

# India's Defence Strategies

## *An Analysis of Indian Military System*

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### 1. Background

Defence has always been a cornerstone for any nation's economy and growth as it enhances facilitation of government's foreign policies, peacekeeping operations and humanitarian relief missions. Further, military forces play an important role to build up nation's status as a global power. Currently, nations are prioritising defence because of the increasing adversaries and changing nature of conflict. A recent study by Stockholm International Peace Research Institute (SIPRI) in 2016 analyses the global defence/military spending by the leading nations. The study states that the military expenditures have increased for the first time since 2011, with United States at the top of the military spending amounting to **\$611 billion** followed by **China** at **\$215 billion**, **Russia** at **\$69.2 billion**, **Saudi Arabia** at **\$63.7 billion** and **India** at **\$55.9 billion**.

With the 3<sup>rd</sup> largest military in the world in terms of size i.e. number of personnel, India is currently rising in stature economically and technologically towards a more prominent position. As per the SIPRI Report 2016, in last 4 years, India accounted for **13 per cent** of global arms imports, followed by Saudi Arabia, the United Arab Emirates, China and Algeria and **9.7 per cent** of global imports. As India is not the member of any traditional military alliance, it becomes essential to maintain an independent military capability in keeping with the critical need to retain its strategic autonomy while protecting itself against possible threat to its unity and integrity. In this context, the brief analyses the current scenario of Indian military forces and highlights the on-going challenges faced by the system. Further, it provides a few key discussion points based on the current setting of defence sector.

### 2. India's Current Military Position

Despite the recent progress made in defence sector, India's position remains weak, due to the change in the nature of global armed conflicts. Unlike state-versus-state wars of the 20th century, wars today involve multiple states, diverse weaponry (including nuclear forces) and sub-conventional armies, i.e. trained combatants who are not regular military soldiers. The rise of terrorism changes the requirements of military forces, which are now required to be technologically advanced, heavily equipped, strategically placed and ready for immediate action.

Further, India now finds itself in a unique dilemma. So far, India has been a major power in the South Asian region, but now it faces immense pressure to build on its existing defences. Neighbouring countries such as China now pose a significant military threat to the country. The recent **Doklam standoff** exposed

the extent of threat that India is under, and brought forth India's inadequate weaponry in comparison to China's rising military resources. With a defence budget **three times** that of India<sup>1</sup>, China is superior in terms of nuclear, missile and military strength. In addition to this, it has pursued the goal of complete military modernisation in an aggressive manner, and has created a military far more advanced than that of India. With a joint command over forces, comprehensive war plans and state of the art machinery, China currently wields immense power in the region.

The most crucial factor affecting India's need for improved military force is the **growing alliance between Pakistan and China**. This nexus has made a '**two-front war**' a very real possibility for India, requiring an increase in its repository of resources in the eventuality of a conflict. The use of sub-conventional forces is seen most evidently in Pakistan's conflicts with India, with militancy and continuing encounters in and around sensitive areas of Jammu and Kashmir. India's military vastly outnumbers Pakistani forces, both qualitatively and quantitatively across army, navy and air force. However, India's resources are still not up to par to withstand a war with the combined forces of Pakistan and China, as examined later in this brief.

In addition to this, the change in the nature of conflicts in the present geopolitical scenario now requires Indian military personnel to be equipped with the latest technology to adequately respond to attacks from multiple fronts and multiple actors including terrorists, non-state actors and state sponsored non-state actors and cyberwarfare, a new form of warfare. It is therefore crucial for India to prioritise capacity building, strategic efficiency and continuous modernisation of its armed forces. Weapons, strategies and budget allocations need to be upgraded to reflect the changing times, and to ensure that India is able to adequately defend itself against militarily advanced nations such as China. To build up the system as par with leading nation, there needs to be robust research and timely procurement of arms to ensure that forces are not using outdated technologies. Further, budgetary allowances must be made accordingly.

### **3. Indian Defence Forces: Ongoing Challenges**

The pace of development undertaken in defence has been slow. Indigenous development of modern defence hardware along with Indian policy desire for defence self-sufficiency continues to remain an area of concern. The system endures to suffer from major policy, structural and cultural challenges. Experts observe a number of systematic gaps in the defence establishment and civil-military relations that creates number of challenges in the defence sector. Mentioned below are some on-going challenges within the defence sector.

