	Mexico
13	France
14	South Africa
15	Iran
16	Indonesia
17	Australia
18	Spain
19	Brazil
20	Saudi Arabia
21	Ukraine
22	Poland

23	Taiwan
24	Turkey
25	Thailand
26	Netherlands
27	Kazakhstan
28	Malaysia
29	Egypt
30	Venezuela
31	Argentina
32	Uzbekistan
33	Czech Republic
34	Belgium
35	Pakistan
36	Romania
37	Greece
38	United Arab Emirates
39	Algeria
40	Nigeria

41	Austria
42	Iraq
43	Finland
44	Philippines
45	Vietnam
46	Korea, North
47	Israel
48	Portugal
49	Colombia
50	Belarus
51	Kuwait
52	Hungary
53	Chile
54	Denmark
55	Serbia & Montenegro
56	Sweden
57	Syria
58	Libya

59	Bulgaria
60	Singapore
61	Switzerland
62	Ireland
63	Turkmenistan
64	Slovakia
65	Bangladesh
66	Morocco
67	New Zealand
68	Oman
69	Qatar
70	Azerbaijan
71	Norway
72	Peru
73	Cuba
74	Ecuador
75	Trinidad & Tobago
76	Croatia

77	Tunisia
78	Dominican Republic
79	Lebanon
80	Estonia
81	Yemen
82	Jordan
83	Slovenia
84	Bahrain
85	Angola
86	Bosnia & Herzegovina
87	Lithuania
88	Sri Lanka
89	Zimbabwe
90	Bolivia
91	Jamaica
92	Guatemala
93	Luxembourg
94	Myanmar

95	Sudan
96	Kenya
97	Macedonia
98	Mongolia
99	Ghana
100	Cyprus
101	Moldova
102	Latvia
103	El Salvador
104	Brunei
105	Honduras
106	Cameroon
107	Panama
108	Costa Rica
109	Cote d'Ivoire
110	Kyrgyzstan
111	Tajikistan
112	Ethiopia

113	Senegal
114	Uruguay
115	Gabon
116	Albania
117	Nicaragua
118	Botswana
119	Paraguay
120	Tanzania
121	Georgia
122	Armenia
123	Congo, RC
124	Mauritius
125	Nepal
126	Mauritius
127	Nepal
128	Mauritania
129	Malta
130	Papua New Guinea

131	Zambia
132	Suriname
133	Iceland
134	Togo
135	Benin
136	Uganda
137	Bahamas
138	Haiti
139	Congo, DRC
140	Guyana
141	Mozambique
142	Guinea
143	Equatorial Guinea
144	Laos
145	Barbados
146	Niger
147	Fiji
148	Burkina Faso

149	Malawi
150	Swaziland
151	Belize
152	Afghanistan
153	Sierra Leone
154	Eritrea
155	Rwanda
156	Mali
157	Seychelles
158	Cambodia
159	Liberia
160	Bhutan
161	Maldives
162	Antigua & Barbuda
163	Djibouti
164	Saint Lucia
165	Gambia
166	Guinea-Bissau

167	Central African Republic
168	Palau
169	Burundi
170	Grenada
171	Lesotho
172	Saint Vincent & the Grenadines
173	Solomon Islands
174	Samoa
175	Cape Verde
176	Nauru
177	Dominica
178	Saint Kitts & Nevis
179	Chad
180	Tonga
181	Sao Tome & Principe
182	Comoros
183	Vanuatu
185	Kiribati

Not Ranked	Andorra
Not Ranked	East Timor
Not Ranked	Holy See
Not Ranked	Hong Kong
Not Ranked	Liechtenstein
Not Ranked	Marshall Islands
Not Ranked	Micronesia
Not Ranked	Monaco
Not Ranked	San Marino
Not Ranked	Somalia
Not Ranked	Tuvalu

* European Union is ranked 3rd
Cook Islands are ranked 184th
Niue is ranked 186th

Global Environmental Snapshot

Introduction

The countries of the world face many environmental challenges in common. Nevertheless, the nature and intensity of problem vary from region to region, as do various countries' respective capacities, in terms of affluence and infrastructure, to remediate threats to environmental quality.

Consciousness of perils affecting the global environment came to the fore in the last third or so of the 20th century has continued to intensify well into the new millennium. According to the United Nations Environment Programme, considerable environmental progress has been made at the level of institutional developments, international cooperation accords, and public participation. Approximately two-dozen international environmental protection accords with global implications have been promulgated since the late 1970s under auspices of the United Nations and other international organizations, together with many additional regional agreements. Attempts to address and rectify environmental problems take the form of legal frameworks, economic instruments, environmentally sound technologies and cleaner production processes as well as conservation efforts. Environmental impact assessments have increasingly been applied across the globe.

Environmental degradation affects the quality, or aesthetics, of human life, but it also displays potential to undermine conditions necessary for the sustainability of human life. Attitudes toward the importance of environmental protection measures reflect ambivalence derived from this bifurcation. On one hand, steps such as cleaning up pollution, dedicating parkland, and suchlike, are seen as embellishments undertaken by wealthy societies already assured they can successfully perform those functions deemed, ostensibly, more essential-for instance, public health and education, employment and economic development. On the other hand, in poorer countries, activities causing environmental damage-for instance the land degradation effects of unregulated logging, slash-and-burn agriculture, overgrazing, and mining-can seem justified insofar as such activities provide incomes and livelihoods.

Rapid rates of resource depletion are associated with poverty and high population growth, themselves correlated, whereas consumption per capita is much higher in the most developed countries, despite these nations' recent progress in energy efficiency and conservation. It is impossible to sequester the global environmental challenge from related economic, social and political challenges.

First-tier industrialized countries have recently achieved measurable decreases in environmental pollution and the rate of resource depletion, a success not matched in middle income and developing countries. It is believed that the discrepancy is due to the fact that industrialized countries have more developed infrastructures to accommodate changes in environmental policy, to apply environmental technologies, and to invest in public education. The advanced industrialized countries incur relatively lower costs in alleviating environmental problems, in comparison to developing countries, since in the former even extensive environmental programs represent a rather minuscule percentage of total expenditures. Conversely, budget constraints, lagged provision of basic services to the population, and other factors such as debt service and militarization may preclude institution of minimal environmental protection measures in the poorest countries.

A synopsis for the current situation facing each region of the world follows:

Regional Synopsis: Africa

The African continent, the world's second-largest landmass, encompasses many of the world's least developed countries. By global standards, urbanization is comparatively low but rising at a rapid rate. More heavily industrialized areas at the northern and southern ends of the continent experience the major share of industrial pollution. In other regions the most serious environmental problems typically stem from inefficient subsistence farming methods and other forms of land degradation, which have affected an increasingly extensive area under pressure of a widely impoverished, fast-growing population. Africa's distribution of natural resources is very uneven. It is the continent at greatest risk of desertification, especially in the Sahel region at the edge of the Sahara but also in other dry-range areas. Yet at the same time, Africa also harbors some of the earth's richest and most diverse biological zones.

Key Points:

Up to half a billion hectares of African land are moderately to severely degraded, an occurrence reflecting short-fallow shifting cultivation and overgrazing as well as a climatic pattern of recurrent droughts.

Soil degradation is severe along the expanse directly south of the Sahara, from the west to the east coasts. Parts of southern Africa, central-eastern Africa, and the neighboring island of Madagascar suffer from serious soil degradation as well.

Africa contains about 17 percent of the world's forest cover, concentrated in the tropical belt of the continent. Many of the forests, however, are severely depleted, with an estimated 70 percent showing some degree of degradation.

Population growth has resulted in continuing loss of arable land, as inefficient subsistence farming techniques affect increasingly extensive areas. Efforts to implement settled, sustainable agriculture have met with some recent success, but much further progress in this direction is needed. Especially in previously uninhabited forestlands, concern over deforestation is intensifying.

By contrast, the African savanna remains the richest grassland in the world, supporting a substantial concentration of animal and plant life. Wildlife parks are sub-Saharan Africa's greatest tourist attraction, and with proper management-giving local people a stake in conservation and controlling the pace of development-could greatly enhance African economies.

Significant numbers of mammal species in parts of northern, southern and eastern Africa are currently threatened, while the biological diversity in Mauritania and Madagascar is even further

compromised with over 20 percent of the mammal species in these two countries currently under threat.

With marine catch trends increasing from 500,000 metric tons in the 1950s to over 3,000,000 metric tons by 2000, there was increasing concern about the reduction in fisheries and marine life, should this trend continue unabated.

Water resource vulnerability is a major concern in northeastern Africa, and a moderate concern across the rest of the continent. An exception is central Africa, which has plentiful water supplies.

Many Africans lack adequate access to resources, not just (if at all) because the resources are unevenly distributed geographically, but also through institutional failures such as faulty land tenure systems or political upheaval. The quality of Africa's natural resources, despite their spotty distribution, is in fact extraordinarily rich. The infrastructure needed to protect and benefit from this natural legacy, however, is largely lacking.

Regional Synopsis: Asia and the Pacific

Asia-earth's largest landmass-and the many large and nearly innumerable small islands lying off its Pacific shore display extraordinarily contrasting landscapes, levels of development, and degrees of environmental stress. In the classification used here, the world's smallest continent, Australia, is also included in the Asia-Pacific region.

The Asia-Pacific region is home to 9 of the world's 14 largest urban areas, and as energy use for utilities, industry and transport increases in developing economies, urban centers are subject to worsening air quality. Intense population density in places such as Bangladesh or Hong Kong is the quintessential image many people have of Asia, yet vast desert areas such as the Gobi and the world's highest mountain range, the Himalayas, span the continent as well. Forested areas in Southeast Asia and the islands of Indonesia and the Philippines were historically prized for their tropical hardwood, but in many places this resource is now severely depleted. Low-lying small island states are extremely vulnerable to the effects of global warming, both rising sea levels and an anticipated increase in cyclones.

Key Points:

Asian timber reserves are forecast to be depleted in the next 40 years. Loss of natural forest is irreversible in some areas, but plantation programs to restore tree cover may ameliorate a portion of the resulting land degradation.

Increased usage of fossil fuels in China and other parts of southern Asia is projected to result in a

marked increase in emissions, especially in regard to carbon dioxide. The increased usage of energy has led to a marked upsurge in air pollution across the region.

Acidification is an emerging problem regionally, with sulfur dioxide emissions expected to triple by 2010 if the current growth rate is sustained. China, Thailand, India, and Korea seem to be suffering from particularly high rates of acid deposition. By contrast, Asia's most highly developed economy, Japan, has effected substantial improvements in its environmental indicators.

Water pollution in the Pacific is an urgent concern since up to 70 percent of the water discharged into the region's waters receives no treatment. Additionally, the disposal of solid wastes, in like manner, poses a major threat in a region with many areas of high population density.

The Asia-Pacific region is the largest expanse of the world's land that is adversely affected by soil degradation.

The region around Australia reportedly suffers the largest degree of ozone depletion.

The microstates of the Pacific suffer land loss due to global warming, and the consequent rise in the levels of ocean waters. A high-emissions scenario and anthropogenic climate impact at the upper end of the currently predicted range would probably force complete evacuation of the lowest-elevation islands sometime in this century.

The species-rich reefs surrounding Southeast Asia are highly vulnerable to the deleterious effects of coastal development, land-based pollution, over-fishing and exploitative fishing methods, as well as marine pollution from oil spills and other activities.

With marine catch trends increasing from 5,000,000 metric tons in the 1950s to over 20,000,000 metric tons by 2000, there was increasing concern about the reduction in fisheries and marine life, should this trend continue unabated.

Significant numbers of mammal species in parts of China and south-east Asia are currently threatened, while the biological diversity in India, Japan, Australia, the Philippines, Indonesia and parts of Malaysia is even further compromised with over 20 percent of the mammal species in these countries currently under threat.

Water resource vulnerability is a serious concern in areas surrounding the Indian subcontinent.

Regional Synopsis: Central Asia

The Central Asian republics, formerly in the Soviet Union, experience a range of environmental

problems as the result of poorly executed agricultural, industrial, and nuclear programs during the Soviet era. Relatively low population densities are the norm, especially since upon the breakup of the U.S.S.R. many ethnic Russians migrated back to European Russia. In this largely semi-arid region, drought, water shortages, and soil salinization pose major challenges.

Key Points:

The use of agricultural pesticides, such as DDT and other chemicals, has contributed to the contamination of soil and groundwater throughout the region.

Land and soil degradation, and in particular, increased salinization, is mostly attributable to faulty irrigation practices.

Significant desertification is also a problem in the region.

Air pollution is prevalent, mostly due to use of low octane automobile fuel.

Industrial pollution of the Caspian Sea and the Aral Sea, as a result of industrial effluents as well as mining and metal production, presents a challenge to the countries bordering these bodies of water.

One of the most severe environmental problems in the region is attributable to the several billion tons of hazardous materials stored in landfills across Central Asia.

Uzbekistan's particular problem involves the contraction of the Aral Sea, which has decreased in size by a third, as a consequence of river diversions and poor irrigation practices. The effect has been the near-total biological destruction of that body of water.

Kazakhstan, as a consequence of being the heartland of the former Soviet Union's nuclear program, has incurred a high of cancerous malignancies, biogenetic abnormalities and radioactive contamination.

While part of the Soviet Union, the republics in the region experienced very high levels of greenhouse gas emissions, as a consequence of rapid industrialization using cheap but dirty energy sources, especially coal.

By contrast, however, there have recently been substantial reductions in the level of greenhouse gas emissions, especially those attributable to coal burning, with further decreases anticipated over the next decade. These changes are partially due to the use of cleaner energy technologies, such as natural gas, augmented by governmental commitment to improving environmental standards.

