

The Influence of Strategic Culture on the Malaysian Armed Forces' Aspiration for Self-Reliant Capability Development

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DOI: <https://doi.org/10.47772/IJRISS.2026.100900126>

Received: 17 September 2026; Accepted: 22 September 2026; Published: 03 October 2026

ABSTRACT

The strategic culture in Malaysia as a product of its sea-based geography, colonial and post-colonial experiences, and multi-national identity translates into a defence strategy that emphasises sovereignty, maritime security, and nuanced diplomacy. Experiences like the British military pullout and self-reliant measures within the country have strengthened the preference for multilateral engagement and risk-averse, consensus-building policies aimed at minimising confrontation and protecting sea lines of communication (SLOC). This is an issue for which a policy answer is sought, as the policy of self-reliance in defence focuses on the production, maintenance and upgrading of military equipment, including selective foreign procurement, along with technology transfer and local sustainment and institutional capability development. Capability development focuses on dual-use industries, human capacity and doctrinal flexibility to apply new technologies and maintain operational autonomy. However, continuing difficulties have arisen, such as difficulties in achieving economies of scale, technological constraints, political-economic patronage that can negatively impact procurement processes, and disruptions in funding or policy guidance that can negatively affect the long-term maturation of industry. There are opportunities in legislative frameworks for putting local investment conditions upon foreign contracts, specialisation in niche products, research & development (R&D) in dual-use products, and enhancing methodological and institutional capabilities to ensure industry meets doctrinal needs. The relationship between strategic culture and self-reliance results in unique progress where strategic ends (autonomy, cohesion, maritime defence) are given by cultural imperatives and strategic means (industrial and managerial instruments) are used to build sustainable capabilities. The successful conversion of imports and international collaborations into enduring indigenous capabilities necessitates an adaptive and sovereign capability-building approach that addresses entrenched structural constraints and policy biases.

Keywords: Strategic Culture; Defence Self-Reliance; Capability Development; Defence Industrial Development; Malaysian Armed Forces

INTRODUCTION

Malaysia is a strategic country whose strategic culture is influenced by the geographical and historical context, religious beliefs, ethnic diversity and diplomatic practice. Interspersed with peninsular and insular regions, Malaysia's maritime environment focuses on defence priorities for coastal defence and seamless sea lines of communication (SLOC). Priorities of sovereignty and national unity, reinforced by historical experiences, colonial rule and episodes of internal and external insecurity, are driving forces across the federal consolidation. Economic strategies for resilience and domestic political discourses on cohesion are also shaped by ethnic diversity, comprising Malay, Chinese, Indian and indigenous communities. These elements combine to forge a tactical approach focused on careful risk management, maintenance of autonomy, and external engagement through consensus building. Malaysia has taken a cautious and non-confrontational approach, focusing on multilateral and Association of Southeast Asian Nations (ASEAN)-centred mechanisms to manage regional tensions and build confidence (Ministry of Defence Malaysia, 2019). It is an international balancing act that is as much a matter of domestic considerations as foreign pressures, a balancing act that attempts to influence the major powers and assert the country's own sovereignty. This philosophy means Malaysia is inclined to cooperate and settle disputes peacefully, instead

of unilateral coercion. One of the chief policy outcomes of this strategic culture is an emphasis on self-reliance in defence. Modernisation will be based on the protection of sovereignty, territorial integrity and economic security, and the National Defence Policy (NDP) will focus on confidence in the ability of the Malaysian Armed Forces (MAF) to defend the country (Ministry of Defence Malaysia, 2019). Self-reliance is sought in the development of defence industries that could manufacture, maintain and upgrade the country's defence equipment, institutional building up and investment in human resources. Industrial capability is regarded as part of national security and is being utilised as a fundamental thrust for sustaining the force's modernisation, as demonstrated by Malaysian industrial companies and state-owned entities that are involved in aerospace maintenance and aerospace equipment production (Ministry of Defence Malaysia, 2026).

This paper will examine the relationship between Malaysia's strategic culture and its self-reliance aspirations. It will examine the history and normativity of Malaysia's strategic perspective and the influence of geography on threat perceptions and policy preferences. Next, it covers the development of defence industrial policy and its institutionalisation in the promotion of defence capability through indigenous manufacturers, and examines the important defence industry initiatives and procurement decisions based on defence self-reliance. The paper suggests that the path towards defence capability modernisation in Malaysia is neither rhetorical nor simply an extension of the diplomacy pursued by the government, but measured, accompanied by a strong focus on increasing domestic competence and aimed at ensuring autonomy and resilience in its strategic culture.

LITERATURE REVIEW

Conceptualising Strategic Culture

Strategic culture can be considered as institutionalised values, attitudes, behavioural patterns, achievements, and historical experiences that are observable and systematically influence a state's policymaking (Bitzinger, 2015). These continuities give rise to fairly persistent attitudes towards threat perception, objective prioritisation and policy instrument selection, yet provide for adaptation in times of change to political conditions. Strategic culture can often be described as 'enduring', but strategic culture can change over shorter periods if the nation's priorities or leadership preferences lead to a change in the interpretive frameworks that are available to the national policymakers. A comparative analysis of United States (U.S.) policy documents reveals that from 2002 to 2010, there was a significant shift from a preemptive, unilateral and hard-power approach to an emphasis on prevention, deterrence, diplomacy, conflict stabilisation and enhanced use of soft-power tools (Zhao, 2025). As this case demonstrates, change is not just a question of reshifted emphasis within the doctrine, elite discourses and institutional interest; it does not suggest a lack of underlying cultural foundations.