#### **3.1. Need for Improved Budgetary Allocation**

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<sup>1</sup> See [http://www.mod.gov.in/approach/surround/pdf/ch\\_d-budget\\_20170406e.pdf](http://www.mod.gov.in/approach/surround/pdf/ch_d-budget_20170406e.pdf) accessed as on 05/10/17

An allocation of **INR 3,59,854 crores** (US\$ 53.5 billion) was made to Ministry of Defence (MoD) for the year 2017-18. A sum of **INR 2,74,114 crores** including **INR 86,488 crores** was allocated for Defence capital by Finance Minister. It was observed that there has been a further downfall in the defence budget's share in both Central Government expenditure and the Gross Domestic Product (GDP). With a share of **1.56 per cent** of the estimated GDP of 2017-18, the defence budget has been the **lowest since 1956-57**. Below table provides a comparative statistic of Defence Budget for 2016-17 and 2017-18.

**Table 1: Comparative Statistic of Defence Budget: 2016-17 and 2017-18**

	2016-17	2017-18
<b>Defence Budget (in crore)</b>	249099.0	262389.8
<b>Growth of Defence Budget (%)</b>	0.96	5.34
<b>Revenue Expenditure (in crore)</b>	162759.0	175861
<b>Growth of Revenue Expenditure (%)</b>	6.98	8.05
<b>Capital Expenditure (in crore)</b>	86340.0	86528.7
<b>Growth of Capital Expenditure (%)</b>	-8.7	0.22
<b>Share of Defence Budget in GDP (%)</b>	1.65	1.56
<b>Defence Pension</b>	82332.66	85740.00
<b>MoD's Budget (in crore)</b>	340921.98	359854.12

**Source:** India's Defence Budget, 2017-18, MoD

The current defence budget highlights an increase in the share of the revenue expenditure. The rise in the expenditure is due to the **hike in the manpower cost of the armed forces** that accounts for over **83 per cent** i.e. **INR 11,071 crore**, of the overall growth in the defence budget. Further, the combined share of revenue store and capital modernisation in the operational preparedness of the armed forces has **declined** from **55 per cent in 2007-08** to **40 per cent in 2016-17**. Currently, there exists a huge gap in India's defence preparedness, and the armed forces have acute shortage in many areas ranging from **ammunition, assault rifles, bullet-proof jackets, night fighting-devices to howitzers, missiles, fighters and warships**.

Among the defence services, the Indian Army accounts for the biggest share in defence budget amounting for **INR 1,49,369**, followed by the Air Force, Navy, Defence Research and Development Organisation (DRDO) and Ordnance Factories. Accounting for **more than 85 per cent** of the uniformed personnel, bulk of the Army's budget in **devoted into meeting the pay and allowances** of the personnel. In 2017-18, Army's total allocation for **capital expenditures** has been at only **17 per cent** whereas Air Force and Navy has allocated **58 per cent** and **51 per cent** respectively.

### 3.1.1. Disbursement of Modernisation Budget

With the recent focus on modernisation of Indian military, the defence budget of 2017-18 highlights the marginal decline in modernisation or capital procurement budget from the previous allocation. Among the three forces, Air Force is the only service whose modernisation budget has increased. The rise in the budget is in light of signing several mega contracts, such as the **Rafale multi-role fighter**, **Apache attack helicopter** and **Chinook heavy lift helicopter**. The Army and Navy have witnessed a downfall in their respective budgets. The table below provides a quick snapshot of modernisation budget of the armed forces.

**Table 2: Modernisation Budgets across Military Wings**

	2016-17 (BE) in crore	2016-17 (RE) in crore	2017-18 (BE) in crore	% Increase in 2017-18 (BE) over 2016-17 (BE)
<b>Army</b>	21535	17812	20148	-6.4
<b>Navy</b>	21323	18993	18749	-12.1
<b>Air Force</b>	27556	26216	30885	12.1
<b>Total</b>	70414	63021	69783	-0.9