Regional Synopsis: Europe

Western Europe underwent dramatic transformation of its landscape, virtually eliminating large-scale natural areas, during an era of rapid industrialization, which intensified upon its recovery from World War II. In Eastern Europe and European Russia, intensive land development has been less prevalent, so that some native forests and other natural areas remain. Air and water pollution from use of dirty fuels and industrial effluents, however, are more serious environmental problems in Eastern than in Western Europe, though recent trends show improvement in many indicators. Acid rain has inflicted heavy environmental damage across much of Europe, particularly on forests. Europe and North America are the only regions in which water usage for industry exceeds that for agriculture, although in Mediterranean nations agriculture is the largest water consumer.

Key Points:

Europe contributes 36 percent of the world's chlorofluorocarbon emissions, 30 percent of carbon dioxide emissions, and 25 percent of sulfur dioxide emissions.

Sulfur and nitrogen oxide emissions are the cause of 30 to 50 percent of Central and Eastern Europe's deforestation.

Acid rain has been an environmental concern for decades and continues to be a challenge in parts of Western Europe.

Overexploitation of up to 60 percent of Europe's groundwater presents a problem in industrial and urban areas.

With marine catch trends increasing from 5,000,000 metric tons in the 1950s to over 20,000,000 metric tons by 2000, there was increasing concern about the reduction in fisheries and marine life, should this trend continue unabated.

Significant numbers of mammal species in parts of western Europe, Eastern Europe and Russia are currently threatened, while the biological diversity on the Iberian Peninsula is even further compromised with over 40 percent of the mammal species in this region currently under threat. As a result, there has been a 10 percent increase in protected areas of Europe.

A major environmental issue for Europe involves the depletion of various already endangered or threatened species, and most significantly, the decline of fish stocks. Some estimates suggest that up to 50 percent of the continent's fish species may be considered endangered species. Coastal fisheries have been over-harvested, resulting in catch limits or moratoriums on many commercially important fish species.

Fortunately, in the last few years, these policies have started to yield measurable results with decreasing trends in marine fish catch.

Recently, most European countries have adopted cleaner production technologies, and alternative methods of waste disposal, including recycling.

The countries of Eastern Europe have made air quality a major environmental priority. This is exemplified by the Russian Federation's addition to the 1995 "Berlin Mandate" (transnational legislation based on resolutions of the Rio Earth Summit) compelling nations to promote "carbon sinks" to absorb greenhouse gases.

On a relative basis, when compared with the degree of industrial emissions emitted by many Eastern European countries until the late 1980s, there has been some marked increase in air quality in the region, as obsolete plants are closed and a transition to cleaner fuels and more efficient energy use takes place.

Regional Synopsis: The Middle and Near East

Quite possibly, the Middle East will exemplify the adage that, as the 20th century was a century fixated on oil, the 21st century will be devoted to critical decisions about water. Many (though far from all) nations in the Middle East rank among those countries with the largest oil and gas reserves, but water resources are relatively scarce throughout this predominantly dry region. Effects of global warming may cause moderately high elevation areas that now typically receive winter "snowpack" to experience mainly rain instead, which would further constrain dry-season water availability. The antiquities and religious shrines of the region render it a great magnet for tourism, which entails considerable economic growth potential but also intensifies stresses on the environment.

Key Points:

Water resource vulnerability is a serious concern across the entire region. The increased usage of, and further demand for water, has exacerbated long-standing water scarcity in the region. For instance, river diversions and industrial salt works have caused the Dead Sea to shrink by one-third from its original surface area, with further declines expected.

The oil industry in the region contributes to water pollution in the Persian Gulf, as a result of oil spills, which have averaged 1.2 million barrels of oil spilt per year (some sources suggest that this figure is understated). The consequences are severe because even after oil spills have been cleaned up, environmental damage to the food webs and ecosystems of marine life will persist for a

prolonged period.

The region's coastal zone is considered one of the most fragile and endangered ecosystems of the world. Land reclamation, shoreline construction, discharge of industrial effluents, and tourism (such as diving in the Red Sea) contribute to widespread coastal damage.

Significant numbers of mammal species in parts of the Middle East are currently threatened.

Since the 1980s, 11 percent of the region's natural forest has been depleted.

Regional Synopsis: Latin America and the Caribbean

The Latin American and Caribbean region is characterized by exceedingly diverse landforms that have generally seen high rates of population growth and economic development in recent decades. The percentage of inhabitants residing in urban areas is quite high at 73.4 percent; the region includes the megacities of Mexico City, Sao Paulo, and Rio de Janeiro. The region also includes the world's second-highest mountain range, the Andes; significant expanses of desert and grassland; the coral reefs of the Caribbean Sea; and the world's largest contiguous tropical forest in the Amazon basin. Threats to the latter from subsistence and commercial farming, mineral exploitation and timbering are well publicized. Nevertheless, of eight countries worldwide that still retain at least 70 percent of their original forest cover, six are in Latin America. The region accounts for nearly half (48.3 percent) of the world's greenhouse gas emissions derived from land clearing, but as yet a comparatively minuscule share (4.3 percent) of such gases from industrial sources.

Key Points:

Although Latin America is one of the most biologically diverse regions of the world, this biodiversity is highly threatened, as exemplified by the projected extinction of up to 100,000 species in the next few decades. Much of this loss will be concentrated in the Amazon area, although the western coastline of South America will also suffer significant depletion of biological diversity. The inventory of rainforest species with potentially useful commercial or medical applications is incomplete, but presumed to include significant numbers of such species that may become extinct before they are discovered and identified.

Up to 50 percent of the region's grazing land has lost its soil fertility as a result of soil erosion, salinization, alkalinization and overgrazing.

The Caribbean Sea, the Atlantic Ocean, and the Pacific Ocean have all been contaminated by agricultural wastes, which are discharged into streams that flow into these major waters. Water pollution derived from phosphorous, nitrates and pesticides adversely affects fish stocks,

contributes to oxygen depletion and fosters overgrowth of aquatic vegetation. Marine life will continue to be severely compromised as a result of these conditions.

Due to industrial development in the region, many beaches of eastern Latin America and the Caribbean suffer from tar deposits.

Most cities in the region lack adequate sewage treatment facilities, and rapid migration of the rural poor into the cities is widening the gap between current infrastructure capacity and the much greater level needed to provide satisfactory basic services.

The rainforest region of the Amazon Basin suffers from dangerously high levels of deforestation, which may be a significant contributory factor to global warming or "the greenhouse effect." In the late 1990s and into the new millennium, the rate of deforestation was around 20 million acres of rainforest being destroyed annually.

Deforestation on the steep rainforest slopes of Caribbean islands contributes to soil erosion and landslides, both of which then result in heavy sedimentation of nearby river systems. When these sedimented rivers drain into the sea and coral reefs, they poison the coral tissues, which are vital to the maintenance of the reef ecosystem. The result is marine degradation and nutrient depletion. Jamaica's coral reefs have never quite recovered from the effects of marine degradation.

The Southern Cone of Latin America (Argentina, Brazil, Chile, Paraguay, and Uruguay) suffers the effects of greatly increased ultraviolet-B radiation, as a consequence of more intense ozone depletion in the southern hemisphere.

Water resource vulnerability is an increasingly major concern in the northwestern portion of South America.

Regional Synopsis: North America

North American nations, in particular the United States and Canada, rank among the world's most highly developed industrial economies—a fact which has generated significant pollution problems, but also financial resources and skills that have enabled many problems to be corrected. Although efforts to promote energy efficiency, recycling, and suchlike have helped ease strains on the environment in a part of the world where per capita consumption levels are high, sprawling land development patterns and recent preferences many households have demonstrated for larger vehicles have offset these advances.

Meanwhile, a large portion of North America's original forest cover has been lost, though in many cases replaced by productive second-growth woodland. In recent years, attitudes toward best use

of the region's remaining natural or scenic areas seem to be shifting toward recreation and preservation and away from resource extraction. With increasing attention on the energy scarcity in the United States, however, there is speculation that this shift may be short-lived. Indeed, the energy shortage on the west coast of the United States and associated calls for energy exploration, indicate a possible retrenchment toward resource extraction. At the same time, however, it has also served to highlight the need for energy conservation as well as alternative energy sources.

Despite generally successful anti-pollution efforts, various parts of the region continue to suffer significant air, water and land degradation from industrial, vehicular, and agricultural emissions and runoff. Mexico, as a middle-income country, displays environmental problems characteristic of a developing economy, including forest depletion, pollution from inefficient industrial processes and dirty fuels, and lack of sufficient waste-treatment infrastructure.

Key Points:

Because of significantly greater motor vehicle usage in the United States (U.S.) than in the rest of the world, the U.S. contribution of urban air pollution and greenhouse gas emissions, especially carbon dioxide, is disproportionately high in relation to its population.

Acid rain is an enduring issue of contention in the northeastern part of the United States, on the border with Canada.

Mexico's urban areas suffer extreme air pollution from carbon monoxide, nitrogen oxides, sulfur dioxide, and other toxic air pollutants. Emissions controls on vehicles are in their infancy, compared to analogous regulations in the U.S.

The cities of Mexico, including those on the U.S. border, also discharge large quantities of untreated or poorly treated sewage, though officials are currently planning infrastructure upgrades.

Deforestation is noteworthy in various regions of the U.S., especially along the northwest coastline. Old growth forests have been largely removed, but in the northeastern and upper midwestern sections of the United States, evidence suggests that the current extent of tree cover probably surpasses the figure for the beginning of the 20th century.

Extreme weather conditions in the last few years have resulted in a high level of soil erosion along the north coast of California; in addition, the coastline itself has shifted substantially due to soil erosion and concomitant landslides.

Agricultural pollution-including nitrate contamination of well water, nutrient runoff to waterways, and pesticide exposure-is significant in various areas. Noteworthy among affected places are

California's Central Valley, extensive stretches of the Midwest, and land in the Chesapeake Bay watershed.

Inland waterways, especially around the Great Lakes, have substantially improved their water quality, due to concentrated efforts at reducing water pollution by governmental, commercial and community representatives. Strict curbs on industrial effluents and near-universal implementation of sewage treatment are the chief factors responsible for this improvement.

A major environmental issue for Canada and the United States involves the depletion of various already endangered or threatened species, and most significantly, the decline of fish stocks. Coastal fisheries have been over-harvested, resulting in catch limits or moratoriums on many commercially important fish species. In the last few years, these policies have started to yield measurable results with decreasing trends in marine fish catch.

Due to the decay of neighboring ecosystems in Central America and the Caribbean, the sea surrounding Florida has become increasingly sedimented, contributing to marine degradation, nutrient depletion of the ecosystem, depletion of fish stocks, and diseases to coral species in particular.

Polar Regions

Key Points:

The significant rise in sea level, amounting 10 to 25 centimeters in the last 100 years, is due to the melting of the Arctic ice sheets, and is attributed to global warming.

The Antarctic suffers from a significant ozone hole, first detected in 1976. By 1985, a British scientific team reported a 40 percent decrease in usual regeneration rates of the ozone. Because a sustained increase in the amount of ultraviolet-B radiation would have adverse consequences upon all planetary life, recent environmental measures have been put into effect, aimed at reversing ozone depletion. These measures are projected to garner significant results by 2050.

Due to air and ocean currents, the Arctic is a sink for toxic releases originally discharged thousands of miles away. Arctic wildlife and Canada's Inuit population have higher bodily levels of contaminants such as PCB and dioxin than those found in people and animals in much of the rest of the world.

Global Environmental Concepts

1. Global Warming and Greenhouse Gases

The Greenhouse Effect:

In the early 19th century, the French physicist, Jean Fourier, contended that the earth's atmosphere functions in much the same way as the glass of a greenhouse, thus describing what is now understood as the "greenhouse effect." Put simply, the "greenhouse effect" confines some of the sun's energy to the earth, preserving some of the planet's warmth, rather than allowing it to flow back into space. In so doing, all kinds of life forms can flourish on earth. Thus, the "greenhouse effect" is necessary to sustain and preserve life forms and ecosystems on earth.

In the late 19th century, a Swedish chemist, Svante Arrhenius, noticed that human activities, such as the burning of coal and other fossil fuels for heat, and the removal of forested lands for urban development, led to higher concentrations of greenhouse gases, like carbon dioxide and methane, in the atmosphere. This increase in the levels of greenhouse gases was believed to advance the "greenhouse effect" exponentially, and might be related to the trend in global warming.

In the wake of the Industrial Revolution, after industrial development took place on a large scale and the total human population burgeoned simultaneously with industrialization, the resulting increase in greenhouse gas emissions could, many scientists believe, be significant enough to have some bearing on climate. Indeed, many studies in recent years support the idea that there is a linkage between human activities and global warming, although there is less consensus on the extent to which this linkage may be relevant to environmental concerns.

That said, some scientists have argued that temperature fluctuations have existed throughout the evolution of the planet. Indeed, Dr. S. Fred Singer, the president of the Science and Environment Policy Project has noted that 3,000-year-old geological records of ocean sediment reveal changes in the surface temperature of the ocean. Hence, it is possible that climate variability is merely a normal fact of the planet's evolution. Yet even skeptics as to anthropogenic factors concur that any substantial changes in global temperatures would likely have an effect upon the earth's ecosystems, as well as the life forms that inhabit them.

The Relationship Between Global Warming and Greenhouse Gases:

A large number of climatologists believe that the increase in atmospheric concentrations of "greenhouse gas emissions," mostly a consequence of human activities such as the burning of fossil

fuels, are contributing to global warming. The cause notwithstanding, the planet has reportedly warmed 0.3°C to 0.6°C over the last century. Indeed, each year during the 1990s was one of the very warmest in the 20th century, with the mean surface temperature for 1999 being the fifth warmest on record since 1880.