History and society values play an important role in the conceptualisation of strategic culture, since they give preferences and constraints to strategic decisions. Malaysia is a maritime state with a culture of vigilance over the conduct of foreign actors at home and a collaborative security approach in the area, and its plural society informs an external policy that has an inquisitive or consensus-seeking approach to relations with foreign powers, as opposed to a confrontational one (Saravanamuttu et al., 2023). Analysing strategic culture in practice therefore demands knowledge of multiple, interacting layers of strategic culture: historical experience, social norms and values; prevailing political ideology, and leaders' and institutions' interpretative power. Current and past alignment between means and ends in a state's security policy are both elements of continuity and difference together; these layers provide a means of interpreting how milder or harsher environments can result in the same or divergent strategic options that were selected by a state, or in a state's decision to select them at all.

Understanding Self-Reliance in Defence

Self-reliance in defence refers to the ability of a state to meet its security requirements without relying too much on foreign military force or material support by producing, maintaining and utilising its own human and material resources (Dwivedi, 2025). It involves operational autonomy, the capacity to operate, sustain

capabilities, and act in the absence of external assistance, as well as the policy focus on building indigenous production, maintenance and technological capacities that create and sustain sovereignty and resilience. In Malaysia, the imperative for self-reliance was sharpened through various factors, including the wariness of strategic vulnerability; it was clear that the indigenous possession of defence capability was essential following the withdrawal of the British military forces in 1968. This historical event became a source of orientation to subsequent choices, including the formalisation of defence-industrial issues in the NDP and the inclusion of a Defence Industry Policy (DIP) in the Third Malaysia Plan in the early 1980s. They were designed to ensure that procurement, industrial promotion, and capability development are all working harmoniously towards increasing the ability to perform core defence functions, as well as to maintain, repair and overhaul, and to supply spares and make components under domestic control (Ministry of Defence Malaysia, 2026).

These targeted institutional arrangements and selected external partner interactions have been the means to operationalise these policies. Several key organisations are in charge of industry-defence relations, including the Malaysian Industry Council for Defence, Enforcement and Security (MIDES), and the Defence Industry Division (DIV) within the Ministry of Defence (MINDEF), as well as research institutions such as the Science and Technology Research Institute for Defence (STRIDE) to provide science and technology inputs into defence procurement and development. Private-sector participation, in the form of facilities, infrastructure and facilitation of technology transfer, has complemented state-led support in implementing the policy goals, which have resulted in the fielding of products and services. Lack of policy coherence between the science and technology institutions and priorities in defence sectors, though, has been observed as a hurdle to translating Research & Development (R&D) into operationally acceptable equipment (Azmi et al., 2025). The Malaysian approach prioritises local production of strategic commodities and foreign purchasing of non-strategic commodities, if economically viable. Access to advanced technologies and markets is gained through cooperative ventures and selective foreign partnerships while maintaining autonomy on critical capabilities. Institutional oversight is to ensure that industrial output can meet the operational needs as expressed by the NDP. Malaysia still has ongoing work to integrate scientific institutions more cohesively with defence objectives to boost its self-sufficiency and exports. Strategic culture and historical experience still dictate Malaysia's preference in pursuing self-reliance when and how, as industrial capability continues to be a strategic security decision as well as an economic undertaking (Asmanur, 2025).

Interlinkages Between Strategic Culture and Self-Reliance

The connection between strategic culture and self-reliance in defence policy lies in the influence of long-term values and historical experience on the national priorities in developing and purchasing capabilities. Where sovereignty preservation matters in strategic culture, self-reliance is not just a practical organising principle but also a norm, with a view on the part of policymakers that self-reliance is preferable in anticipation of potential disruptions in the supply of others and retention of key capabilities (Mbithi et al., 2024). This preference is reflected in its procurement decisions, its organisation, and the institutionalisation of domestic defence industry positions in the defence establishment. These cultural predispositions come into contact with managerial logics and outsourcing practices. With efficiency signifying cost savings, decision-making has become more efficient and performance-based contracting has encouraged governments to move away from simply contracting with industry and toward the industry becoming an integral part of capability sustainability. The challenge of how long-term solutions can fit in with self-reliant goals can be met with, for instance, managerial approaches like Contractor Logistics Support (CLS) or Performance-Based Logistics (PBL) that introduce sustainment responsibilities in the home countries (Malarvizhi et al., 2021). Meanwhile, outsourcing is done based on sovereign considerations; contracting out will be attempted, as long as it does not reduce national sovereignty over key technologies and operating capabilities.

This interlinkage thus has at its core industrial participation. Strategic cultures valuing autonomy encourage those initiatives and policies that aim to mobilise domestic industrial bases by means of production, maintenance and technology development to respond to the national defence requirements. This results in

the creation of mutual dependence in which government policies are biased towards retaining key functions domestically, and industry demands long-term contracts, so that they justify capability investment (Fiott, 2024). Such dynamics minimise exposure to outside political pressures and enable continuity in capability development where not everything is state-owned in explicit terms of functions. These relations are also mediated by the dynamics of civil-military interaction, as well as changes in strategic posture and strategic context. Military-technical knowledge is increasingly specialised, and key actors in turn can shape the demand for in-country high-tech capabilities, thereby solidifying self-reliant procurement channels. Managerialism thus functions alongside cultural imperatives, offering an approach to organising and contracting sustainment and strategic culture an impetus to prefer domestic control. Overall, strategic culture addresses the 'why' of autonomy, while managerial and outsourcing logics, with their respective industrial participation, represent the 'means' by which autonomy can serve as a mechanism for the self-reliance of an industry in the long term (Balakrishnan & Johar, 2023).

