PAKISTAN ARMS PRODUCTION AND TRADE

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PAKISTAN -- ARMS PRODUCTION AND TRADE

Pakistan has made good progress in the field of arms production since 1951 when the first ordnance factory was inaugurated From a modest and rather slow beginning it has become self-sufficient in small arms and ammunition and has set up overhaul and rebuild facilities for aircraft and tanks If it is able to complete the on-going projects and implement the plans it has on the drawing board it will become an important producer and exporter of arms military hardware and defense-production technology in the Third World especially the Muslim world

We can identify two broad phases in the development of defense industry and arms production in Pakistan (i) 1947-48 to 1965-66 A modest beginning was made by setting up the first ordnance factory but the pace of modernization of this ordnance factory was slow and no other significant defense industrial venture was undertaken except the extension of the maintenance and service facilities for the three services The needs of arms and military hardware were met primarily by procuring these materials from external sources expecially the U S (ii) 1966-67 to the present Frantic efforts were made to make Pakistan as self sufficient as possible in arms production This awakening was due to the experience of the 1965 Indo-Pakistan war and the American arms embargo on South Asia The Government of Pakistan launched several projects of arms production and defense related industry in this period especially in the post-1971 period

We shall in the following pages examine the factors which shaped Pakistan's arms production and arms trade policy the nature and development of armament industry and the channels of acquisition of this technology

This study has one serious limitation There is hardly any data available on the output of defense industries over time the number of personnel working in these enterprises and major production problems Some information is released by the government in bits and pieces which is inadequate Unlike India the Ministry of Defense does not publish annual reports As the tradition of civilian supremacy over the military is extremely fragile in Pakistan the military authorities use the blanket of not in the interest of national security to refuse information on arms industry including data on their targets and achievements

FACTORS SHAPING ARMS PRODUCTION PROGRAM

(1) Security Considerations and Arms Embargoes

Pakistan's world-view is conditioned by a deep sense of insecurity dating back to 1947 when it came into existence as an independent and sovereign state One may talk about the discrepancies between the reality and the perceptions of the ruling elite One may also argue as several writers do that the ruling elite exaggerated the security threat to the state in order to consolidate their position vis-a-vis the counter-elite in the domestic political system The fact remains that the sense of insecurity was the single major factor which greatly shaped Pakistan's defense and security policies during the last 35-36 years

The hostile circumstances under which Pakistan came into being a series of disputes with India on the matters relating to the partition of the South Asian Sub-continent and on top of all this the first armed conflict between the two countries on Kashmir (1947-48) created a strong impression in Pakistan that India either wanted to undo Pakistan or turn it into a non-entity or a client state This set in motion a process whereby

India and Pakistan viewed each other as major adversaries Pakistan a small and weak state felt insecure vis-a-vis India [1] The subsequent developments especially the Rann of Kutch conflict (1965) [2] the Indo-Pakistan wars of 1965 [3] and 1971 [4] and the nuclear explosion by India in 1974 [5] reinforced Pakistan's insecurity syndrome

Pakistan's relations with Afghanistan have ranged from unfriendly to hostile because the Afghanistan Government laid claims on Pakistan's territory What perturbed Pakistan was that the Soviet Union openly supported Afghanistan's claim on Pakistani territory India also extended its blessings to the Afghan posture towards Pakistan Pakistan herefore felt extremely vulnerable to threats from India and Afghanistan

The Soviet military intervention in Afghanistan (December 1979) the intensification of the civil strife there and its spillover on Pakistan has multiplied Pakistan's already serious security concerns In view of the presence of the Soviet troops in Afghanistan their involvement in counter insurgency operations and the minimal prospects of their pull-out in the foreseeable future the Soviet Union has, for practical purposes reached the Durand Line (Pakistan-Afghanistan Border)

A state facing such a security dilemma was bound to give a high priority to the defense needs and requirements One aspect of defense needs was the provision of the required military hardware arms and equipment This could either be procured from sources outside the territorial boundaries of the state or manufactured indigenously Since Pakistan had no ordnance factory at the time of independence and received only a part of its share of military hardware belonging to the former British Indian Army it met its immediate needs by obtaining arms and ammunition from abroad Plans

were rushed to set up the first ordnance factory at Wah. Once it came into production, interest in setting up more defense industry waned. Modernization and expansion of the Wah ordnance factory was also slow.

The neglect of indigenous production of arms in the fifties was due to, inter alia, the availability of arms and military hardware, including the high performance aircraft, from the U.S. under regional security arrangements between the U.S. and Pakistan.[6] These arrangements enabled Pakistan to obtain the much needed economic and military assistance but it had negative implications for indigenous production of arms and other heavy military equipment. As Pakistan was getting arms in sufficient quantity, the expansion of arms industry received little attention.