In early 2000, a panel of atmospheric scientists for the National Research Council concluded in a report that global warming was, indeed, a reality. While the panel, headed by Chairman John Wallace, a professor of atmospheric sciences at the University of Washington, stated that it remained unclear whether human activities have contributed to the earth's increasing temperatures, it was apparent that global warming exists.

In 2001, following a request for further study by the incoming Bush administration in the [United States](#), the National Academy of Sciences again confirmed that global warming had been in existence for the last 20 years. The study also projected an increase in temperature between 2.5 degrees and 10.4 degrees Fahrenheit by the year 2100. Furthermore, the study found the leading cause of global warming to be emissions of carbon dioxide from the burning of fossil fuels, and it noted that greenhouse gas accumulations in the earth's atmosphere was a result of human activities.

Within the scientific community, the controversy regarding has centered on the difference between surface air and upper air temperatures. Information collected since 1979 suggests that while the earth's surface temperature has increased by about a degree in the past century, the atmospheric temperature five miles above the earth's surface has indicated very little increase. Nevertheless, the panel stated that this discrepancy in temperature between surface and upper air does not invalidate the conclusion that global warming is taking place. Further, the panel noted that natural events, such as volcanic eruptions, can decrease the temperature in the upper atmosphere.

The major consequences of global warming potentially include the melting of the polar ice caps, which, in turn, contribute to the rise in sea levels. Many islands across the globe have already experienced a measurable loss of land as a result. Because global warming may increase the rate of evaporation, increased precipitation, in the form of stronger and more frequent storm systems, is another potential outcome. Other consequences of global warming may include the introduction and proliferation of new infectious diseases, loss of arable land (referred to as "desertification"), destructive changes to existing ecosystems, loss of biodiversity and the isolation of species, and concomitant adverse changes in the quality of human life.

International Policy Development in Regard to Global Warming:

Regardless of what the precise nature of the relationship between greenhouse gas emissions and global warming may be, it seems that there is some degree of a connection between the phenomena. Any substantial reductions in greenhouse gas emissions and global warming trends will

likely involve systematic changes in industrial operations, the use of advanced energy sources and technologies, as well as global cooperation in implementing and regulating these transformations.

In this regard, the United Nations Framework Convention on Climate Change (UNFCCC) stipulated the following objectives:

1. To stabilize "greenhouse gas" concentrations within the atmosphere, in such a manner that would preclude hazardous anthropogenic intervention into the existing biosphere and ecosystems of the world. This stabilization process would facilitate the natural adaptation of ecosystems to changes in climate.
2. To ensure and enable sustainable development and food production on a global scale.

*** See section on "International Environmental Agreements and Associations" for information related to international policies related to limiting greenhouse gases and controlling climate change emanating from historic summits at Kyoto, Copenhagen, Doha, and Paris. ***

2. Air Pollution

Long before global warming reared its head as a significant issue, those concerned about the environment and public health noted the deleterious effects of human-initiated combustion upon the atmosphere. Killer smogs from coal burning triggered acute health emergencies in London and other places. At a lower level of intensity motor vehicle, power plant, and industrial emissions impaired long-range visibility and probably had some chronic adverse consequences on the respiratory systems of persons breathing such air.

In time, scientists began associating the sulfur dioxide and nitrogen oxides released from coal burning with significant acid deposition in the atmosphere, eventually falling as "acid rain." This phenomenon has severely degraded forestlands, especially in Europe and a few parts of the [United States](#). It has also impaired some aquatic ecosystems and eaten away the surface of some human artifacts, such as marble monuments. Scrubber technology and conversion to cleaner fuels have enabled the level of industrial production to remain at least constant while significantly reducing acid deposition. Technologies aimed at cleaning the air and curtailing acid rain, soot, and smog may, nonetheless, boomerang as the perils of global warming become increasingly serious. In brief, these particulates act as sort of a sun shade -- comparable to the effect of volcanic eruptions on the upper atmosphere whereby periods of active volcanism correlate with temporarily cooler weather conditions. Thus, while the carbon dioxide releases that are an inevitable byproduct of combustion continue, by scrubbing the atmosphere of pollutants, an industrial society opens itself to greater

insolation (penetration of the sun's rays and consequent heating), and consequently, it is likely to experience a correspondingly greater rise in ambient temperatures.

The health benefits of removing the sources of acid rain and smog are indisputable, and no one would recommend a return to previous conditions. Nevertheless, the problematic climatic effects of continually increasing emissions of carbon dioxide and other greenhouse gases pose a major global environmental challenge, not as yet addressed adequately.

3. Ozone Depletion

The stratospheric ozone layer functions to prevent ultraviolet radiation from reaching the earth. Normally, stratospheric ozone is systematically disintegrated and regenerated through natural photochemical processes. The stratospheric ozone layer, however, has been depleted unnaturally as a result of anthropogenic (man-made) chemicals, most especially chlorine and bromide compounds such as chlorofluorocarbons (CFCs), halons, and various industrial chemicals in the form of solvents, refrigerants, foaming agents, aerosol propellants, fire retardants, and fumigants. Ozone depletion is of concern because it permits a greater degree of ultraviolet-B radiation to reach the earth, which then increases the incidences of cancerous malignancies, cataracts, and human immune deficiencies. In addition, even in small doses, ozone depletion affects the ecosystem by disturbing food chains, agriculture, fisheries and other forms of biological diversity.

Transnational policies enacted to respond to the dangers of ozone depletion include the 1985 Vienna Convention on the Protection of the Ozone Layer and the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. The Montreal Protocol was subsequently amended in London in 1990, Copenhagen in 1992 and Vienna in 1995. By 1996, 155 countries had ratified the Montreal Protocol, which sets out a time schedule for the reduction (and eventual elimination) of ozone depleting substances (OPS), and bans exports and imports of ODS from and to non-participant countries.

In general, the Protocol stipulates that developed countries must eliminate halon consumption by 1994 and CFC consumption by 1996, while developing countries must eliminate these substances by 2010. Consumption of methyl bromide, which is used as a fumigant, was to be frozen at the 1995 in developed countries, and fully eliminated in 2010, while developing countries are to freeze consumption by 2002, based on average 1995-1998 consumption levels. Methyl chloroform is to be phased out by 2005. Under the Montreal Protocol, most ODS will be completely eliminated from use by 2010.

4. Land Degradation

In recent decades, land degradation in more arid regions of the world has become a serious concern. The problem, manifest as both "desertification" and "devegetation," is caused primarily by climate variability and human activities, such as "deforestation," excessive cultivation, overgrazing, and other forms of land resource exploitation. It is also exacerbated by inadequate irrigation practices. Although the effects of droughts on drylands have been temporary in the past, today, the productivity and sustainability of these lands have been severely compromised for the long term. Indeed, in every region of the world, land degradation has become an acute issue.

Desertification and Devegetation:

"Desertification" is a process of land degradation causing the soil to deteriorate, thus losing its nutrients and fertility, and eventually resulting in the loss of vegetation, known as "devegetation." As aforementioned, "desertification" and "devegetation" are caused by human activities, yet human beings are also the greatest casualties. Because these forms of land degradation affect the ability of the soil to produce crops, they concomitantly contribute to poverty. As population increases and demographic concentrations shift, the extent of land subject to stresses by those seeking to wrest subsistence from it has inexorably risen.

In response, the United Nations has formed the Convention to Combat Desertification-aimed at implementing programs to address the underlying causes of desertification, as well as measures to prevent and minimize its effects. Of particular significance is the formulation of policies on transboundary resources, such as areas around lakes and rivers. At a broader level, the Convention has established a Conference of Parties (COP), which includes all ratifying governments, for directing and advancing international action.

To ensure more efficacious use of funding, the Convention intends to reconfigure international aid to utilize a consultative and coordinated approach in the disbursement and expenditure of donor funds. In this way, local communities that are affected by desertification will be active participants in the solution-generation process. In-depth community education projects are envisioned as part of this new international aid program, and private donor financing is encouraged. Meanwhile, as new technologies are developed to deal with the problem of desertification, they need to be distributed for application across the world. Hence, the Convention calls for international cooperation in scientific research in this regard.

Desertification is a problem of sustainable development. It is directly connected to human challenges such as poverty, social and economic well-being and environmental protection as well. Broader environmental issues, such as climate change, biological diversity, and freshwater supplies, are indirectly related, so any effort to resolve this environmental challenge must entail coordinated research efforts and joint action.

Deforestation:

Deforestation is not a recent phenomenon. For centuries, human beings have cut down trees to clear space for land cultivation, or in order to use the wood for fuel. Over the last 200 years, and most especially after World War II, deforestation increased because the logging industry became a globally profitable endeavor, and so the clearing of forested areas was accelerated for the purposes of industrial development. In the long term, this intensified level of deforestation is considered problematic because the forest is unable to regenerate itself quickly. The deforestation that has occurred in tropical rainforests is seen as an especially serious concern, due to the perceived adverse effects of this process upon the entire global ecosystem.

The most immediate consequence of deforestation is soil degradation. Soil, which is necessary for the growth of vegetation, can be a fragile and vital property. Organically, an extensive evolution process must take place before soil can produce vegetation, yet at the same time, the effects of natural elements, such as wind and rain, can easily and quickly degrade this resource. This phenomenon is known as soil erosion. In addition, natural elements like wind and rain reduce the amount of fertile soil on the ground, making soil scarcity a genuine problem. When fertile topsoil that already exists is removed from the landscape in the process of deforestation, soil scarcity is further exacerbated. Equally significant is the fact that once land has been cleared so that the topsoil can be cultivated for crop production, not only are the nutrient reserves in the soil depleted, thus producing crops of inferior quality, but the soil structure itself becomes stressed and deteriorates further.

Another direct result of deforestation is flooding. When forests are cleared, removing the cover of vegetation, and rainfall occurs, the flow of water increases across the surface of land. When extensive water runoff takes place, the frequency and intensity of flooding increases. Other adverse effects of deforestation include the loss of wildlife and biodiversity within the ecosystem that supports such life forms.

At a broader level, tropical rainforests play a vital role in maintaining the global environmental system. Specifically, destruction of tropical rainforests affects the carbon dioxide cycle. When forests are destroyed by burning (or rotting), carbon dioxide is released into the air, thus contributing to an intensified "greenhouse effect." The increase in greenhouse gas emissions like carbon dioxide is a major contributor to global warming, according to many environmental scientists. Indeed, trees themselves absorb carbon dioxide in the process of photosynthesis, so their loss also reduces the absorption of greenhouse gases.

Tropical rainforest destruction also adversely affects the nitrogen cycle. Nitrogen is a key nutrient for both plants and animals. Plants derive nitrogen from soil, while animals obtain it via nitrogen-enriched vegetation. This element is essential for the formation of amino acids, and thereby for

proteins and biochemicals that all living things need for metabolism and growth. In the nitrogen cycle, vegetation acquires these essential proteins and biochemicals, and then cyclically returns them to the atmosphere and global ecosystem. Accordingly, when tropical rainforest ecosystems are compromised, not only is vegetation removed; the atmosphere is also affected and climates are altered. At a more immediate level, the biodiversity within tropical rainforests, including wildlife and insect species and a wealth of plant varieties, is depleted. Loss of rare plants is of particular concern because certain species as yet unknown and unused could likely yield many practical benefits, for instance as medicines.

As a result of the many challenges associated with deforestation, many environmental groups and agencies have argued for government policies on the sustainable development of forests by governments across the globe. While many countries have instituted national policies and programs aimed at reducing deforestation, and substantial research has been advanced in regard to sustainable and regenerative forestry development, there has been very little progress on an international level. Generally speaking, most tropical rainforests are located in developing and less developed countries, where economic growth is often dependent upon the exploitation of tropical rainforests. Timber resources as well as wildlife hunting tend to be particularly lucrative arenas.

In places such as the Amazon, where deforestation takes place for the construction of energy plants aimed at industrialization and economic development, there is an exacerbated effect on the environment. After forests are cleared in order to construct such projects, massive flooding usually ensues. The remaining trees then rot and decay in the wake of the flooding. As the trees deteriorate, their biochemical makeup becomes more acidic, producing poisonous substances such as hydrogen sulphide and methane gases. Acidified water subsequently corrodes the mechanical equipment and operations of the plants, which are already clogged by rotting wood after the floodwaters rise.

Deforestation generally arises from an economically plausible short-term motivation, but nonetheless poses a serious global concern because the effects go beyond national boundaries. The United Nations has established the World Commission on Forest and Sustainable Development. This body's task is to determine the optimal means of dealing with the issue of deforestation, without unduly affecting normal economic development, while emphasizing the global significance of protecting tropical forest ecosystems.

5. Water Resources

For all terrestrial fauna, including humans, water is the most immediate necessity to sustain life. As the population has increased and altered an ever-greater portion of the landscape from its natural condition, demand on water resources has intensified, especially with the development of industrialization and large-scale irrigation. The supply of freshwater is inherently limited, and

moreover distributed unevenly across the earth's landmasses. Moreover, not just demand for freshwater but activities certain to degrade it are becoming more pervasive. By contrast, the oceans form a sort of "last wilderness," still little explored and in large part not seriously affected by human activity. However, coastal environments - the biologically richest part of the marine ecosystem-are experiencing major depletion due to human encroachment and over-exploitation.