Historical Context of MAF Capability Development

The background of the defence orientations of Malaysia before independence is dominated by the geopolitical position of the country, which sits on the current international trade route, the Strait of Malacca, which influences the military thinking of Malaysian states since the pre-independence era. Other maritime kingdoms, including the Malacca Sultanate and Langkasuka, took advantage of this to control trade in the region, and the wealth of those ports turned the entire peninsula into a desirable spot occupied by the Europeans. With either Portuguese or Dutch, and eventually British rule, colonial military concerns were overlaid on local practice, focusing on maritime control, protection of ports and shipping lanes vital to imperial trade (Permal & Moorthy, 2024). British rule saw the inclusion of defence infrastructure, bases and garrisons and coastal fortifications into larger imperial defence networks for the securing of SLOC, and not as a national defence standing on their own. This orientation entrenched the focus on chokepoints like the Strait of Malacca and bequeathed a set of institutional arrangements, training regiments and procurement frameworks to the fledgling Malaysian state. Britain's withdrawal from Malaya in 1957, followed by the addition of Borneo territories in 1963 to form Malaysia, took place in a context of continuity, in which organisational models following the pattern of the Commonwealth, equipment and doctrine are still related to British practice, and strategic considerations remain focused primarily on maritime lines of approach (Setiawan & Padilla, 2025). Not long into the post-colonial period, these inherited institutions started to accommodate national needs. The need to defend the territorial borders and the need to assert sovereign control of the maritime space were accelerated due to territorial contestations, especially those that occurred during the Confrontation (1963-1966) with Indonesia. Meanwhile, Malaysia's relations with Britain and Cold War influences shaped its orientation towards relying on Western security structures, notably the Five Power Defence Arrangements (FPDA) for collective security, and at the same time, ensured interoperability and interdependence with allied forces (Mejino & Wolff, 2026). To sum up, before and after independence, the defence foundations of Malaysia show a need for continuity of policy, starting from the well-known pre-independent era of sea power, to the colonial defence arrangements in the Pacific Ocean, onwards to the early independent posture, which was a combination of the inherited British structure with the emerging national priorities. In this era, geography, control of sea approaches and chokepoints, remained the dominant determinant shaping the practice and institutional development.

Since post-independence, Malaysia strengthened its military within a political framework for many years, ruled by the government under the umbrella of the nation's governance coalition. Such a one-party-dominated set-up led to parliamentary stability and the facade of multi-ethnic representation via alliances with the Malay, Chinese and Indian political parties. This centrality of power was connected with extensive patron-client networks where political favour was often instrumental in securing high-ranking echelons within the bureaucracy and business, and thus influence in the procurement of defence and the focus of military capability development. Procurement decisions were influenced by more than operational requirements because political-economic elites also influenced decisions about the defence industry. Defence modernisation was linked to overall policies of economic patronage and state-led development, forming a network of government-linked companies and business elites who were often in a favourable position to provide equipment, services, or offset arrangements (Kania, 2024). This meant there was

frequently a bias for continuity and predictability in the capability planning process, as the process also produced a bias toward opacity and against the inclusion of a large number of actors in capability deliberations. From an institutional standpoint, defence policy was institutionalised through the Westminster-style parliamentary arrangements that existed in Malaysia. Formal channels were established for the review of defence bills, budgets and reports, with cabinet ministers going through parliament and being held accountable by parliament. These set-ups allowed for a more central decision-making process and allowed the executive to merge defence concerns into the overall country policy recommendations. As for the development of defence capability, the policy environment in Malaysia with the emergence of post-independence is a combination of political control, economic networks based on the political control system, and Westminster institutional forms, which enables the development to be planned in political-economic ententes (Permal & Moorthy, 2024). The circumstances foster continuity and autonomy in the equation of defence and strategic choices, and restrict pluralistic challenge against defence procurement and priorities.

Key Historical Influences On Capability Development

In examining the MAF capability development, one can see the historical influences which shaped and moulded the capability-building policy over a long time. Comparative cases can provide succinct lessons that shed some light on Malaysia's choices. The repeated experiences of invasion and betrayal throughout its history left Russia with a strategic disposition characterised by a profound distrust of outsiders and a reliance on self-reliance in its ability to defend itself (Savitri, 2023). In addition, capability choices are guided by leadership-mediated cultural tenets. Political authorities need to make choices between ambitious goals and limited direct effects; instances where they make such choices and where the intentions are expansive, while the means are restrictive, illustrate how strategic culture translates preferences into concrete procurement and deployment patterns. The United States (U.S.) experience of supporting external conflicts without committing significant amounts of troops is an example of how elite decision-making processes can yield enduring trends of capability and risk management, in this instance, those of the U.S. military, in the name of prevailing cultural principles (Mfodwo et al., 2026).

An accompanying but related enabler is institutional trust in technology. Military cultures that prefer to focus on technological answers do tend to push for the procurement of the newest systems, training focus, and budget distribution in a virtuous circle involving the inclusion and harnessing of cutting-edge technology. This is an orientation that not only influences the structure of forces, but also the industrial policy and supplier relationships, thus shaping the technological habitus of the armed forces in the long-term investments (Koroshchupov, 2022). Hence, these comparative themes are of interest to Malaysia. The country's capability development cannot be interpreted as only being a reaction to current operational needs, but rather also as influenced by its memories of colonial inheritance, leadership stories and institutional dispositions for specific force-modernisation trajectories. Understanding the interplay between distrust, leadership framing, and technology orientation can shed light on the role that some procurement decisions, domestic industry linkages, and doctrinal choices have in surviving through planning cycles. This view allows for analysts and policymakers to see capability development as an outcome of longstanding, cumulative cultural narratives and institutions rather than as merely periodic threat assessments.