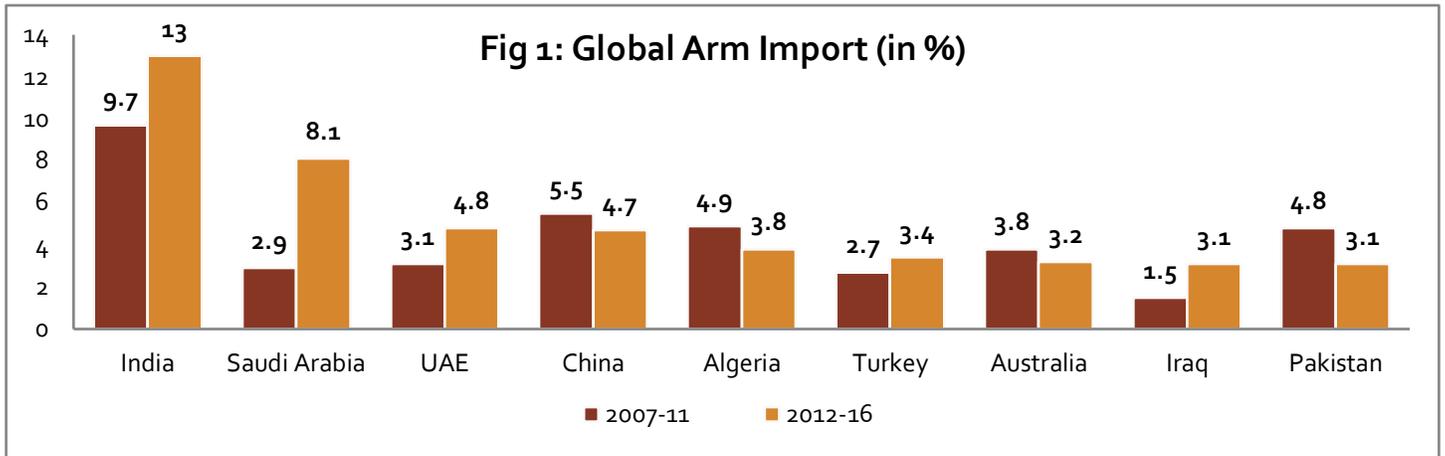
**Source:** India's Defence Budget, 2017-18, MoD

As observed from the above table, there has been a constant decline in the modernisation budget, which is a source of concern given the limited budgetary scope available for signing new contracts. Further, underutilisation of the modernisation budget has been a recurring feature of the defence budget despite several efforts to improve the procurement procedures undertaken by the MoD in the past two and a half decades. Alongside the modernisation budget, the Union budget failed to provide any specific incentives to push the '*Make in India*' initiative in the defence sector in the current year.

### 3.2. Manufacturing and Procurement Challenges

India has been one of the largest arms importers in the world in the last five years. Its imports are almost **three times** that of China<sup>2</sup>. This trend has been a concern for parliamentarians, policy-makers and defence officials, as a heavy reliance on external arms weakens India's ability to build a large resource base.

<sup>2</sup> <https://www.sipri.org/commentary/blog/2017/state-major-arms-transfers-8-graphics> accessed on 05/10/12



**Source:** Stockholm International Peace Research Institute, 2016

In order to achieve self-reliance, Defence Public Sector Undertakings (DPSUs) and Ordnance Factories (OFs) were set up by MoD. Further, Defence Procurement Policies (DPPs) were enacted in order to bring efficiency and transparency to the process of arms acquisition. These laid down procedures and regulations for buying and making of arms by both Indian and foreign companies, including private players. However, India's reliance on imports has slowed the progress of domestic arms industries. Major issues with the DPP 2013 framework included rigid rules, inordinate delays and difficulties faced by vendors. Since 2008, foreign manufacturers were able to report only **51.5 per cent** achievement till 2014 against contracted obligations<sup>3</sup>.

### Key Developments – Dhirendra Singh Committee Report (2015)

**March 2016: DPP 2016** – Based on the recommendations of the **Dhirendra Singh Committee Report**, the new policy concentrates largely on domestic manufacturing and self-reliance under the 'Make in India' initiative of the government, through the introduction of the 'Buy (Indian Designed, Developed and Manufactured)' category. Further, it speeds up the process by reducing the Acceptance of Necessity (AoN) timeframe and setting up a fast-track route for procurement.