Freshwater:

In various regions, for instance the Colorado River in the western [United States](#), current withdrawals of river water for irrigation, domestic, and industrial use consume the entire streamflow so that almost no water flows into the sea at the river's mouth. Yet development is ongoing in many such places, implying continually rising demand for water. In some areas reliant on groundwater, aquifers are being depleted at a markedly faster rate than they are being replenished. An example is the San Joaquin Valley in California, where decades of high water withdrawals for agriculture have caused land subsidence of ten meters or more in some spots. Naturally, the uncertainty of future water supplies is particularly acute in arid and semi-arid regions. Speculation that the phenomenon of global warming will alter geographic and seasonal rainfall patterns adds further uncertainty.

Water conservation measures have great potential to alleviate supply shortages. Some city water systems are so old and beset with leaking pipes that they lose as much water as they meter. Broad-scale irrigation could be replaced by drip-type irrigation, actually enhancing the sustainability of agriculture. In many areas where heavy irrigation has been used for decades, the result is deposition of salts and other chemicals in the soil such that the land becomes unproductive for farming and must be abandoned.

Farming is a major source of water pollution. Whereas restrictions on industrial effluents and other "point sources" are relatively easy to implement, comparable measures to reform hydraulic practices at farms and other "nonpoint sources" pose a significantly knottier challenge. Farm-caused water pollution takes the following main forms:

- Nitrate pollution found in wells in intensive farming areas as a consequence of heavy fertilizer use is a threat to human health. The most serious danger is to infants, who by ingesting high-nitrate water can contract methemoglobinemia, sometimes called "blue baby syndrome," a potentially fatal condition.
- Fertilizer runoff into rivers and lakes imparts unwanted nutrients that cause algae growth and eventual loss of oxygen in the body of water, degrading its ability to support fish and other desirable aquatic life.

- Toxic agricultural chemicals - insecticides, herbicides, and fungicides - are detectable in some aquifers and waterways.

In general, it is much easier to get a pollutant into water than to retrieve it out. Gasoline additives, dry cleaning chemicals, other industrial toxins, and in a few areas radionuclides have all been found in water sources intended for human use. The complexity and long time scale of subterranean hydrological movements essentially assures that pollutants already deposited in aquifers will continue to turn up for decades to come. Sophisticated water treatment processes are available, albeit expensive, to reclaim degraded water and render it fit for human consumption. Yet source protection is unquestionably a more desirable alternative.

In much of the developing world, and even some low-income rural enclaves of the developed world, the population lacks ready access to safe water. Surface water and shallow groundwater supplies are susceptible to contamination from untreated wastewater and failing septic tanks, as well as chemical hazards. The occurrence of waterborne disease is almost certainly greatly underreported.

Marine Resources:

Coastal areas have always been desirable places for human habitation, and population pressure on them continues to increase. Many types of water degradation that affect lakes and rivers also affect coastal zones: industrial effluents, untreated or partially treated sewage, nutrient load from agriculture figure prominently in both cases. Prospects for more extreme storms as a result of global warming, as well as the pervasiveness of poorly planned development in many coastal areas, forebode that catastrophic hurricanes and landslides may increase in frequency in the future. Ongoing rise in sea levels will force remedial measures and in some cases abandonment of currently valuable coastal property.

Fisheries over much of the globe have been overharvested, and immediate conservation measures are required to preserve stocks of many species. Many governments subsidized factory-scale fishing fleets in the 1970s and 1980s, and the resultant catch increase evidently surpassed a sustainable level. It is uncertain how much of the current decline in fish stocks stems from overharvesting and how much from environmental pollution. The deep ocean remains relatively unaffected by human activity, but continental shelves near coastlines are frequently seriously polluted, and these close-to-shore areas are the major biological nurseries for food fish and the smaller organisms they feed on.

6. Environmental Toxins

Toxic chemical pollution exploded on the public consciousness with disclosure of spectacularly polluted industrial areas such as Love Canal near Buffalo, New York. There is no question that pollutants such as organophosphates or radionuclides can be highly deleterious to health, but evidence to date suggests that seriously affected areas are a localized rather than universal problem.

While some explore the possibilities for a lifestyle that fully eschews use of modern industrial chemicals, the most prevalent remediative approach is to focus on more judicious use. The most efficient chemical plants are now able to contain nearly all toxic byproducts of their production processes within the premises, minimizing the release of such substances into the environment. Techniques such as Integrated Pest Management (IPM) dictate limited rather than broadcast use of pesticides: application only when needed using the safest available chemical, supplemented as much as possible with nontoxic controls.

While heightened public awareness and growing technical sophistication suggest a hopeful outlook on limiting the damage from manmade environmental toxins, one must grant that previous incidents of their misuse and mishandling have already caused environmental damage that will have to be dealt with for many years to come. In the case of the most hazardous radioactive substances, the time scale for successful remediation actually extends beyond that of the recorded history of civilization. Moreover, in this era of high population density and rapid economic growth, quotidian activities such as the transport of chemicals will occasionally, seemingly inevitably result in accidents with adverse environmental consequences.

7. "Islandization" and Biodiversity

With increased awareness regarding the adverse effects of unregulated hunting and habitat depletion upon wildlife species and other aspects of biodiversity, large-scale efforts across the globe have been initiated to reduce and even reverse this trend.

In every region of the world, many species of wildlife and areas of biodiversity have been saved from extinction. Nationally, many countries have adopted policies aimed at preservation and conservation of species, and one of the most tangible measures has been the proliferation of protected habitats. Such habitats exist in the form of wildlife reserves, marine life reserves, and other such areas where biodiversity can be protected from external encroachment and exploitation.

Despite these advances in wildlife and biodiversity protection, further and perhaps more intractable challenges linger. Designated reserves, while intended to prevent further species decline, exist as closed territories, fragmented from other such enclaves and disconnected from the larger ecosystem. This environmental scenario is referred to as "islandization." Habitat reserves often serve as oversized zoos or game farms, with landscapes and wildlife that have effectively been "tamed" to suit. Meanwhile, the larger surrounding ecosystem continues to be seriously degraded

and transformed, while within the islandized habitat, species that are the focus of conservation efforts may not have sufficient range and may not be able to maintain healthy genetic variability.

As a consequence, many conservationists and preservationists have demanded that substantially larger portions of land be withheld as habitat reserves, and a network of biological corridors to connect continental reserves be established. While such efforts to combat islandization have considerable support in the [United States](#), how precisely such a program would be instituted, especially across national boundaries, remains a matter of debate. International conservationists and preservationists say without a network of reserves a massive loss of biodiversity will result.

The concept of islandization illustrates why conservation and preservation of wildlife and biodiversity must consider and adopt new, broader strategies. In the past, conservation and preservation efforts have been aimed at specific species, such as the spotted owl and grizzly bear in North America, the Bengal tiger in Southeast Asia, the panda in [China](#), elephants in Africa. Instead, the new approach is to simultaneously protect many and varied species that inhabit the same ecosystem. This method, referred to as "bio-regional conservation," may more efficaciously generate longer-term and more far-reaching results precisely because it is aimed at preserving entire ecosystems, and all the living things within.

More About Biodiversity Issues:

This section is directly taken from the United Nations Environmental Program: "[Biodiversity Assessment](#)"

The Global Biodiversity Assessment, completed by 1500 scientists under the auspices of United Nations Environmental Program in 1995, updated what is known (or unknown) about global biological diversity at the ecosystem, species and genetic levels. The assessment was uncertain of the total number of species on Earth within an order of magnitude. Of its working figure of 13 million species, only 13 percent are scientifically described. Ecological community diversity is also poorly known, as is its relationship to biological diversity, and genetic diversity has been studied for only a small number of species. The effects of human activities on biodiversity have increased so greatly that the rate of species extinctions is rising to hundreds or thousands of times the background level. These losses are driven by increasing demands on species and their habitats, and by the failure of current market systems to value biodiversity adequately. The Assessment calls for urgent action to reverse these trends.

There has been a new recognition of the importance of protecting marine and aquatic biodiversity. The first quantitative estimates of species losses due to growing coral reef destruction predict that almost 200,000 species, or one in five presently contributing to coral reef biodiversity, could die out in the next 40 years if human pressures on reefs continue to increase.

Since Rio, many countries have improved their understanding of the status and importance of their biodiversity, particularly through biodiversity country studies such as those prepared under the auspices of UNEP/GEF. The [United Kingdom](#) identified 1250 species needing monitoring, of which 400 require action plans to ensure their survival. Protective measures for biodiversity, such as legislation to protect species, can prove effective. In the USA, almost 40 percent of the plants and animals protected under the Endangered Species Act are now stable or improving as a direct result of recovery efforts. Some African countries have joined efforts to protect threatened species through the 1994 Lusaka Agreement, and more highly migratory species are being protected by specialized cooperative agreements among range states under the Bonn Agreement.

There is an emerging realization that a major part of conservation of biological diversity must take place outside of protected areas and involve local communities. The extensive agricultural areas occupied by small farmers contain much biodiversity that is important for sustainable food production. Indigenous agricultural practices have been and continue to be important elements in the maintenance of biodiversity, but these are being displaced and lost. There is a new focus on the interrelationship between agrobiodiversity conservation and sustainable use and development practices in smallholder agriculture, with emphasis on use of farmers' knowledge and skills as a source of information for sustainable farming.

Perhaps even more important than the loss of biodiversity is the transformation of global biogeochemical cycles, the reduction in the total world biomass, and the decrease in the biological productivity of the planet. While quantitative measurements are not available, the eventual economic and social consequences may be so significant that the issue requires further attention.

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USFWS. 1994. U.S. Fish and Wildlife Service report to Congress, cited in news release 21 July 1994.

Online resources used generally in the Environmental Overview:

Environmental Protection Agency Global Warming Site. URL: <http://www.epa.gov/globalwarming>

Food and Agriculture Organization of United Nations: Forestry. URL: <http://www.fao.org/forestry/site/sofo/en/>

Global Warming Information Page. URL: <http://globalwarming.org>

United Nations Environmental Program. URL: http://www.unep.org/GEO/GEO_Products/Assessment_Reports/

United Nations Global Environmental Outlook. URL: <http://www.unep.org/geo/geo4/media/>

Note on Edition Dates:

The edition dates for textual resources are noted above because they were used to formulate the original content. We also have used online resources (cited above) to update coverage as needed.

Information Resources

For more information about environmental concepts, CountryWatch recommends the following resources:

The United Nations Environmental Program Network (with country profiles)

[<http://www.unep.net/>](http://www.unep.net/)

The United Nations Environment Program on Climate Change

[<http://climatechange.unep.net/>](http://climatechange.unep.net/)

The United Nations Environmental Program on Waters and Oceans

[<http://www.unep.ch/earthw/Pdepwat.htm>](http://www.unep.ch/earthw/Pdepwat.htm)

The United Nations Environmental Program on Forestry: "Forests in Flux"

[<http://www.unep-wcmc.org/forest/flux/homepage.htm>](http://www.unep-wcmc.org/forest/flux/homepage.htm)

FAO "State of the World's Forests"

[<http://www.fao.org/forestry/FO/SOFO/SOFO99/sofo99-e.stm>](http://www.fao.org/forestry/FO/SOFO/SOFO99/sofo99-e.stm)

World Resources Institute.

[<http://www.wri.org/>](http://www.wri.org/)

Harvard University Center for Health and the Global Environment

[<http://www.med.harvard.edu/chge/the-review.html>](http://www.med.harvard.edu/chge/the-review.html)

The University of Wisconsin Center for Sustainability and the Global Environment

<http://sage.aos.wisc.edu/>

International Environmental Agreements and Associations

International Policy Development in Regard to Global Warming:

Introduction

Regardless of what the precise nature of the relationship between greenhouse gas emissions and global warming may be, it seems that there is some degree of a connection between the phenomena. Any substantial reductions in greenhouse gas emissions and global warming trends will likely involve systematic changes in industrial operations, the use of advanced energy sources and technologies, as well as global cooperation in implementing and regulating these transformations.

In this regard, the United Nations Framework Convention on Climate Change (UNFCCC) stipulated the following objectives:

1. To stabilize "greenhouse gas" concentrations within the atmosphere, in such a manner that would preclude hazardous anthropogenic intervention into the existing biosphere and ecosystems of the world. This stabilization process would facilitate the natural adaptation of ecosystems to changes in climate.
2. To ensure and enable sustainable development and food production on a global scale.

Following are two discussions regarding international policies on the environment, followed by listings of international accords.

Special Entry: The Kyoto Protocol

The UNFCCC was adopted at the Rio Earth Summit in 1992, and entered into force in 1994. Over 175 parties were official participants.

Meanwhile, however, many of the larger, more industrialized nations failed to reach the emissions' reduction targets, and many UNFCCC members agreed that the voluntary approach to reducing

emissions had not been successful. As such, UNFCCC members reached a consensus that legally binding limits were necessitated, and agreed to discuss such a legal paradigm at a meeting in Kyoto, [Japan](#) in 1997. At that meeting, the UNFCCC forged the Kyoto Protocol. This concord is the first legally binding international agreement that places limits on emissions from industrialized countries. The major greenhouse gas emissions addressed in the Kyoto Protocol include carbon dioxide, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and methane.

The provisions of the Kyoto Protocol stipulate that economically advanced nations must reduce their combined emissions of greenhouse gases, by approximately five percent from their 1990 levels, before the 2008-2010 deadline. Countries with the highest carbon dioxide emissions, such as the [United States](#) (U.S.), many of the European Union (EU) countries, and [Japan](#), are to reduce emissions by a scale of 6 to 8 percent. All economically advanced nations must show "demonstrable progress" by 2005. In contrast, no binding limits or timetable have been set on developing countries. Presumably, this distinction is due to the fact that most developing countries - - with the obvious exceptions of [India](#) and [China](#) -- simply do not emit as many greenhouse gases as do more industrially advanced countries. Meanwhile, these countries are entrenched in the process of economic development.