Geopolitical and Security Environment of Malaysia

Malaysia's regional geopolitical approach can be attributed to its maritime geography, which is its location astride the Strait of Malacca and its proximity to the South China Sea (SCS). The Malacca Strait is a chokepoint that is very important to the world, as it is important to the Malaysian economy and security, as a large volume of commercial shipping transits the region (Permal & Moorthy, 2024). The narrowness of the strait has spurred defence planning and cooperative security with other regional partners to ensure secure passage can flow through, free from piracy, trafficking or confrontation between states. Malaysia has overlapping territorial claims in the SCS, which also form overlapping claims of maritime zones that affect fisheries and hydrocarbon resources in Malaysia's Exclusive Economic Zone (EEZ). Malaysia has rich oil and gas reserves that support the revenues of the nation, and resource protection is a fundamental element of the Malaysian strategy. Meanwhile, vigorous claims by the great powers have led to crowded seas, as Chinese maritime activity, both maritime and paramilitary, affects Malaysian strategic considerations, as

well as continual activities of the U.S. Navy grounded in competing claims in ‘contested waters’ (Zhou, 2023). This makes it important that Malaysia’s sovereignty and resources are guarded, and that it does not engage in confrontation with bigger powers. Malaysia’s strategic culture also inclines toward controlled diplomacy and legal means, bilateral claims and multilateral approaches based on the United Nations Convention on the Law of the Sea (UNCLOS), rather than unilateral escalation. However, ASEAN continues to play an important role as the structure to collectively manage maritime tensions and ensure confidence-building measures, norm development exercises, and cooperative mechanisms that can help reduce geopolitical tensions between the big players. Meanwhile, Malaysia is also pursuing selective bilateral cooperation with Australia and the U.S., along with several other nations as part of multilateral cooperation in the maritime field to boost maritime readiness and capability in monitoring and surveillance without compromising Malaysia’s position of being a non-allied state (CNA, 2026).

As years go by, the concept of environmental security is becoming more and more incorporated into the maritime strategies of Malaysia. Long-term resource productivity and resilience are in jeopardy as a result of coastal erosion, pollution, destructive fishing, and ecological degradation in contested and neighbouring waters. These environmental stresses can increase socio-economic factors of vulnerability and hinder sovereignty claims in the face of loss or degradation of the basis for fisheries and energy extraction. Malaysia therefore takes a combination approach that includes naval and law enforcement, as well as diplomatic approaches that aim at cooperative resource management, sustainable fisheries practices and regional environmental protection. Overall, Malaysia’s role in its region exemplifies regional geopolitics that are not about asserting sovereign rights over critical sea lanes or EEZ offshore resources, but about leveraging multilateral organisations such as ASEAN to help manage conflicts, while working with great powers pragmatically through bilateral relationships (Naguib & Yusof, 2025). All these decisions are influenced by an understanding that environmental degradation and maritime security are interlinked and reinforcing issues that must be addressed through an integrated approach to policymaking, which pushes the boundaries of their respective jurisdictions while ensuring the security and sustainability of the economic interests and the region at large. Malaysia’s strategic calculations are driven not only by regional affairs but also by big power strategies which affect expectations of burden-sharing and multilateralism. For instance, U.S. conceptions in East Asia have involved building networks of containment and contracting out allies to manage risks, thereby incorporating assumptions about allied burden-sharing which smaller states must consider when choosing how far to engage in collective security without over-committing resources (Kassim et al., 2024). Multilateral forums then become attractive platforms for Malaysia to seek security goals through coalitions which spread the risk beyond any one nation, and promote strategic autonomy. One of the most salient transnational trends that poses a direct challenge for Malaysia is the industry and outsourcing influences on defence policy. Models of capability acquisition with major powers are facilitated for continued engagement with private industry for capability development, maintenance work and contracted services. Strong industry lobbying, weak legislative governance, and limited citizen and critical civil society voices have allowed the persistence of reliance on contractors and resulted in institutional resistance to change in the U.S. and United Kingdom (UK) contexts (Zhou, 2023). Joint exercises, supply chains, and partnership programmes could expose Malaysia to these models, which can also result in a normalisation of outsourcing as a pragmatic solution to resource constraints, but at the same time, import practices of governance and accountability that might not be suitable for Malaysia’s priorities.

Adding to the filtering are the technological and doctrinal norms issued by great powers and fed into Malaysian planning. The focus on high tech comes from service guidance within the U.S. and influences the procurement agenda as well as training and education, leading to modernisation strategies that emphasise ‘force-multiplying’ platforms, but raise concerns about sustainment and interoperability. Malaysian policymakers will need to consider how such a combination of economic and capability objectives can be achieved, drawing on examples of state-led industrial alignment with defence objectives overseas (Radakrishnan, 2025). Lastly, as preferences and doctrines can be non-linearly reconfigured by global shocks and changing professional norms, external events and alliances often trigger sudden, doctrinal changes that affect Malaysia through its experience of shared operational environments and through political debates. Overall, Malaysia is implementing a framework that places heavy emphasis on preserving sovereignty and sovereignty-oriented interpretative contexts as its underlying ethos, while coping with

major-power burden-sharing proposals, industry-led outsourcing, and high-tech doctrinal norms by emphasising autonomy, stability, and calibrated engagement in bilateral and multilateral engagement.