What brought about a change in the policy on indigenous arms production were the 1965 Indo-Pakistan war and the U.S. decision to impose the first arms embargo on South Asia after the outbreak of this war. These two events could be described as a watershed in the development of indigenous armament industry in Pakistan. It was during these seventeen days of the war that Pakistan realized that the lack of developed armament industry could seriously undermine combat effectiveness. The three services of the Pakistan military, especially the Air Force, were almost entirely using American equipment. The embargo hurt them very hard. Many in Pakistan believe (including this author) that the cutting off of weapon supply contributed to Pakistan's acceptance of the U.N. sponsored cease-fire on September 23, 1965. A Pakistani writer remarked that the embargo 'had serious repercussions on Pakistan's defense capability and was one of the factors which contributed to its dismemberment in 1971.'[7] It had two major consequences for defense

policy First Pakistan embarked on a policy of diversification of sources of supply of weapons and military equipment We are not dealing with this issue in this study Second a high priority was assigned to de ense production in Pakistan so that reliance on external sources was minimized

The emphasis on indigenous defense production was reinforced when the U S refused to issue new licenses for the purchase of weapons in the U S after the resumption of military action in East Pakistan in March 1971 by the Pakistan Army Subsequently total embargo was enforced when another Indo-Pakistan war erupted in November-December 1971 After the conclusion of this war the programs for defense production were reviewed and expanded In other words the two wars and American embargoes proved catalyst for Pakistan's march on road to defense-weapons self sufficiency While commenting on domestic arms production trends in the Third World Stockholm International Peace Research Institute identified Pakistan as one of those states which greatly expanded their domestic arms production after being subjected to arms embargoes by their traditional suppliers of weapons [8]

(ii) Economic Considerations

The paucity of foreign exchange was another factor which compelled the political and the military elite to work towards acquiring as much self-sufficiency as possible in arms production The problem of shortage of foreign exchange became serious after the imposition of the first arms embargo by the U S (1965) In the past the U S provided military equipment either as aid or against loans which did not cause any foreign exchange problem After the 1965 embargo Pakistan purchased some weapons from Europe which involved cash payments in foreign exchange Later in 1966

and 1967 when the U S gradually eased embargo and agreed to sell non-lethal equipment and some spares of the equipment already supplied it did not return to the policy of military aid Pakistan was obliged to pay in cash for everything Similarly when the second arms embargo imposed in 1971 was lifted in February 1975 the U S applied the principle of 'cash and carry' for arms purchases in the U S [9] Pakistan had too limited foreign exchange resources to buy everything on cash payment Some of the friendly Arab states provided a reasonable amount of funds to Pakistan to obtain arms and military hardware in the period after the 1971 military debacle The Arab funds enabled Pakistan to overcome some of the immediate armament deficiencies but Pakistan could not permanently rely on this source In fact this was not meant to be a permament source of funds for the purchase of arms and equipment The leaders of the post-1971 Pakistan therefore devoted more attention than their predecessors towards building up defense industry

The expansion of the existing defense industry and the setting up of the new one was to cost a big sum including foreign exchange but in the long run it was to effect savings in foreign exchange The policy planners were also thinking that Pakistan would be able to earn some foreign exchange by supplying small weapons ammunition and related equipment to other Third World States especially the Muslim states

(iii) Industrial Development Considerations

The defense industry is seen as an integral part of the over-all efforts of industrialization and economic development of the country

In addition to contributing towards economic self sufficiency and effecting foreign exchange savings the organizational resources and technological know-how at their disposal makes the military the largest single pool of skilled manpower in a developing state While taking steps for indigenous production of arms and other material they contribute to the overall industrialization of the country in several ways First in certain fields they take the lead The private sector neither has the resources nor willingness to undertake such massive projects Second arms industry encourages a host of related industrial enterprises to develop which primarily supply some spares and ancillary defense equipment to the military With the passage of time a chain of industrial and semi-industrial concerns develops which serves the military as well as the civil Third once the defense related and defense industry takes off it also caters to the needs of the civil especially during the peace time Engineering and technical tools road building and construction equipment spare parts of various kinds, etc are supplied to the market by these industrial enterprises Fourth as the managerial and technical skills at the disposal of the military are also 'applicable to civilian enterprises [10] they not only make trained manpower available to the non-military public and private sector but also provide technical advice to erect new industry or expand and modernize the existing one Fifth defense industry like any other industry, is a useful source of employment for the qualified personnel skilled and non-skilled manpower These industrial complexes not only absorb ex-servicemen but also civilian manpower

(iv) Foreign Policy Considerations

The political elite and the military brass in Pakistan are also of the view that a well developed indigenous armament industry will be instrumental to achieving foreign policy objectives security against external threats not making combat effectiveness of the military totally dependent on arms purchases abroad self sufficiency economic and industrial development and the improvement of Pakistan's image and influence in the Third World (the Muslim world in general and the Middle East and the Gulf region in particular) by defense technology and arms transfers

Self sufficiency was the popular theme of Bhutto's government (1972-77) in the back-drop of efforts of the Third World leaders to rediscover and assert their identity in the international system This augured well with his theme of 'Myth of Independence' [11] need of political and economic self reliance in the Third World and the different demands put forward under the rubric of the New International Economic Order Economic self-sufficiency was regarded as key to the improvement of Pakistan's bargaining position in the regional and international systems The return of the military to power in July 1977 has not caused any change in Pakistan's drive for economic self sufficiency especially in the field of arms production