**May 2017: Strategic Partnership Model (SPM)** – Through the SPM, the Committee sought to create long-term capacity of Indian manufacturing firms in key defence sub-sectors, such as fighter aircrafts, helicopters, submarines and battle tanks. This would be done through partnerships with foreign manufacturers, for technology transfer and manufacturing know-how. However, it has not performed as expected, due to several impediments including, the requirement of a **49 per cent** stake for foreign partners in any SPM partnership.

### 3.3. Deficit of Weapons

<sup>3</sup> <http://www.swaniti.com/wp-content/uploads/2016/04/Defence-Procurement-and-Policy.pdf> as accessed on 04/10/12

In spite of its large import share, the impediments to adequate procurement have resulted in India falling short of ammunition stocks across all wings of the armed forces.

**Army:** According to a recently conducted audit of the Indian Army, the existing ammunition reserves are **significantly lower** than what is required for a potential conflict. The MoD has a requirement for a **War Wastage Reserve (WWR)** of 40 days i.e. resources enough to withstand 40 days of intense conflict, with a minimum of 20 days of reserves being the **Minimum Acceptable Risk Level (MARL)**. The figures stated fall well below the requirement to withstand a ‘two front war’, especially given the on-ground resources of China and Pakistan. However, in a recent statement the Chief of Army Staff was reported to provide assurance that the Indian Army is well prepared to face external, as well as internal threats to the country, and has the necessary equipment to withstand a two front war.

**Table 3: Ammunition Reserves**

	Time Period	Resource Availability
WWR	40 Days	20% (10% as on March 2013)
Meeting MARL	20-40 Days	25%
Below MARL (Critical)	>20 Days	55%
	<10 Days	10%

**Source:** CAG Report, Ammunition Management in Army (2016)

**Air Force:** Similar to the Indian Army, the reserves of the Air Force are also much lower than required. Of the **42 fighter squadrons** required, there currently exist only **33<sup>4</sup>**, an insufficient number to ward off a potential two-fold threat. On paper, India’s Air Force is the **world’s fourth largest**, with around 2,000 aircraft in service. But an internal report seen in 2014 by *IHS Jane’s*, a defence publication, revealed that only **60 per cent** were typically fit to fly.

**Navy:** Navy is extremely important for establishing India’s presence in the **Indian Ocean region (IOR)**. A zone of strategic importance, with vast oil reserves, the IOR sees a large proportion of the world’s cargo traffic. It is a contested zone between India and China, thereby increasing the need for a robust naval force. India’s Navy is relatively well-equipped, with its procurement moving faster than the other wings. India’s warship construction programme has proceeded in a timely manner (with at least **48 ships** and 15 submarines under construction in Indian shipyards). However, larger institutional lacunae such as insufficient capital and deficient planning, continue to plague the system<sup>5</sup>.

**Table 4: India’s Military Resources: A Comparison**

			India	China	Pakistan
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<sup>4</sup> <http://www.indiandefencereview.com/news/indian-air-force-2025/> accessed as on 05/10/17

<sup>5</sup> <http://www.orfonline.org/expert-speaks/future-technologies-for-the-indian-navy> accessed as on 05/10/17

	Army	Active Personnel	1,200,255	2,300,000	6,20,000
		Tanks	4,426	6,457	2,924
		Artillery	7,414	6,246	3,278
	Air Force	Total Aircrafts	2,102	2,955	951
		Fighter Aircrafts	676	1,271	301
		Attack Aircraft	809	1,385	394
		Attack Helicopter	16	206	52
	Navy	Total Assets	295	714	197
		Destroyers	11	35	0
		Carriers	3 (1 in service)	1	0
		Submarines	15	68	8
	<b>Nuclear Power</b>	Total Weapons	130	270	140

Source: Globalfirepower.com, 2017

### 3.4. Slow Upgradation of Military Systems

Given the deficiencies in domestic procurement, the lack of replacements has resulted in the existing military equipment being rendered out-of-date. A CAG Report has highlighted that on 30 September 2016 about **18 per cent** of the available ammunition was either “Unserviceable”, “Segregated” or “Repairable Major” category<sup>6</sup>. The Air Force also has military equipment that is highly outdated, including MiG 21s, the old Chetak and Cheetah helicopters and transport aircraft such as the Antonov AN-32. Currently, Navy is the most modernised of the three wings. It has plans to induct high-definition radars, infra-red seeker, sonars and electronic warfare suites to minimise foreign dependence for sensors and weapons<sup>7</sup>.