Regardless of the aforementioned reasoning, there has been strong opposition against the asymmetrical treatment assigned to emissions limits among developed and developing countries. Although this distinction might be regarded as unfair in principle, associations such as the Alliance of Small Island States have been vocal in expressing how global warming -- a result of greenhouse gas emissions - has contributed to the rise in sea level, and thus deleteriously affected their very existence as island nation states. For this reason, some parties have suggested that economically advanced nations, upon returning to their 1990 levels, should be required to further reduce their greenhouse gas emissions by a deadline of 2005. In response, interested parties have observed that even if such reductions were undertaken by economically advanced nations, they would not be enough to completely control global warming. Indeed, a reduction in the rate of fossil fuel usage by developing nations would also be necessary to have substantial ameliorative effect on global warming. Indeed, a reduction in the rate of fossil fuel usage by developing nations would also be necessary to have substantial ameliorative effect on global warming.

As such, the Protocol established a "Clean Development Mechanism" which permits developed countries to invest in projects aimed at reducing emissions within developing countries in return for credit for the reductions. Ostensibly, the objective of this mechanism is to curtail emissions in developing countries without unduly penalizing them for their economic development. Under this model, the countries with more potential emissions credits could sell them to other signatories of the Kyoto Protocol, whose emissions are forecast to significantly rise in the next few years. Should this trading of emissions credits take place, it is estimated that the Kyoto Protocol's emissions targets could still be met.

In 1999, the International Energy Outlook projected that Eastern Europe, the former Soviet Union and Newly Independent States, as well as parts of Asia, are all expected to show a marked decrease in their level of energy-related carbon emissions in 2010. Nations with the highest emissions, specifically, the U.S., the EU and [Japan](#), are anticipated to reduce their emissions by up to 8 percent by 2012. By 2000, however, the emissions targets were not on schedule for achievement. Indeed, the U.S. Department of Energy estimates forecast that by 2010, there will be a 34 percent increase in carbon emissions from the 1990 levels, in the absence of major shifts in policy, economic growth, energy prices, and consumer trends. Despite this assessment in the U.S., international support for the Kyoto Protocol remained strong, especially among European countries and island states, who view the pact as one step in the direction away from reliance on fossil fuels and other sources of greenhouse gases.

In 2001, U.S. President, George W. Bush, rejected his country's participation in the Kyoto Protocol, saying that the costs imposed on the global economic system, and especially, on the US, overshadowed the benefits of the Protocol. He also cited the unfair burden on developed nations to reduce emissions, as another primary reasons for withdrawal from the international pact, as well as insufficient evidence regarding the science of global warming. Faced with impassioned international disapproval for his position, the U.S. president stated that his administration remained interested in dealing with the matter of global warming, but would endorse alternative measures to combat the problem, such as voluntary initiatives limiting emissions. Critics of Bush's position, however, have noted that it was the failure of voluntary initiatives to reduce emissions following the Rio Summit that led to the establishment of the Kyoto Protocol in the first place.

In the wake of the Bush administration's decision, many participant countries resigned themselves to the reality that the goals of the Kyoto Protocol might not be achieved without U.S. involvement. Nevertheless, in Bonn, [Germany](#), in July 2001, the remaining participant countries struck a political compromise on some of the key issues and sticking points, and planned to move forward with the Protocol, irrespective of the absence of the U.S. The key compromise points included the provision for countries to offset their targets with carbon sinks (these are areas of forest and farmland which can absorb carbon through the process of photosynthesis). Another compromise point within the broader Bonn Agreement was the reduction of emissions cuts of six gases from over 5 percent to a more achievable 2 percent. A third key change was the provision of funding for less wealthy countries to adopt more progressive technologies.

In late October and early November 2001, the UNFCCC's 7th Conference of the Parties met in Marrakesh, [Morocco](#), to finalize the measures needed to make the Kyoto Protocol operational. Although the UNFCCC projected that ratification of the Protocol would make it legally binding within a year, many critics noted that the process had fallen short of implementing significant changes in policy that would be necessary to actually stop or even slow climate change. They also maintained that the absence of U.S. participation effectively rendered the Protocol into being a

political exercise without any substance, either in terms of transnational policy or in terms of environmental concerns.

The adoption of the compromises ensconced within the Bonn Agreement had been intended to make the provisions of the Kyoto Protocol more palatable to the U.S. In this regard, it failed to achieve its objective as the Bush administration continued to eschew participation in the international accord. Still, however, the Bonn Agreement did manage to render a number of other positive outcomes. Specifically, in 2002, key countries, such as [Russia](#), [Japan](#) and [Canada](#) agreed to ratify the protocol, bringing the number of signatories to 178. The decision by key countries to ratify the protocol was regarded as "the kiss of life" by observers.

By 2005, on the eve of a climate change conference in London, British Prime Minister Tony Blair was hoping to deal with the problems of climate change beyond the provisions set forth in the Kyoto Protocol. Acknowledging that the Kyoto Protocol could not work in its current form, Blair wanted to open the discussion for a new climate change plan.

Blair said that although most of the world had signed on to Kyoto, the protocol could not meet any of its practical goals of cutting greenhouse gas emissions without the participation of the United States, the world's largest polluter. He also noted that any new agreement would have to include India and China -- significant producers of greenhouse gas emissions, but exempt from Kyoto because they have been classified as developing countries. Still, he said that progress on dealing with climate change had been stymied by "a reluctance to face up to reality and the practical action needed to tackle problem."

Blair also touted the "huge opportunities" in technology and pointed toward the possibilities offered by wind, solar and nuclear power, along with fuel cell technology, eco-friendly biofuels, and carbon capture and storage which could generate low carbon power. Blair also asserted that his government was committed to achieving its domestic goal of reducing carbon dioxide emissions by 20 percent by 2010.

In the United States, President George W. Bush has said that global warming remained a debatable issue and despite conclusions reached by his own Environmental Protection Agency, he has not agreed with the conclusion that global warming and climate change are linked with human activities. Bush has also refused to ratify Kyoto on the basis of its economic costs.

Australia, an ally of the United States, has taken a similarly dim view of the Kyoto Protocol. Ahead of the November 2005 climate change meeting in Canada in which new goals for the protocol were to be discussed, Australia's Environment Minister, Ian Campbell, said that negotiating new greenhouse gas emission levels for the Kyoto Protocol would be a waste of time. Campbell said, "There is a consensus that the caps, targets and timetables approach is flawed. If we spend the next five years arguing about that, we'll be fiddling and negotiating while Rome

burns." Campbell, like the Bush administration, has also advocated a system of voluntary action in which industry takes up new technologies rather than as a result of compelling the reduction of emissions. But the Australian Conservation Foundation (ACF) has called on its government to ratify the Kyoto Protocol, to establish a system of emissions trading, and to set binding limits on emissions. Interestingly, although it did not sign on to Kyoto, Australia was expected to meet its emissions target by 2012 (an 8 percent increase in 1990 levels in keeping with the country's reliance on coal). But this success has nothing to do with new technologies and is due to state-based regulations on land clearing.

Note: The Kyoto Protocol calls for developed nations to cut greenhouse emissions by 5.2 percent of 1990 levels by 2012.

Special Entry: Climate Change Summit in Copenhagen (2009) --

In December 2009, the United Nations Climate Change Summit opened in the Danish capital of Copenhagen. The summit was scheduled to last from Dec. 7-18, 2009. Delegates from more than 190 countries were in attendance, and approximately 100 world leaders, including British Prime Minister Gordon Brown and [United States](#) President Barack Obama, were expected to participate. At issue was the matter of new reductions targets on greenhouse gas emissions by 2020.

Despite earlier fears that little concurrence would come from the conference, effectively pushing significant actions forward to a 2010 conference in [Mexico](#) City, negotiators were now reporting that the talks were productive and several key countries, such as [South Africa](#), had pledged to reduce greenhouse gas emissions. The two main issues that could still lead to cleavages were questions of agreement between the industrialized countries and the developing countries of the world, as well as the overall effectiveness of proposals in seriously addressing the perils of climate change.

On Dec. 9, 2009, four countries -- the [United Kingdom](#), [Australia](#), [Mexico](#) and [Norway](#) -- presented a document outlining ideas for raising and managing billions of dollars, which would be intended to help vulnerable countries dealing with the perils of climate change. Described as a "green fund," the concept could potentially help small island states at risk because of the rise in sea level. [Bangladesh](#) identified itself as a potential recipient of an assistance fund, noting that as a country plagued by devastating floods, it was particularly hard-hit by climate change. The "green fund" would fall under the rubric of the United Nations Framework Convention on Climate Change, for which developed countries have been committed to quantifying their emission reduction targets, and also to providing financial and technical support to developing countries.

The [United Kingdom](#), [Australia](#), [Mexico](#) and [Norway](#) also called for the creation of a new legal treaty that would replace the Kyoto Protocol. This new treaty, which could go into force in 2012, would focus largely on the reduction of greenhouse gas emissions by 2020. But [Australia](#) went

even further in saying that the successor treaty to the Kyoto Protocol, should be one with provisions covering all countries. Such a move would be a departure from the structure of the Kyoto Protocol, which contained emissions targets for industrialized countries due to the prevailing view that developed countries had a particular historic responsibility to be accountable for climate change. More recently, it has become apparent that substantial reductions in greenhouse gas emissions demanded by scientists would only come to pass with the participation also of significant developing nation states, such as [China](#) and [India](#). Indeed, one of the most pressing critiques of the Kyoto Protocol was that it was a "paper tiger" that failed to address the impact of the actions of emerging economies like [China](#) and [India](#), with its focus on the developed economies.

Now, in 2009, [China](#) -- as the world's biggest greenhouse gas emitter -- was responding this dubious distinction by vocalizing its criticism of the current scenario and foregrounding its new commitments. Ahead of the Copenhagen summit, [China](#) had announced it would reduce the intensity of its carbon emissions per unit of its GDP in 2020 by 40 to 45 percent against 2005 levels. With that new commitment at hand, [China](#) was now accusing the [United States](#) and the European Union of shirking their own responsibilities by setting weak targets for greenhouse gas emissions cuts. Senior Chinese negotiator, Su Wei, characterized the goals of the world's second largest greenhouse gas emitter -- the [United States](#) -- as "not notable," and the European Union's target as "not enough." Su Wei also took issue with [Japan](#) for setting implausible preconditions.

On Dec. 11, 2009, [China](#) demanded that developed and wealthy countries in Copenhagen should help deliver a real agreement on climate change by delivering on their promises to reduce carbon emissions and provide financial support for developing countries to adapt to global warming. In so doing, China's Vice Foreign Minister He Yafei said his country was hoping that a "balanced outcome" would emerge from the discussions at the summit. Echoing the position of the Australian government, He Yafei spoke of a draft agreement as follows: "The final document we're going to adopt needs to be taking into account the needs and aspirations of all countries, particularly the most vulnerable ones."

China's Vice Foreign Minister emphasized the fact that climate change was "a matter of survival" for developing countries, and accordingly, such countries need wealthier and more developed countries to accentuate not only their pledges of emissions reduction targets, but also their financial commitments under the aforementioned United Nations Framework Convention on Climate Change. To that end, scientists and leaders of small island states in the Indian Ocean, the Pacific Ocean and the Caribbean Sea, have highlighted the existential threat posed by global warming and the concomitant rise in sea level.

China aside, attention was also on [India](#) -- another major player in the developing world and a country with an industrializing economy that was impacting the environment. At issue was the Indian government's decision to set a carbon intensity target, which would slow emissions growth by up to 25 percent by the 2020 deadline. This strong position was resisted by some elements in

[India](#), who argued that their country should not be taking such a strong position when developed wealthy countries were yet to show accountability for their previous commitments to reduce greenhouse gas emissions. The matter grew so heated that the members of the opposition stormed out of the parliament in protest as Indian Environment Minister Jairam Ramesh defended the policy. But the political pressure at home in [India](#) was leaving the Indian delegation in Copenhagen in a state of chaos as well. In fact, India's top environmental negotiator refused to travel to Copenhagen in protest of the government's newly-announced stance.

China and [India](#) were joined by [Brazil](#) and [South Africa](#) in the crafting of a draft document calling for a new global climate treaty to be completed by June 2010. Of concern has been the realization that there was insufficient time to find concurrence on a full legal treaty, which would leave countries only with a politically-binding text by the time the summit at Copenhagen closed. But Guyana's leader, President Bharrat Jagdeo, warned that the summit in [Denmark](#) would be classified as a failure unless a binding document was agreed upon instead of just political consensus. He urged his cohorts to act with purpose saying, "Never before have science, economics, geo-strategic self-interest and politics intersected in such a way on an issue that impacts everyone on the planet."

Likewise, [Tuvalu](#) demanded that legally binding agreements emerge from Copenhagen. Its proposal was supported by many of the vulnerable countries, from small island states and sub-Saharan Africa, all of whom warned of the catastrophic impact of climate change on their citizens. [Tuvalu](#) also called for more aggressive action, such as an amendment to the 1992 agreement, which would focus on sharp greenhouse gas emissions and the accepted rise in temperatures, due to the impact the rise in seas. The delegation from [Kiribati](#) joined the call by drawing attention to the fact that one village had to be abandoned due to waist-high water, and more such effects were likely to follow. Kiribati's Foreign Secretary, Tessie Lambourne, warned that the people of [Kiribati](#) could well be faced with no homeland in the future saying, "Nobody in this room would want to leave their homeland." But despite such impassioned pleas and irrespective of warnings from the Intergovernmental Panel on Climate Change that the rise in sea level from melting polar ice caps would deleteriously affect low-lying atolls such as such as [Tuvalu](#) and [Kiribati](#) in the Pacific, and the [Maldives](#) in the Indian Ocean, the oil-giant [Saudi Arabia](#) was able to block this move.