METHODOLOGY

The research method used in this study is qualitative research, which was used to find out how strategic culture and self-reliance affect the capability development of the MAF. The qualitative approach was chosen since it allows in-depth understanding of the experience, perception and perspective of key actors who are engaged in defence planning and capability development. Semi-structured interviews are a commonly used technique that can be used to gain detailed insights into a person's attitudes toward an issue while exploring its context and complexity (Braun & Clarke, 2024). The data were gathered from a sample of secondary parties selected purposively from senior military officers, defence policymakers, defence industry representatives and defence and security experts who were interviewed using semi-structured interview techniques. The participants were selected for their knowledge and experience around three core areas of defence capability development, defence procurement and strategic policy formulation. The interview data were transcribed and analysed thematically using the guidance of Braun and Clarke's thematic analysis method. Thematic analysis is a systematic method for identifying and analysing themes and patterns in qualitative data (Braun & Clarke, 2025). The analysis included familiarisation with the data, coding, development of themes, review of the themes and interpretation of findings. Several steps were taken to enhance the credibility of the results, such as member checking, an audit trail, and researcher reflexivity. The use of these procedures added to the credibility, dependability, confirmability and transferability of the study. Ethical practices were followed during the research process, such as informed consent, voluntary participation, confidentiality and protection of participants' identities.

FINDINGS

Self-Reliance in Malaysia's Defence Policy

Economic and industrial capacity is the critical base for the defence policy of self-reliance goals. One of the periodic issues that confronts any state interested in indigenous arms production is a series of structural factors that influence the production potential and its operational viability (Balakrishnan et al., 2024). Notably, these include weak political stability, lack of economies of scale and scope for smaller producers, and technology gaps and limitations around certain subsystems and skilled workers. Political fragmentation and a constant shift in government priorities result in short-term initiatives, short-term planning and lower confidence levels on the part of the investor. Industrial programmes lack continuity and fail to develop into mature, reliable 'capability bases' without ongoing guidance. The inability to cope with scale is a problem for third-tier producers or states that have a small domestic market. The increased costs of research, development and production of competitive weapon systems are often not offset by limited export possibilities and low levels of domestic demand (Radakrishnan, 2025).

Those situations drive up unit costs, introduce inefficiencies and in some cases make foreign suppliers a necessity as opposed to a choice. Dependency is reinforced by technological gaps in microelectronics, propulsion systems, sensors and software, the omission of which makes it hard to sustain the supply chain, exposing it to shocks and political limitations, thus increasing capability asymmetries in the global arms market. The policy-making process is supported by clear conceptual boundaries. Self-sufficiency describes being capable of producing all the necessary military equipment or forces by one's own means, while domestic production, more specifically, means the production of equipment using domestic technologies that might, in the past, have been imported (Mohamed et al., 2024).

Understanding the difference between these concepts can help produce effective strategies that will respond to the immediate demand for production capacity (domestic production) and establish realistic, long-term autonomy goals (self-sufficiency). Domestic production for many states can be achieved by incremental technology transfer, localised assembly and by developing dual-use industries, which provides a more practical route toward self-sufficiency without the huge burden of going autarchic today (Radakrishnan,

2025). Practical policy responses emphasise political will, sectoral coordination and making the most of synergies in dual-use. Fixed costs of defence projects can be spread, and private participation can be attracted by integrating defence projects into broader industrial and commercial strategies to ensure skills pipelines. Long-term political backing is required to counter the effects of periodic political shifts, while there should also be investment to sustain the continuous renewal of skills, facilities and technology pipelines to keep up with the changes in doctrine and technology. These dynamics are illustrated in comparative examples. The evolution of dual-use industry connections and defence-sector commercialisation, such as the manufacture of ammunition and aircraft maintenance and repair (MRO), enabled companies to have both military and civilian clientele to stabilise the industry's revenue and innovation (Bitzinger & Raska, 2023). Both instances demonstrate how conscious selection of the policy orientation can overcome this limitation of size and technology, and build up the defence industry capacity.

Capability Development in the Malaysian Armed Forces

Modernisation is the effective programmes which pack industrialisation into its defence planning, set up institutional processes for identifying and capturing Transfer of Technology (TOT), and leave some doctrinal flexibility regarding the absorption of new capabilities. Contractor support can accelerate capability development by supplementing limited internal resources. Nevertheless, defence organisations must maintain sufficient in-house expertise to avoid overreliance on external providers and preserve control of core functions. Developing doctrinal and organisational agility is critical, as military forces gain the greatest advantage from new technologies when doctrine, command, and organisational structures can adapt quickly to change (Savitri, 2023). Agile logistics and sea-based manoeuvre are examples of operational concepts which involve technological and organisational integration to support expeditionary flexibility. Significant strategic culture and historical narratives intervene in these decisions and can limit or facilitate reform, a fact that needs to be taken into account when decisions are made with long-term industrial goals in mind (Mbithi et al., 2024). Practical lessons from international precedents can be taken for how Malaysia can strive for a calibrated and sovereignty-maintaining technological integration.