#### Key Developments – Modernisation Initiatives

**Air Force Modernisation Plan [2016-2025]:** The plan includes acquisition of over **2.5 lakh crore**, introduction of new technologies such as infrared imaging and 3D printing, increased contribution of the private sector in manufacturing, among other initiatives.

**Army Design Bureau (ADB) [2016]:** Created to spearhead research and development for all modernisation needs. The bureau had been introduced along the lines of the Navy Design Bureau that has been in existed for over half a century, and has created over **119 ship** designs over the years.

<sup>6</sup> CAG Report, Army and Ordnance Factories (2017)

<sup>7</sup> <http://www.orfonline.org/expert-speaks/future-technologies-for-the-indian-navy/> accessed as on 06/10/17

Organisational modernisation is also essential for smooth functioning and effective planning of the military as a whole. The current force structure of India's Special Operational Forces (SOFs) is highly fragmented and spread across multiple organisational silos encompassing the three services of the armed forces under the MoD, Intelligence Agency (Research and Analysis Wing - R&AW) under the Cabinet Secretariat, and the Ministry of Home Affairs<sup>8</sup>. However, this model poses certain strategic issues that may continue to hamper India's efficiency in a potential conflict situation. With the three wings devising their own strategies, there is a distinct possibility of **an over-lap and possible confusion or cross-purpose**, apart from a general slow-down in the decision-making process. There is an urgent need for a coordinator at the apex level to ensure decisive and effective war strategies. The nature of personnel may also need restructuring in order to handle potential encounters, with a greater number of 'special forces' as opposed to general military personnel.

India's defence capabilities must also be strengthened against the threat of cyber warfare. Instances of 'weaponising' the internet are on the rise due to advancing technologies, with activities such as **recruitment of terrorists, disruption of crucial public services** like electricity grids and **the financial sectors**, and the **theft of commercial secrets**<sup>9</sup>. The technological nature of today's conflicts requires countries to have military preparedness against possible cyber attacks. The Defence Ministry has pointed out the need for India to gear up and fight future wars in cyberspace<sup>10</sup>. Currently, the army, navy and air force have their own separate cells dealing with cyber issues and they have also developed individual networks for safe communication and data exchange.

India released a **National Cyber Security Policy in 2013**, with an aim to monitor and protect information and strengthen defences from cyberattacks. Further, with an aim to enhance its combat capabilities in the virtual domain, the MoD is working towards establishing a new cyber agency to tackle attempts by Chinese and Pakistani hackers to break into its systems and networks<sup>11</sup>.

#### 4. Key Discussion Points

In context of the key challenges, it becomes necessary to initiate measures to minimise the existing gaps in the defence sectors that can ensure better security and structure of the military forces.

**1. Inadequate Funds:** Even with a mere hike of **6 per cent**, the defence budget has failed to enhance military modernisation and revenue stores which play a vital role in the operational preparedness of the

<sup>8</sup> [http://www.orfonline.org/wp-content/uploads/2016/06/ORF\\_IssueBrief\\_150\\_SinhaBalakrishnan.pdf](http://www.orfonline.org/wp-content/uploads/2016/06/ORF_IssueBrief_150_SinhaBalakrishnan.pdf) accessed as on 06/10/17

<sup>9</sup> [http://www.orfonline.org/wp-content/uploads/2016/03/SR\\_9\\_Arun-Mohan-Sukumar-and-RK-sharma.pdf](http://www.orfonline.org/wp-content/uploads/2016/03/SR_9_Arun-Mohan-Sukumar-and-RK-sharma.pdf) accessed as on 06/10/17

<sup>10</sup> <https://timesofindia.indiatimes.com/india/Future-wars-to-be-fought-in-cyberspace-says-Manohar-Parrikar/articleshow/49900372.cms> accessed as on 06/10/17

<sup>11</sup> <http://www.businesstoday.in/buzztop/mail-today-business/india-to-set-up-new-defence-unit-to-tackle-chinese-and-pakistani-hackers/story/247373.html> accessed as on 05/10/17

armed forces. The budgetary allocations earmarked on the capital account for the modernisation of the armed forces continues to be capitulated unless the government sets up a rolling, non-lapsable defence modernisation fund of approximately INR 1,00,000 crore under the Consolidated Fund of India. Cutting down on wasteful subsidies from which the people do not really benefit in a meaningful manner would be one way to spare more funds for national security.