Meanwhile, within the developed countries, yet another power struggle was brewing. The European Union warned it would only agree to raise its target of 20 percent greenhouse gas emissions reductions to 30 percent if the [United States](#) demonstrated that it would do more to reduce its own emissions. It was unknown if such pressure would yield results. [United States](#) President Barack Obama offered a "provisional" 2020 target of 17 percent reductions, noting that he could not offer greater concessions at Copenhagen due to resistance within the [United States](#) Congress, which was already trying to pass a highly controversial "cap and trade" emissions legislation. However, should that emissions trading bill fail in the Senate, the [United States](#)

Environment Protection Agency's declaration that greenhouse gases pose a danger to human health and the environment was expected to facilitate further regulations and limits on power plants and factories at the national level. These moves could potentially strengthen the Obama administration's offering at Copenhagen. As well, President Obama also signaled that he would be willing to consider the inclusion of international forestry credits.

Such moves indicated willingness by the Obama administration to play a more constructive role on the international environmental scene than its predecessor, the Bush administration. Indeed, ahead of his arrival at the Copenhagen summit, President Barack Obama's top environmental advisors promised to work on a substantial climate change agreement. To that end, [United States](#) Environmental Protection Agency Administrator Lisa Jackson said at a press conference, "We are seeking robust engagement with all of our partners around the world." But would this pro-engagement assertion yield actual results?

By Dec. 12, 2009, details related to a draft document prepared by Michael Zammit Cutajar, the head of the Ad-hoc Working Group on Long-Term Cooperative Action, were released at the Copenhagen climate conference. Included in the document were calls for countries to make major reductions in carbon emissions over the course of the next decade. According to the Washington Post, industrialized countries were called on to make cuts of between 25 percent and 40 percent below 1990 levels -- reductions that were far more draconian than the [United States](#) was likely to accept. As discussed above, President Obama had offered a provisional reduction target of 17 percent. The wide gap between the released draft and the United States' actual stated position suggested there was much more negotiating in the offing if a binding agreement could be forged, despite the Obama administration's claims that it was seeking greater engagement on this issue.

In other developments, the aforementioned call for financial support of developing countries to deal with the perils of climate change was partly answered by the European Union on Dec. 11, 2009. The European bloc pledged an amount of 2.4 billion euros (US\$3.5 billion) annually from 2010 to 2012. Environment Minister Andreas Carlgren of [Sweden](#) -- the country that holds the rotating presidency of the European Union at the time of the summit -- put his weight behind the notion of a "legally binding deal." Meanwhile, Yvo de Boer, a top United Nations climate change official, focused less on the essence of the agreement and more on tangible action and effects saying, "Copenhagen will only be a success if it delivers significant and immediate action that begins the day the conference ends."

The division between developed and developing countries in Copenhagen reached new heights on Dec. 14, 2009, when some of the poor and less developed countries launched a boycott at the summit. The move, which was spurred by African countries but backed by [China](#) and [India](#), appeared to be geared toward redirecting attention and primary responsibility to the wealthier and more industrialized countries. The impasse was resolved after the wealthier and more industrialized countries offered assurances that they did not intend on shirking from their commitments to reducing greenhouse gases. As a result, the participating countries ceased the

boycott.

Outside the actual summit, thousands of protestors had gathered to demand crucial global warming, leading to clashes between police and demonstrators elsewhere in the Danish capital city. There were reports of scattered violence across Copenhagen and more than 1,000 people were arrested.

Nevertheless, by the second week of the climate change summit, hopes of forging a strong deal were eroding as developed and developing nations remained deadlocked on sharing cuts in greenhouse gases, and particularly on the matters of financing and temperature goals. In a bid to shore up support for a new climate change, [United States](#) President Barack Obama joined other world leaders in Copenhagen. On Dec. 14, 2009, there was a standoff brewing between the [United States](#) and [China](#). At issue was China's refusal to accept international monitoring of its expressed targets for reducing greenhouse gas emissions. The [United States](#) argued that China's opposition to verification could be a deal-breaker.

By the close of the summit, the difficult process eventually resulted in some consensus being cultivated. A draft text called for \$100 billion a year by 2020 to assist poor nations cope with climate change, while aiming to limit global warming to two degrees Celsius compared with pre-industrial levels. The deal also included specific targets for developed countries to reduce greenhouse gas emissions, and called for reductions by developing countries as a share of their economies. Also included in the agreement was a mechanism to verify compliance. The details of the agreement were supported by President Barack Obama, Chinese Premier Wen Jiabao, Indian Prime Minister Manmohan Singh and Brazilian President Luiz Inacio Lula da Silva.

This draft would stand as an interim agreement, with a legally-binding international pact unlikely to materialize until 2010. In this way, the summit in Copenhagen failed to achieve its central objective, which was to negotiate a successor to the Kyoto Protocol on greenhouse gas emissions.

Editor's Note

In the background of these developments was the growing global consciousness related to global warming and climate change. Indeed, as the Copenhagen summit was ongoing, it was clear there was enormous concurrence on the significance of the stakes with an editorial on the matter of climate change being published in 56 newspapers in 45 countries. That editorial warned that without global action, climate change would "ravage our planet." Meanwhile, a global survey taken by Globescan showed that concern over global warming had exponentially increased from 1998 -- when only 20 percent of respondents believed it to be a serious problem -- to 64 percent in 2009. Such survey data, however, was generated ahead of the accusations by climate change skeptics that some climate scientists may have overstated the case for global warming, based on emails derived in an illicit manner from a British University.

Special Entry: Climate change talks in Doha in [Qatar](#) extend life of Kyoto Protocol (2012)

December 2012 saw climate talks ensue in the Qatari city of Doha as representatives from countries across the world gathered to discuss the fate of the Kyoto Protocol, which seeks to minimize greenhouse gas emissions. The summit yielded results with decisions made (1) to extend the Kyoto Protocol until 2020, and (2) for wealthier countries to compensate poorer countries for the losses and damage incurred as a result of climate change.

In regards to the second matter, Malia Talakai of [Nauru](#), a leading negotiator for the Alliance of Small Island States, explained the necessity of the compensation package as follows: "We are trying to say that if you pollute you must help us."

This measure was being dubbed the "Loss and Damage" mechanism, and was being linked with [United States](#) President Barack Obama's request for \$60 billion from Congress to deal with the devastation caused by Hurricane Sandy months before. The sight of a hurricane bearing down on the northern Atlantic seaboard, along with the reality of the scope of reconstruction, appeared to have illustrated the economic costs of climate change -- not so much as a distant environmental issue -- but as a danger to the quotidian lives of people. Still, there was blame to be placed on the [United States](#) and European countries -- some of world's largest emitters -- for failing to do more to reduce emissions.

To that latter end, there was in fact little progress made on the central issue of reducing greenhouse gas emissions. Had those emissions been reduced, there would have been less of a need to financially deal with the devastation caused by climate change. One interpretation was that the global community was accepting the fact that industrialization was contributing to global warming, which had deleterious effects on the polar ice caps and concomitantly on the rise of sea level, with devastating effects for small island nations. Thus, wealthier countries were willing to pay around \$10 billion a year through 2020, effectively in "damages," to the poor countries that could be viewed as the "collateral damage" of industrial progress. But damages today could potentially be destruction tomorrow, leaving in place the existential challenges and burdens to be born by some of the world's smallest and least wealthy island countries.

Perhaps not surprisingly, the representative for the small island nation states at the Doha summit responded with ire, characterizing the lack of progress on reducing emissions as follows: "We see the package before us as deeply deficient in mitigation (carbon cuts) and finance. It's likely to lock us on the trajectory to a 3,4,5C rise in global temperatures, even though we agreed to keep the global average temperature rise of 1.5C to ensure survival of all islands. There is no new finance (for adapting to climate change and getting clean energy) -- only promises that something might materialize in the future. Those who are obstructive need to talk not about how their people will live, but whether our people will live."

Indeed, in most small island countries not just in the Pacific, but also the Caribbean and Indian Ocean, ecological concerns and the climate crisis have been dominant themes with dire life and death consequences looming in the background for their people. Small island nations in these region are already at risk from the rise of sea-level, tropical cyclones, floods. But their very livelihoods of fishing and subsistence farming were also at risk as a result of ecological and environmental changes. Increasingly high storm surges can wipe out entire villages and contaminate water supplies. Accordingly, the very existence of island nations, such as [Kiribati](#) and [Tuvalu](#), are at severe risk of being obliterated from the map. Yet even with the existential threat of being wiped off the map in the offing, the international community has been either slow or restrictive in its efforts to deal with global warming, climate change, economic and ecological damage, as well as the emerging global challenge of environmental refugees.

A 2012 report from the United Nations Environment Program (UNEP) and the Pacific Regional Environment Program underlined the concerns of small island nations and their people as it concluded that the livelihoods of approximately 10 million people in Pacific island communities were increasingly vulnerable to climate change. In fact, low-lying islands in that region would likely confront losses of up to 18 percent of gross domestic product due to climate change, according to the report. The report covers 21 countries and territories, including [Fiji](#), [Kiribati](#), [Samoa](#) and [Tonga](#), and recommended environmental legislation intended to deal with the climate crisis facing the small island countries particularly. As noted by David Sheppard, the director general of the Pacific Regional Environment Program that co-sponsored this study: "The findings... emphasize the need more than ever to raise the bar through collective actions that address the region's environmental needs at all levels."

Regardless of the failures of the summit in [Qatar](#) (discussed above), the meeting did facilitate a process starting in 2015, which would bind both wealthy and poor countries together in the mission of forging a new binding treaty that would replace the Kyoto Protocol and tackle the central causes of climate change.

For more information on the threats faced in small island nations by climate change and the measures being undertaken to lobby for international action, please see the Alliance for Small Island States available online at the URL: <http://aosis.org/>

Special Report

COP 21 summit in Paris ends with historic agreement to tackle climate change; rare international consensus formed on environmental crisis facing the planet (2015) --

In mid-December 2015, the highly-anticipated United Nations climate conference of parties (COP)

in Paris, [France](#), ended with a historic agreement. In fact, it would very likely be understood as the most significant international agreement signed by all the recognized countries of the world since the Cold War. Accordingly, the Paris Agreement was being distinguished as the first multilateral pact that would compel all countries across the world to cut its carbon emissions -- one of the major causes of increasing greenhouse gas emissions, which contribute to global warming, and its deleterious effects ranging from the dangerous rise in sea level to catastrophic climate change.

The accord, which was dubbed to be the "Paris Agreement," was the work of rigorous diplomacy and fervent environmental advocacy, and it aimed to address the climate change crisis facing the planet. As many as 195 countries were represented in the negotiations that led to the landmark climate deal. Indeed, it was only after weeks of passionate debate that international concurrence was reached in addressing the environmental challenges confronting the world, with particular attention to moving beyond fossil fuels and reducing greenhouse gas emissions.

The success of the COP 21 summit in Paris and the emergence of the landmark Paris Agreement was, to some extent, attributed to the efforts of France's Foreign Minister Laurent Fabius who presided over the negotiations. The French foreign minister's experience and credentials as a seasoned diplomat and respected statesman paid dividends. He skillfully guided the delegates from almost 200 countries and interest groups along the negotiations process, with ostensibly productive results and a reasonably robust deal to show for it.

On Dec. 12, 2015, French Foreign Minister Fabius officially adopted the agreement, declaring: "I now invite the COP to adopt the decision entitled Paris Agreement outlined in the document. Looking out to the room I see that the reaction is positive, I see no objections. The Paris agreement is adopted." Once Foreign Minister Fabius' gavel was struck, symbolically inaugurating the Paris Agreement into force, the COP delegate rushed to their feet with loud and bouyant cheers as well as thunderous applause.

In general, the Paris Agreement was being hailed as a victory for enviromental activists and a triumph for international diplomats, while at the same time being understood as simply an initial -- and imperfect -- move in the direction of a sustainable future. China's chief negotiator, Xie Zhenhua, issued this message, saying that while the accord was not ideal, it should "not prevent us from marching historical steps forward."

United States President Barack Obama lauded the deal as both "ambitious" and "historic," and the work of strenuous multilateral negotiations as he declared, "Together, we've shown what's possible when the world stands as one." The [United States](#) leader acknowledged that the accord was not "perfect," but he reminded the critics that it was "the best chance to save the one planet we have."

Former [United States](#) Vice President Al Gore, one of the world's most well known environmental

advocates, issued a lengthy statement on the accomplishments enshrined in the Paris Agreement. He highlighted the fact that the Paris Agreement was a first step towards a future with a reduced carbon footprint on Planet Earth as he said, "The components of this agreement -- including a strong review mechanism to enhance existing commitments and a long-term goal to eliminate global-warming pollution this century -- are essential to unlocking the necessary investments in our future. No agreement is perfect, and this one must be strengthened over time, but groups across every sector of society will now begin to reduce dangerous carbon pollution through the framework of this agreement."