The utilisation of relatively inexpensive, indigenous Unmanned Aerial Vehicles (UAVs) also indirectly served as a force multiplier, as demonstrated by the development and implementation of these systems by the Israelis, who were able to provide real-time targeting, minimise political implications of aircrew, and enhance operational flexibility in the face of advanced defence systems (CNA, 2026). Meanwhile, the parallel process of developing combat planes of its own under the Lavi programme, while still buying capable platforms, the F-16, from abroad, exemplifies Israel's pragmatic approach to using technology, ensuring its own technological expertise is not lost, even when imported planes meet critical operational needs. South Korea's export-led industrialisation during Park Chung-hee's era exemplifies the complementary function of dual-use industry, where steel, electronics, shipbuilding and other investments laid the foundation of materials and skills which enabled the development of armoured vehicles, artillery systems and other defence equipment (Min, 2026). In Malaysia's smaller-scale situation, state-led agencies that integrate reverse engineering with indigenous R&D were able to scale to a continuous increase in defence capability. The two cases above suggest three priorities for Malaysia. First, support economically indigenous systems (unmanned and modular) to enhance deterrence with low political risk. Second, allow for some foreign purchases in areas of immediate need whilst ineluctably investing in domestic programmes to preserve and broaden local skills. Third, let industrial policy dovetail with the creation of capacities (materials, electronics, shipbuilding) with dual uses, and institutional mechanisms for R&D while allowing civil industrial growth to create permanent defence dividends. These are all part of a collection of measures that enable Malaysia to not only effectively incorporate technology but also maintain long-term independence.

Operational Readiness and Sustainability

The MAF require a set of interconnected capabilities to ensure operational readiness and sustain a defence industry aligned with military doctrine. These include an interoperable and resilient logistics system, effective contractor management, adaptive doctrine capable of responding to unforeseen challenges, and a secure environment that supports sustained operations (Ministry of Defence Malaysia, 2026). When

industrial output is aligned with priority capabilities, maintenance cycles, upgrade cycles and spares planning reflect operational concepts without the need for overspending and over-reliance on unpredictable Original Equipment Manufacturers (OEMs). However, this is an industrial-doctrinal fit that can also allow for a gradual modernisation with a minimum capability gap. Networked logistics, integrating military, interagency, multinational, commercial, and nongovernmental nodes, improves deployment and sustainment visibility and responsiveness when adapted for the defence of national command prerogatives and information security (Ministry of Defence Malaysia, 2019). Role, clearance and command interfaces need to be carefully specified to ensure that contractors add value and do not reduce operational pace when the operational concept has a contractor involvement component.

Dwivedi (2025) argued that doctrinal, organisational, cognitive and technological flexibility is essential, as this more easily allows them to react to technological surprise and changing threats by shortening the decision and adaptation cycle. Apart from that, environmental security is connected with sustainment; degradation of maritime and coastal ecosystems affects the economic foundation that is responsible for sustaining and modernising the long-term force, and therefore, environmental security should be part and parcel of ensuring operational readiness (Min, 2026). These mechanisms, when combined, including industrial alignment with doctrinal needs, interoperable logistics networks, structured contractor integration, doctrinal adaptability, and environmental stewardship, together comprise a holistic approach to sustainment that can be shaped to help realise Malaysia's strategic vision of sovereignty and self-reliance. This is particularly necessary when they are embedded within a locally controlled institution that can adapt to threat dynamics and technology, thus ensuring a credible and sustainable defence posture across various scenarios.

Challenges and Opportunities in Balancing Strategic Culture and Self-Reliance

There are intertwined strategic, economic, technological and institutional issues that must be addressed in defence policy decisions seeking to balance strategic culture and self-reliance. Long-term industrial programmes can be broken off by politically motivated changes or fluctuations in priorities, thus stalling the programme's ability to impact the operational capability needed to achieve the desired result. It is a problem especially in states with a small domestic market, where weapons engineering lacks economies of scale due to its high fixed costs, and individual domestic production is still economically unviable except in the presence of a stable market for its products, in terms of procurement or export volumes (Min, 2026). Logistical challenges may necessitate temporary reliance on foreign defence systems to satisfy urgent operational requirements. Nevertheless, sustained dependence on external suppliers can impede the growth of indigenous capabilities and weaken defence self-reliance. Technological bottlenecks, access to advanced manufacturing processes upfront, some key component designs, and access to skilled labour are elements that entrench dependency in the supply chain and increase the unit price for smaller manufacturers, which further encourages behaviour of foreign acquisition (Savitri, 2023). These pressures are reinforced by institutional issues such as discontinuous funding cycles, weak legislative protections for technology transfer, and fragmented governance that destroy the industrial base, reducing human capital needed for self-reliance.

Capability delivery is likely to be quicker if too dependent on the outside provider or provider of surge capacity, yet the risk is that in the event of future political or strategic changes, adaptation may be required, resulting in a lack of local capability (Mejino & Wolff, 2026). However, there are clear opportunities to be identified in aligning strategic culture to sustainable self-reliance, in spite of these challenges. Industrial strategies that prioritise long-term purchase obligations, targeted investment in research and development and support for niche specialisations can boost the economies of scale and minimise the unit costs. Legislative measures supporting large foreign purchases contractually linked to direct indigenous investments and technology transfers implement capability building into imports, so that it enhances domestic industries without compromising the need for acquisition. Equally important are doctrinal and organisational measures, because flexible adaptation frameworks and modular integration approaches enable armed forces and industry to co-develop solutions, ensuring the relevance of the solutions in operation and maintaining the competency of the local industry in developing solutions (Fiott, 2024). To sum up, the balance between maintaining sovereign strategic culture and achieving effective self-reliance requires

careful management of political and financial support, resolving technological constraints through policy intervention, and integrating industrial, offset and technology transfer; and doctrinal flexibility as a bridging mechanism to lift imports, but not partnerships, into lasting local capacity.