Further, it is necessary to allocate appropriate amount of budget among the three wings, monitor the allocation and maintain a transparency to ensure better disbursement of monetary sources and minimal underutilisation of the fund.

**2. Modernisation of equipment:** The defence forces must utilise the manpower in its laboratories to promote research for advances in equipment, hardware, and technology. In order to effectively carry out surveillance and precision attacks, unmanned aerial vehicles and similar technologies must be introduced in large numbers. The Army also needs “**third generation**” **Night Vision Devices** (NVDs) for soldiers, night sights for rifles and night vision equipment for armoured and mechanised formations<sup>12</sup>. Such devices have longer lifespans and greater resolution and magnification capacity.

These practical steps would ensure that India meets the demands of the time, and is in continued possession of cutting-edge defence technology as a result of indigenous production by its defence industry.

**3. Efficient Procurement:** India has to streamline its procurement process, and increase domestic production of defence resources, in order to be self-sufficient and well equipped. So far, a majority of defence procurement is from government Ordnance Factories. For the ‘Buy (Indian Designed, Developed and Manufactured)’ model to be successful, it is important for the government to incentivise and ease business for private sector manufacturers, and give them equal opportunity to compete with the public sector units. Further, the proposed SPM requires greater clarity in order to be successful in spurring domestic production. It is still unclear whether the nomination of foreign manufacturer will be done by the strategic partner or pre-decided by the MoD. As noted before, the **49 per cent FDI cap** is a crucial requirement that may pose a challenge to bringing in foreign partners. Further, if the SPM process is governed by the DPP, it is likely to be a lengthy one, thereby diluting the efficiency of domestic production.

**4. Management of Special Operations Forces (SOF):** Given the growing trend of ‘surgical strikes’ in wars, the armed forces need to supervise and deploy its SOF to manage such threats. SOF currently needs to be integrated under a **‘Tri-services Command’**. The establishment of a Special Operations Command would go a long way in ensuring that India's SOF are organised, equipped and trained jointly to ensure their optimal utilization<sup>13</sup>.

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<sup>12</sup> <http://www.indiandefencereview.com/spotlights/indian-army-enhancing-night-capability/> accessed as on 05/10/17

<sup>13</sup> [http://www.orfonline.org/wp-content/uploads/2016/06/ORF\\_IssueBrief\\_150\\_SinhaBalakrishnan.pdf](http://www.orfonline.org/wp-content/uploads/2016/06/ORF_IssueBrief_150_SinhaBalakrishnan.pdf)

**5. Integration of Military Wings:** India recently introduced a Joint Doctrine for Armed Forces for greater synergy among the three wings of the defence forces. The aim of such a doctrine is to effectively deal with potential security threats. It includes concepts such as an '**Integrated Theatre Battle**', a nodal network for ensuring decisive victory and creating innovative strategies across the spectrum of conflict. Such efforts must be promoted and continued.

India, however, still does not have a Joint Chief of Staff across the three services to serve as a nodal officer with the MoD. Almost **65 countries** have adopted Joint Control models, including, most recently, China and Pakistan. Such a model improves logistical activities such as procurement, and also provides the armed forces with greater strategic and doctrinal clarity. First recommended by the Naresh Chandra Committee in 2012, the proposal was reiterated in 2016 by the Shekatkar Committee, which highlighted the need for a **four-star Chief of Defence Staff (CDS)**, who would be deputed to be a nodal adviser to the Defence Minister.

Further, with the increase in cyber attacks, there is also need for the creation of a **Cyber Command**, across all three wings, to ensure that dangers from all fronts are prevented. Most nations with strong military control now have cyber command centres, including USA and China.

## **5. The Way Forward**

From the above examination of the existing status of defence forces in the country, it is clear that organisation and administration are the need of the day. Even challenges such as equipment shortfalls can be overcome with improved policies and efficient management. India's military is one of the largest in the world, and with more structured and streamlined management, it can be in a better position to secure its territories and resources, both regionally and globally.

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