The central provisions of the Paris Agreement included the following items:

- Greenhouse gas emissions should peak as quickly as possible, with a move towards balancing energy sources, and ultimately the decrease of greenhouse gases in the second half of this century
- Global temperature increase would be limited to 1.5 degrees Centigrade above pre-industrial levels and would be held "well below" the two degrees Centigrade threshold
- Progress on these goals would be reviewed every five years beginning in 2020 with new greenhouse gas reduction targets issued every five years
- \$100 billion would be expended each year in climate finance for developing countries to move forward with green technologies, with further climate financing to be advanced in the years beyond

It should be noted that there both legally binding and voluntary elements contained within the Paris Agreement. Specifically, the submission of an emissions reduction target and the regular review of that goal would be legally mandatory for all countries. Stated differently, there would be a system in place by which experts would be able to track the carbon-cutting progress of each country. At the same time, the specific targets to be set by countries would be determined at the discretion of the countries, and would not be binding. While there was some criticism over this non-binding element, the fact of the matter was that the imposition of emissions targets was believed to be a major factor in the failure of climate change talks in Copenhagen, [Denmark](#), in 2009.

In 2015, the talks faced challenges as several countries, such as [China](#) and [India](#), objected to conditions that would stymie economic and development. In order to avoid that kind of landmine, a system Intended Nationally Determined Contributions (INDCs) was developed and formed the basis of the accord. As such, the Paris Agreement would, in fact, facilitate economic growth and development, as well as technological progress, but with the goal of long-term ecological sustainability based on low carbon sources. In fact, the agreement heralded as "the beginning of the end of the fossil fuel era." As noted by Nick Mabey, the head of the climate diplomacy organization E3G, said, "Paris means governments will go further and faster to tackle climate change than ever before. The transition to a low carbon economy is now unstoppable, ensuring the end of the fossil fuel age."

A particular sticking point in the agreement was the \$100 billion earmarked for climate financing for developing countries to transition from traditional fossil fuels to green energy technologies and a low carbon future. In 2014, a report by the International Energy Agency indicated that the cost of that transition would actually be around \$44 trillion by the mid-century -- an amount that would render the \$100 billion being promised to be a drop in the proverbial bucket. However, the general expectation was that the Republican-controlled Senate in the [United States](#), which would have to ratify the deal in that country, was not interested in contributing significant funds for the cause of climate change.

A key strength of the Paris Agreement was the ubiquitous application of measures to all countries. Of note was the frequently utilized concept of "flexibility" with regard to the Paris Agreement. Specifically, the varying capacities of the various countries in meeting their obligations would be anticipated and accorded flexibility. This aspect presented something of a departure from the 1997 Kyoto Protocol, which drew a sharp distinction between developed and developing countries, and mandated a different set of obligations for those categories of countries. Thus, under Kyoto, [China](#) and [India](#) were not held to the same standards as the [United States](#) and European countries. In the Paris Agreement, there would be commitments from all countries across the globe.

Another notable strength of the Paris Agreement was the fact that the countries of the world were finally able to reach consensus on the vital necessity to limit global temperature increases to 1.5 degrees Centigrade. Ahead of the global consensus on the deal, and as controversy continued to surface over the targeted global temperature limits, the leaders of island countries were sounding the alarm about the melting of the Polar ice caps and the associated rise in sea level. Prime Minister Enele Sopoaga of [Tuvalu](#) issued this dismal reminder: "Tuvalu's future ... is already bleak and any further temperature increase will spell the total demise of [Tuvalu](#). No leader in this room carries such a level of worry and responsibility. Just imagine you are in my shoes, what would you do?" It was thus something of a victory for environmental advocates that the countries of the world could find consensus on the lower number -- 1.5 degrees rather than 2 degrees.

A significant weak point with regard to the Paris deal was a "loss and damage" provision, which anticipates that even with all the new undertakings intended to reduce greenhouse gas emissions and move to a low carbon future, there would nonetheless be unavoidable climate change consequences. Those consequences ranged from the loss of arable land for farmers as well as soil erosion and contamination of potable water by sea water, to the decimation of territory in coastal zones and on small islands, due to the rise in sea level, with entire small island countries being rendered entirely uninhabitable. The reality was that peoples' homes across the world would be destroyed along with their way of life.

With that latter catastrophic effect being a clear and present danger for small island countries, the Association of Small Island States (AOSIS) demanded that the developed world acknowledge its

responsibility for this irreversible damage.. Despite the fact that greenhouse gas emissions and the ensuing plague of global warming was, indeed, the consequence of development in the West (the [United States](#) and Europe) and the large power house countries, such as [Russia](#), [China](#) and [India](#), there was no appetite by those countries to sign on to unlimited liability. Under the Paris Agreement, there was a call for research on insurance mechanisms that would address loss and damage issues, with recommendations to come in the future.

The call for research was being regarded as an evasion of sorts and constituted the weakest aspect of the Paris Agreement. Not surprisingly, a coalition of small island nations demanded a "Marshall Plan" for the Pacific. Borrowing the term "Marshall Plan" from the post-World War II reconstruction effort, the coalition of Pacific island nation, which included [Kiribati](#), [Tuvalu](#), [Fiji](#), and the [Marshall Islands](#), called for an initiative that would include investment in renewable energy and shoreline protection, cultural preservation, economic assistance for economies in transition, and a plan for migration and resettlement for these countries as they confront the catastrophic effects of the melting of the Polar ice caps and the concomitant rise in sea level. The precise contours of the initiative remained unknown, unspecified, and a mere exercise in theory at the time of writing. Yet such an initiative would, at some point, have to be addressed, given the realities of climate change and the slow motion calamity unfolding each day for low-lying island nations across the world.

As noted by Vice President Greg Stone of Conservation International, who also functions as an adviser to the government of [Kiribati](#), "Imagine living in a place where you know it's going to go away someday, but you don't know what day that wave's going to come over and wash your home away." He added, "It's a disaster we know is going to happen." Meanwhile, the intervening years promised to be filled with hardship for small island nations, such as [Kiribati](#). Stone explained, "For every inch of sea-level rise, these islands lose 10 feet of their freshwater table to saltwater intrusion," Stone explained. "So it's not just about the day the water finally goes over the island; it's also about the day that there's just not enough water left and everyone has to move off the island." Presaging the future for island nations that could face submersion, Stone said, "If you look ahead 50 years, a country like [Kiribati](#) could become the first aqueous nation. possibility of migration. That is, they own this big patch of ocean, and they administer it from elsewhere."

Foreign Minister Minister Tony Debrum of the [Marshall Islands](#) emerged as the champion advocating on behalf of small island nation states and a loose coalition of concerned countries from the Pacific to the Caribbean, but with support from the [United States](#). He addressed the comprehensive concerns of small island nations regarding the weaknesses of the deal, while simultaneously making clear that the Paris Agreement signified hope for the countries most at risk. In a formal statement, Debrum declared: "We have made history today. Emissions targets are still way off track, but this agreement has the tools to ramp up ambition, and brings a spirit of hope that we can rise to this challenge. I can go back home to my people and say we now have a pathway to

survival.” Debrum highlighted the imperatives of Pacific island nations, saying, “Our High Ambition Coalition was the lightning rod we needed to lift our sights and expectations for a strong agreement here in Paris. We were joined by countries representing more than half the world. We said loud and clear that a bare-bones, minimalist agreement would not fly. We instead demanded an agreement to mark a turning point in history, and the beginning of our journey to the post-carbon era.”

Debrum of the [Marshall Islands](#) espoused the quintessential synopsis of the accord and its effects for those most likely to be affected by climate change as he noted, “Climate change won’t stop overnight, and my country is not out of the firing line just yet, but today we all feel a little safer.”

Editor's Entry on [Environmental Policy](#):

The low-lying Pacific island nations of the world, including [Kiribati](#), [Tuvalu](#), the [Marshall Islands](#), [Fiji](#), among others, are vulnerable to the threats posed by global warming and climate change, derived from carbon emissions, and resulting in the rise in sea level. Other island nations in the Caribbean, as well as poor countries with coastal zones, were also at particular risk of suffering the deleterious effects of climate change.

Political policy in these countries are often connected to ecological issues, which have over time morphed into an existential crisis of sorts. Indeed, ecological concerns and the climate crisis have also been dominant themes with life and death consequences for the people of island nations in the Pacific. Indeed, the very livelihoods of fishing and subsistence farming remain at risk as a result of ecological and environmental changes. Yet even so, these countries are threatened by increasingly high storm surges, which could wipe out entire villages and contaminate water supplies. Moreover, because these are low lying island nations, the sustained rise in sea level can potentially lead to the terrain of these countries being uninhabitable at best, and submerged at worst. Stated in plain terms, these countries are at severe risk of being obliterated from the map and their plight illuminates the emerging global challenge of environmental refugees. In these manifold senses, climate change is the existential crisis of the contemporary era.

Since the time of the 1997 Kyoto Protocol, there have been efforts aimed at extending the life of that agreement, with an eye on minimizing greenhouse gas emissions, and thus minimizing the effects of climate change. Those endeavors have largely ended in failure, as exemplified by the unsuccessful Copenhagen talks in 2009 and the fruitless Doha talks in 2012 respectively. The success of the COP 21 talks in [France](#), with the adoption of the landmark Paris Agreement in 2015, was regarded as the first glimmer of hope. Not only did the Paris Agreement signify the triumph of international diplomacy and global consensus, but it also marked the start of the end of the fossil fuel era, with the path forward toward a low carbon future reliant on greener technologies. Most crucially, the Paris Agreement stood as the first significant response in recent times to the central challenge of climate change and its quotidian effects on the lives of real human

beings across the world.

1. Major International Environmental Accords:

General Environmental Concerns

Convention on Environmental Impact Assessment in a Transboundary Context, Espoo, 1991.

Accords Regarding Atmosphere

Annex 16, vol. II (Environmental Protection: Aircraft Engine Emissions) to the 1044 Chicago Convention on International Civil Aviation, Montreal, 1981

Convention on Long-Range Transboundary Air Pollution (LRTAP), Geneva, 1979

United Nations Framework Convention on Climate Change (UNFCCC), New York, 1992

Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985 including the Montreal Protocol on Substances that Depleted the Ozone Layer, Montreal, 1987

Accords Regarding Hazardous Substances

Convention on the Ban of the Import into Africa and the Control of Transboundary Movements and Management of Hazardous Wastes within Africa, Bamako, 1991

Convention on Civil Liability for Damage Caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (CRTD), Geneva, 1989

Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention), Basel, 1989

Convention on the Transboundary Effects of Industrial Accidents, Helsinki, 1992

Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region (Waigani Convention), Waigani, 1995

European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR), Geneva 1957

FAO International Code of Conduct on the Distribution and Use of Pesticides, Rome, 1985

2. Major International Marine Accords:

Global Conventions

Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention 1972), London, 1972

International Convention for the Prevention of Pollution from Ships, 1973, as modified by Protocol of 1978 relation thereto (MARPOL 73/78), London, 1973 and 1978

International Convention on Civil Liability for Oil Pollution Damage 1969 (1969 CLC), Brussels, 1969, 1976, and 1984

International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971 (1971 Fund Convention), Brussels, 1971

Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS), London 1996

International Convention on Oil Pollution Preparedness, Response, and Co-operation (OPRC), London, 1990

International Convention Relation to Intervention on the High Seas in Cases of Oil Pollution Casualties (Intervention Convention), Brussels, 1969

United Nations Convention on the Law of the Sea (UNCLOS), Montego Bay, 1982

Regional Conventions

Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft (Oslo Convention), Oslo, 1972

Convention for the Prevention of Marine Pollution from Land-based Sources (Paris Convention), Paris, 1974

Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR Convention), Paris, 1992

Convention for the Protection of the Marine Environment of the Baltic Sea Area (1974 Helsinki Convention), Helsinki 1974

Convention for the Protection of the Marine Environment of the Baltic Sea Area (1992 Helsinki Convention), Helsinki 1992

Conventions within the UNEP Regional Seas Programme

Convention on the Protection of the Black Sea against Pollution, Bucharest, 1992

Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Cartagena de Indias, 1983

Convention for the Protection, Management, and Development of the Marine and Coastal Environment of the Eastern African Region, Nairobi, 1985

Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution, [Kuwait](#), 1978

Convention for the Protection and Development of the Marine Environment and Coastal Region of the Mediterranean Sea (Barcelona Convention), Barcelona, 1976

Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment, Jeddah, 1982

Convention for the Protection of the Natural Resources and Environment of the South Pacific Region, Noumea, 1986

Convention for the Protection of the Marine Environment and Coastal Area of the South-East Pacific, Lima, 1981

Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region, Abidjan, 1981

3. Major Conventions Regarding Living Resources:

Marine Living Resources

Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), Canberra, 1980

International Convention for the Conservation of Atlantic Tunas (ICCAT), Rio de Janeiro, 1966

International Convention for the Regulation of Whaling (ICRW), Washington, 1946

Nature Conservation and Terrestrial Living Resources

Antarctic Treaty, Washington, D.C., 1959

Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention), Paris, 1972

Convention on Biological Diversity (CBD), Nairobi, 1992

Convention on the Conservation of Migratory Species of Wild Animals (CMS), Bonn, 1979

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Washington, D.C., 1973

Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention), Ramsar, 1971

Convention to Combat Desertification (CCD), Paris 1994

FAO International Undertaking on Plant Genetic Resources, Rome, 1983

International Tropical Timber Agreement, 1994 (ITTA, 1994), Geneva, 1994

Freshwater Resources

Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Helsinki, 1992

4. Major Conventions Regarding Nuclear Safety:

Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (Assistance Convention), Vienna, 1986

Convention on Early Notification of a Nuclear Accident (Notification Convention), Vienna, 1986

Convention on Nuclear Safety, Vienna, 1994

Vienna Convention on Civil Liability for Nuclear Damage, Vienna, 1963

5. Major Intergovernmental Organizations

Commission on Sustainable Development (CSD)