CONCLUSION

Malaysia remains a maritime country, in both its geography and strategic culture, which are writ large in the country's history as a result of colonialism and a plural domestic polity, where choices in defence tend to be guided by sovereignty protection, maritime security and calibrated diplomacy. These cultural stances account for multilateral engagement through ASEAN channels and selective bilateral cooperation, as well as for persistent local investments in industrial aspects of maintenance and sustainment and dual-use, all as manifestations of its operational autonomy. It demonstrates that the security and command structures within the industry, producing military output for doctrinal need, and safeguarding maritime environments are mutually reinforcing factors that enable readiness and uphold national identity and experience.

Building the foundation for durable self-reliance depends upon consolidated political support, better methods and institutional capacity, as well as deliberate industrial policy based on niche specialisation and conditional technology-transfer agreements to bypass technological and scale barriers. Selective foreign acquisitions can be transformed into long-term, domestic competence without giving up sovereign control by using long-term procurement commitments, dual-use R&D support and inclusive coalition mechanisms amongst state, military and industry participants. Whether Malaysia's trajectory will result in a resilient path of capability development that is sovereign-indigenous depends on addressing the discontinuities of funding and governance and maintaining doctrinal flexibility to accommodate technological change.

RECOMMENDATIONS

Based on the results of this study, several recommendations are provided to enhance the capability development of MAF by incorporating the concept of strategic culture and self-reliance. MINDEF and the MAF must institutionalise strategic culture as an important parameter for defence planning and capability building. A coherent and sustainable capability planning will be achieved by having a clear understanding of Malaysia's strategic environment, national interests, past experiences and defence priorities. Therefore, strategic culture should be integrated into military education, the professional military development programme and strategic decision-making processes. Second, it is necessary to improve the defence self-reliance of the country, instead of relying on foreign suppliers, and make it more strategic. This can be done either through indigenous R&D promotion, more local defence industrial participation and technology transfer from strategic partnerships. Improved domestic defence industrial capability will help sustain capability and readiness over the long term.

Third, the MAF, government, academia and defence industry need to cooperate more closely to establish a strong defence innovation ecosystem. This could help with the sharing of information; the development of capabilities; human capital building; and the implementation of new technologies that help meet the needs of the future force. Lastly, defence procurement policies should be aligned with the objective of national self-reliance by emphasising local content development, industrial participation programs and capability-based acquisitions. This would not only help the development of the Malaysian defence industry but would also make the country more capable of maintaining and sustaining the critical military capabilities on its own. Taken together, these recommendations can assist Malaysia's policymakers and defence planners to improve the country's military preparedness, strategic autonomy, and military capability development in the evolving security landscape in Malaysia.

ACKNOWLEDGMENTS

The author would like to extend sincere gratitude to MAF for assisting in the preparation of data collection for the completion of this study.

REFERENCES

1. Asmanur, O., Saudi, N. S. M., Baker, R., & Saudi, M. H. M. (2025). From security to sustainability: Human capital development and the economic future of Malaysia's defence industry. *International Journal of Law, Government and Communication*, 10(42), 56–72. <https://doi.org/10.35631/IJLGC.1042005>
2. Azmi, F. R., Sukri, N. M., Mahmud, N., Sundram, V. P. K., Hasbullah, N. N., & Musa, H. (2025). Resilient Supply Chains in Malaysia's Manufacturing Sector: A Comparative Analysis of Priority Industries Affected by COVID-19. *Paper Asia*, 41(4), 95–107. <https://doi.org/10.59953/paperasia.v41i4b.557>
3. Bahari, M. Z., Abdul Batau, M. F., Pakeer Mohamed, A. S., Md Ladin, M. R., & Sulaiman, S. H. H. (2025). Achieving the defence self-reliance principle: Challenges and strategies for the defence industry in Malaysia. *Malaysian Journal of Social Sciences and Humanities*, 10(4), e003379. <https://doi.org/10.47405/mjssh.v10i4.3379>
4. Balakrishnan, K., Badia, K., & Subramaniam, A. (2024). Strengthening Human Capability Through Defence Offset and Industrial Collaboration Resources. *Defence S and T Technical Bulletin*, 17(2), 217–235. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-105021117987&partnerID=40&md5=2892b325bb801f93b6de42e435b7800c>
5. Balakrishnan, K., & Johar, T. N. (2023). The Role of Stakeholders in Managing Government Research and Development Funding for Defence Industrial Innovation: The Case of Malaysia. *Defence and Peace Economics*, 34(8), 1110–1129. <https://doi.org/10.1080/10242694.2022.2100588>
6. Bitzinger, R. A. (2015). Defence industries in Asia and the technonationalist impulse. *Contemporary Security Policy*, 36(3), 453–472.
7. Bitzinger, R. A., & Raska, M. (2023). *The AI wave in defence innovation: Assessing military artificial intelligence strategies, capabilities, and trajectories*. Routledge.
8. Braun, V., & Clarke, V. (2024). A critical review of the reporting of reflexive thematic analysis in Health Promotion International. *Health Promotion International*, 39(3), daae049. <https://doi.org/10.1093/heapro/daae049>
9. Braun, V., & Clarke, V. (2025). Reporting guidelines for qualitative research: A values-based approach. *Qualitative Research in Psychology*, 22(2), 399–438. <https://doi.org/10.1080/14780887.2024.2382244>
10. CNA. (2026, January 23). 'Kamikaze drones', laser systems: Malaysia to boost defence industry amid 'uncertain security realities'. The new National Defence Industry Policy aims to reduce Malaysia's reliance on foreign security and defence technology and bolster long-term domestic industrial capacity. Channel NewsAsia. <https://www.channelnewsasia.com/asia/kamikaze-drones-malaysia-boost-defence-industry-5878591>
11. Dwivedi, G. G. (2025). India's quest for self-reliance in defence sector: Reality check, challenges and way ahead. *Journal of Defence Studies*, 19(3), 54–72.
12. Fiott, D. (2024). Defence industrial readiness in Europe: Challenges and opportunities. European Union Institute for Security Studies.
13. Kania, E. B. (2024). Defence innovation ecosystems and military modernisation. *Journal of Strategic Studies*.
14. Kassim, Z., Suhaimi, Z. S., Subramaniam, S. A., Zahari, H. M., & Yahaya, M. N. (2024). Military spending and spillover effect on social welfare. *Environment and Social Psychology*, 9(2). <https://doi.org/10.54517/esp.v9i2.1990>
15. Koroshchupov, V. O. (2022). Some Aspects of European Defence Industry Development. *World Economy and International Relations*, 66(12), 98–107. <https://doi.org/10.20542/0131-2227-2022-66-12-98-107>
16. Malarvizhi, C. N. A., Manzoor, S. R., & Jayashree, S. (2021). Malaysia–Japan Defence Industry Collaboration Prospects: Rejuvenation of the Look East Policy (LEP). In *Eurasian Studies in Business and Economics* (Vol. 18, pp. 121–131). Springer Science and Business Media B.V. https://doi.org/10.1007/978-3-030-71869-5_8

17. Mbithi, E. W., Munyi, D. E., & Onyango, D. R. (2024). Influence of strategic culture on national security: The Kenya experience from 1963 to 2023. *International Journal for Multidisciplinary Research (IJFMR)*, 6(3). <http://www.ijfmr.com>
18. Mejino-Lpez, J., & Wolff, G. B. (2026). Europe's dependence on U.S. foreign military sales: evidence for policymakers from a new database. *Defence and Peace Economics*. <https://doi.org/10.1080/10242694.2026.2647243>
19. Mfodwo, E., Lanka, P., Aydogan, A. F., & Varol, C. (2026). Uncovering the Security Landscape of Maritime Software-Defined Radios: A Threat Modelling Perspective. *Applied Sciences (Switzerland)*, 16(2). <https://doi.org/10.3390/app16020813>
20. Min, I. J. (2026). Building indigenous defence industries in technologically third-tier countries: The cases of South Korea, Israel and Poland. University of St Andrews. <https://doi.org/10.17630/sta/1507>
21. Ministry of Defence Malaysia. (2019). Defence white paper (DWP). MINDEF, Malaysia. Defence White Paper
22. Ministry of Defence Malaysia. (2026). National defence industry policy (NDIP). MINDEF, Malaysia. National Defence Industry Policy
23. Mohamed, A. S. P., Batau, M. F. A., Ismail, S. E., & Ismail, M. F. (2024). Importance and significance of the self-reliance principle on the development of the Malaysian defence industry. *Environment-Behaviour Proceedings Journal*, 9(SI22). <https://doi.org/10.21834/e-bpj.v9iSI22.5891>
24. Naguib, R. M. K. A. R. M., & Yusof, D. M. (2025). Malaysia's Counter-Terrorism Strategy: A Top-Down Policy Analysis of Legislative, Rehabilitative, and Educational Approaches. *Intellectual Discourse*, 33, 229–253. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85217061089&partnerID=40&md5=a77204507bac575154ba1c0a59529280>
25. Permal, S., & Moorthy, R. (2024). Nuancing maritime security governance in the Straits of Malacca: A comparative analysis of Indonesia, Malaysia, and Singapore. *Jebat: Malaysian Journal of History, Politics & Strategic Studies*, 51(3). <https://doi.org/10.17576/jebat.2024.5103.02>
26. Radakrishnan, K. D. (2025). Malaysia's defence industrial base journey builds self-reliance, enhances readiness. *Indo-Pacific Defence Forum*.
27. Saravanamuttu, J., Mark, E., & Rayar, N. S. (2023). Malaysia's National Role Conceptions and Transitions of Foreign Policy From Tunku To Mahathir. *Kajian Malaysia*, 41(1), 21–42. <https://doi.org/10.21315/km2023.41.1.2>
28. Savitri, C. M. (2023). Go East or North? Recalibrating Defence Modernisation in a Post-Russia Southeast Asia. *Contemporary Southeast Asia*, 45(2), 166–192. <https://doi.org/10.1355/cs45-2b>
29. Setiawan, A., & Padilla, A. M. (2025). Addressing maritime security threats in the Malacca Strait: A Malaysian perspective. *Open Journal of Social Sciences*, 13(2), 333–359. <https://doi.org/10.4236/jss.2025.132021>
30. Zhao, X. (2025). Navigating the U.S.–China Rivalry: ASEAN's Position on Critical Mineral Resources. *Pacific Focus*, 40(3), 452–489. <https://doi.org/10.1111/pafo.70006>
31. Zhou, H. (2023). State Capacity and Leadership: Why Did China Take Off? *Chinese Economy*, 56(1), 50–68. <https://doi.org/10.1080/10971475.2022.2058183>