European Union (EU): Environment

Food and Agriculture Organization (FAO)

Global Environment Facility (GEF)

International Atomic Energy Agency (IAEA)

International Council for the Exploration of the Sea (ICES)

International Fund for Agricultural Development (IFAD)

International Labour Organization (ILO)

International Maritime Organization (IMO)

International Monetary Fund (IMF)

International Oil Pollution Compensation Funds (IOPC Funds)

Organization for Economic Co-operation and Development (OECD), Environment Policy Committee (EPOC)

United Nations Children's Fund (UNICEF)

United Nations Development Programme (UNDP)

United Nations Educational, Scientific, and Cultural Organization (UNESCO)

United Nations Environment Programme (UNEP)

United Nations Industrial Development Organization (UNIDO)

United Nations Population Fund (UNFPA)

World Bank

World Food Programme (WFP)

World Health Organization (WHO)

World Meteorological Organization (WMO)

World Trade Organization (WTO)

6. Major Non-Governmental Organizations

Atmosphere Action Network East Asia (AANE)

Climate Action Network (CAN)

Consumers International (CI)

Earth Council

Earthwatch Institute

Environmental Liaison Centre International (ELCI)

European Environmental Bureau (EEB)

Forest Stewardship Council (FSC)

Friends of the Earth International (FoEI)

Greenpeace International

International Chamber of Commerce (ICC)

International Confederation of Free Trade Unions (ICFTU)

International Planned Parenthood Federation (IPPF)

International Solar Energy Society (ISES)

IUCN-The World Conservation Union

Pesticide Action Network (PAN)

Sierra Club

Society for International Development (SID)

Third World Network (TWN)

Water Environment Federation (WEF)

Women's Environment and Development Organization (WEDO)

World Business Council for Sustainable Development (WBCSD)

World Federalist Movement (WFM)

World Resources Institute (WRI)

World Wide Fund For Nature (WWF)

7. Other Networking Instruments

Arab Network for Environment and Development (RAED)

Global Legislators for a Balanced Environment (GLOBE)

Regional Environmental Center for Central and Eastern Europe (REC)

United Nations Non-Governmental Liaison Service (UN-NGLS)

Appendices

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Methodology Note for Demographic Data:

The demographic numbers for cities and national populations listed in CountryWatch content are derived from the Geoba.se website, which analyzes data from the World Bank. The current demographic numbers displayed on the Countrywatch website are reflective of the latest available estimates.

The demographic information for language, ethnicity and religion listed in CountryWatch content is

derived from a mix of sources including the Altapedia, Central Intelligence Agency Factbook, Infoplease, and State Department Background Notes.

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-- See also list of News Wires services below, which are also used for research purposes. --

Note on Edition Dates:

The earlier edition dates are noted above because they were used to formulate the original Country Reviews and serve as the baseline for some of the information covered. Later editions have been used in some cases, and are cited as such, while other more recent online resources (cited above) contain recent and ever-updated data sets used for research.

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United States Geological Service, Mineral Information

United States Department of State, Country Commercial Guides. Washington, D.C. [United States](#) of America. URL:http://www.state.gov/www/about_state/business/com_guides/index.html

The World Bank, Global Development Finance, Country Tables. 1999 to present. Washington, D.C.: The World Bank.

The World Bank Group, World Development Indicators. 1999 to present. Washington, D.C.: The World Bank.

Yearbook of Tourism Statistics, World Tourism Organization. 1998 to present. Madrid: The World Tourism Organization.

Note on Edition Dates:

The earlier edition dates are noted above because they were used to formulate the original country reviews and serve as the baseline for some of the information covered. Later editions have been used in some cases, and are cited as such, while other more recent online resources (cited above) contain recent and ever-updated data sets used for research.

Methodology Notes for Economic Data:

Estimates by CountryWatch.com of GDP in dollars in most countries are made by converting local currency GDP data from the International Monetary Fund World Economic Outlook to US dollars by market exchange rates estimated from the International Monetary Fund International Financial Statistics and projected out by the CountryWatch Macroeconomic Forecast. Real GDP was estimated by deflating current dollar values by the US GDP Implicit Price Deflator.

Exceptions to this method were used for:

- Bosnia-Herzegovina
- Nauru
- Cuba
- Palau
- Holy See
- San Marino
- Korea, North
- [Serbia](#) & Montenegro
- Liberia
- Somalia
- Liechtenstein
- Tonga
- Monaco
- Tuvalu

In these cases, other data and/or estimates by CountryWatch.com were utilized.

Investment Overview

C o r r u p t i o n a n d T r a n s p a r e n c y I n d e x . U R L :
<http://www.transparency.org/documents/cpi/2001/cpi2001.html#cpi>
<<http://www.transparency.org/documents/>

Deloitte Tax Guides. URL: <http://www.deloittetaxguides.com>

Trade Policy Reviews by the World Trade Organization . URL: http://www.wto.org/english/tratop_e/tpr_e/tp_rep_e.htm#bycountry

United States Department of Energy, Country Analysis Briefs. URL: <http://www.eia.doe.gov/emeu/cabs/contents.html>

United States Department of State, Background Notes. URL: http://www.state.gov/www/background_notes/index.html

United States Department of State, Country Commercial Guides. 1996-2006. Washington, D.C. U n i t e d S t a t e s o f A m e r i c a . U R L : http://www.state.gov/www/about_state/business/com_guides/index.html

World Bank: Doing Business. URL: <http://www.doingbusiness.org>

World Bank: Governance Indicators. URL: <http://info.worldbank.org/governance>

Social Overview

Borden, G.A., Conaway, W.A., Morrison, T. 1994. *Kiss, Bow, or Shake Hands: How to do Business in Sixty Countries*. Holbrook, Massachusetts, 1994.

Center for Disease Control. URL: <http://www.cdc.gov>

Eldis Country Profiles. URL: <http://www.eldis.org/country/index.htm>

Ethnologue. URL: <http://www.ethnologue.com/>

Government of Australia Department of Foreign Affairs and Trade. URL: <http://www.dfat.gov.au/geo>

Government of Canada Foreign Affairs and International Trade. URL: http://www.voyage.gc.ca/consular_home-e.htm

Library of Congress Country Studies. URL: <http://lcweb2.loc.gov/frd/cs/cshome.html>

Lonely Planet. URL: <http://www.lonelyplanet.com/worldguide/>

Steve Kropla's Online Help For World Travelers. URL: <http://www.kropla.com/>

[United Kingdom](http://www.fco.gov.uk/) Ministry of Foreign and Commonwealth Office. URL: <http://www.fco.gov.uk/>

United Nations Human Development Report. URL: <http://www.undp.org/hdro>

UNICEF Statistical Database Online. URL: <http://www.unicef.org/statis/atoz.html>

[United States](http://www.cia.gov/cia/publications/factbook/index.html) Central Intelligence Agency, World Factbook. 2001. Washington, D.C.: Printing and Photography Group. URL: <http://www.cia.gov/cia/publications/factbook/index.html>

United States Department of State, Background Notes. URL: http://www.state.gov/www/background_notes/index.html

United States Department of State, Commercial and Business Affairs: Travel Tips. URL: http://www.state.gov/www/about_state/business/cba_travel.html

United States Department of State, Bureau of Consular Affairs. URL: <http://travel.state.gov/>

World Health Organization. URL: <http://www.who.int/home-page/>

World News Connection, National Technical Information Service. Springfield, Virginia, USA.

Internet News Service, Xinhua News Agency (U.S.) Inc. Woodside, New York. URL: <http://www.xinhuanet.com/english/>

Note on Edition Dates:

The earlier edition dates are noted above because they were used to formulate the original country reviews and serve as the baseline for some of the information covered. Later editions have been used in some cases, and are cited as such, while other more recent online resources (cited above) contain recent and ever-updated data sets used for research.

Methodology Notes for the HDI:

Since 1990, the United Nations Development Programme, in concert with organizations across the globe, has produced the [Human Development Index](#) (or HDI). According to the UNDP, the index measures average achievement in basic human development in one simple composite index, and produces from this index a ranking of countries. The HDI is a composite of three basic components of human development: longevity, knowledge and standard of living. Longevity is measured by life expectancy. Knowledge is measured by combination of adult literacy and mean

years of schooling. Standard of living is measured by purchasing power, based on real GDP per capita (in constant US\$) adjusted for differences in international living costs (or, purchasing power parity, PPP). While the index uses these social indicators to measure national performance with regard to human welfare and development, not all countries provide the same level of information for each component needed to compute the index; therefore, as in any composite indicator, the final index is predicated on projections, predictions and weighting schemes. The index is a static measure, and thus, an incomplete measure of human welfare. In fact, the UNDP says itself the concept of human development focuses on the ends rather than the means of development and progress, examining in this manner, the average condition of all people in a given country.

Specifically, the index is calculated by determining the maximum and minimum for each of the three components (as listed above) and then measuring where each country stands in relation to these scales-expressed as a value between 0 and 1. For example, the minimum adult literary rate is zero percent, the maximum is 100 percent, and the reading skills component of knowledge in the HDI for a country where the literacy rate is 75 percent would be 0.75. The scores of all indicators are then averaged into the overall index.

For a more extensive examination of human development, as well as the ranking tables for each participating country, please visit: <http://www.undp.org>

Note on [History](#) sections

In some CountryWatch Country Reviews, open source content from the State Department Background Notes and Country Guides have been used.

Environmental Overview

Environmental Profiles: A Global Guide to Projects and People. 1993. Linda Sobel Katz, Sarah Orrick, and Robert Honig. New York: Garland Publishing.

The Environment Encyclopedia and Directory, 2nd Edition. 1998. London: Europa.

Environmental Protection Agency Global Warming Site. URL: <http://www.epa.gov/globalwarming>

Food and Agriculture Organization of United Nations: Forestry. URL: <http://www.fao.org/forestry/site/sofo/en/>

Global Warming Information Page. URL: <http://globalwarming.org>

Introduction to Global [Environmental Issues](#), 2nd Edition. 1997. Kevin Pickering and Lewis Owen.

London: Routledge.

Trends: Compendium of Data on Global Change. URL: http://cdiac.esd.ornl.gov/trends/emis/em_cont.htm

United Nations Environmental Program. URL: http://www.unep.org/GEO/GEO_Products/Assessment_Reports/

United Nations Global Environmental Outlook. URL: <http://www.unep.org/geo/geo4/media/>

United States Department of Energy, Country Analysis Briefs. URL: <http://www.eia.doe.gov/emeu/cabs/contents.html>

World Climate Data Online. URL: <http://www.worldclimate.com>

World Directory of Country Environmental Studies. 1996. The World Resource Institute.

World Factbook. US Central Intelligence Agency. Washington, D.C.: Printing and Photography Group.

1998-1999 World Resources Guide to the Global Environment by the World Resources Institute. May, 1998.

1998/1999 Yearbook of International Cooperation on Environment and Development. 1998. London: Earthscan Publications.

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Other Sources:

General information has also been used in the compilation of this review, with the courtesy of governmental agencies from this country.

News Services:

CANA Daily Bulletin. Caribbean Media Agency Ltd., St. Michael, [Barbados](#).

Central and Eastern Africa Report, United Nations Office for the Coordination of Humanitarian Affairs - Integrated Regional Information Network for Central and Eastern Africa.

Daily News, Panafrican News Agency. Dakar, [Senegal](#).

PACNEWS, Pacific Islands Broadcasting Association. Suva, [Fiji](#).

Radio Free Europe/Radio Liberty. Washington D.C. USA.

Reuters News. Thomson Reuters. New York, New York. USA.

Southern Africa Report, United Nations Office for the Coordination of Humanitarian Affairs - Integrated Regional Information Network for Southern Africa.

Voice of America, English Service. Washington D.C.

West Africa Report, United Nations Office for the Coordination of Humanitarian Affairs - Integrated Regional Information Network for West Africa. 1998-1999

Note: Some or all these news services have been used to research various sections of this Country Review.

USING COUNTRYWATCH.COM AS AN ELECTRONIC SOURCE:

MLA STYLE OF CITATION

Commentary

For items in a "Works Cited" list, CountryWatch.com suggests that users follow recommended patterns for indentation given in the *MLA Handbook*, 4th edition.

Individual Works

Basic form, using an Internet protocol:

Author/editor. *Title of Print Version of Work*. Edition statement (if given). Publication information (Place of publication: publisher, date), if given. *Title of Electronic Work*. Medium. Available Protocol (if applicable):Site/Path/File. Access date.

Examples:

Youngblood-Coleman, Denise. *Country Review: France*. 2003. Houston, Texas: CountryWatch Publications, 2003. *Country Review:France*. Online. Available URL : http://www.countrywatch.com/cw_country.asp?vCOUNTRY=61 October, 12, 2003.

Note:

This is the citation format used when the print version is not used in the reference.

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Author/editor. "Part title." *Title of Print Version of Work*. Edition statement (if given). Publication information (Place of publication: publisher, date), if given. *Title of Electronic Work*. Medium. AvailableProtocol (if applicable): Site/Path/File. Access date.

Examples:

Youngblood-Coleman, Denise. "People." *CountryWatch.com: France*. 2003. Houston, Texas: CountryWatch Publications, 2003. *CountryWatch.com: France*. Online. Available URL : http://www.countrywatch.com/cw_topic.asp?vCOUNTRY=61&SECTION=SOCIAL&TOPIC=CLPEO&TYPE=TEXT. October 12, 2003.

Note:

This is the citation format used when the print version is not used in the reference.

For further source citation information, please email: editor@countrywatch.com or education@countrywatch.com.

CountryWatch

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