Pakistan sees itself as one of the potential sources of supply of a wide variety of small and medium arms and defense related technology to the Muslim world In order to assume this role Pakistan needs to extend and modernize its existing military-industrial facilities What inhibits such modernization is the shortage of capital especially foreign exchange to obtain high defense technology and the relevant skilled manpower

Pakistan has therefore been exploring the prospects of setting up joint defense industries with other Muslim countries In November 1975 Bhutto (Pakistan) Koruturk (Turkey) and the Shah of Iran agreed in principle to establish joint defense industries It was proposed that this industry would begin by producing light conventional weapons like rifles bazookas and missiles complementing the existing defense production in the three countries [12] Before any concrete step could be taken in this direction Bhutto lost power to the military (1977) and the Shah of Iran was overthrown (1979) The establishment of the Islamic Republic in Iran created an entirely new situation The whole question of cooperation with Iran will have to be taken up afresh once things settle down there which is not likely to be in the near future After the military take-over in Turkey (1960) the new Turkish head of state during his visit to Pakistan in 1981 and President General Zia-ul-Huq during his visit to Turkey in the same year reaffirmed their governments' intentions to extend cooperation in economic fields including defense production

Pakistan has also been trying to obtain cooperation of the Gulf kingdoms for setting up defense industries in Pakistan or in the Gulf states Some of these states (i e Saudi Arabia the U A E) are already investing their capital in Pakistan in different industrial enterprises Pakistan is also providing technical advice training and military personnel in advisory capacity and on active service to help reorganize and modernize the armed forces of some of these Gulf states Pakistan wants these states to invest their capital in arms industry Their rulers and princes on visits to Pakistan are invariably taken to the defense industrial complex at Wah

and the nearby places They show keen interest in Pakistan s defense industry and promise to look into the question of undertaking joint defense industrial projects but so far no Gulf state has actually invested in the defense sector of Pakistan Besides attracting their investment for new defense projects Pakistan also regards these states as its potential markets for arms and related material At the moment Pakistan has sold some small arms and spares to some of these Gulf states Jordan and Somalia The arms and spares sold to these countries were not in a large quantity It is hoped that Pakistan will engage in more arms trade on a regular basis in the future

THE POLICY MAKERS AND ARMS PRODUCTION

Since 1966-67 when Pakistan took arms and military hardware production very seriously it had four different governments One of these (Ayub Khan's government) was a civilianized-military regime which lasted up to 1969 Two regimes (Yahya Khan 1969-71 Zia-ul-Huq 1977 to the present) were military regimes The offices of Chief of Army Staff and head of government/state were combined and the country was run under martial law Only one government (Bhutto Dec 20 1971 to 1977) was civilian and elected

These governments assigned a high priority to defense production It was during the last couple of years of the Ayub regime that a strong realization dawned on his government that serious efforts for indigenous production of arms were needed to reduce reliance on external sources This regime sought Chinese help to set up new arms production enterprises to mark the beginning of a new phase in arms industry The Yahya regime could not make much innovation in the on-going defense production program because of the political crisis and civil war in East Pakistan (Bangladesh)

The two regimes (civilian government of Bhutto and the military government of General Zia-ul-Huq) which succeeded Yahya Khan made the most significant contribution to arms and military hardware production in Pakistan

The regimes of Bhutto and Zia-ul-Huq differed in their orientations The latter was a military government with a narrow support base The former was an elected government and enjoyed popular support during the major part of its life span Bhutto did humiliate the top brass of the military in the early days of his rule in order to reassert civilian supremacy over the military but he did not reverse the pattern of high defense expenditure and took personal interest in obtaining technical know-how machinery and funds from abroad to set up new defense industry and extend the existing facilities

A large number of projects completed in the late seventies and early eighties were initiated during Bhutto's[5] tenure His successor General Zia-ul-Huq was no less enthusiastic supporter of the idea of self sufficiency in defense production Not only the on-going projects were completed but several new projects were undertaken by the Zia regime

The policies promoting domestic arms industry enjoyed a widespread support amongst the military and political elite as well as the ordinary folks The perception of serious external threats to Pakistan and disappointments at the imposition of arms embargoes in 1965 and 1971 by the U S were widely shared in Pakistan These sentiments were further reinforced by the Carter Administration's political and economic pressures to dissuade Pakistan from purchasing a nuclear reprocessing plant from France All this inter alia shaped general orientations towards arms production The National Assembly (1965-69 1972-77) and the national press (1965-82) reflected

dissatisfaction and concern over the heavy reliance on external source for meeting with the requirements of military hardware and arms There were always repeated calls for securing independence from foreign suppliers by producing more arms and military equipment at home so that the supplier-country did not use its arms-transfers for extracting political concessions from the recipient

Therefore no matter whether a serving or retired General or a civilian elected leader was at the helm of affairs he felt committed to assigning a high priority to defense requirements and indigenous production of arms and military hardware The military especially those concerned with defense production did not have to do special lobbying for funds The governments were making available reasonable funds in foreign exchange and local currency for arms industry

By the time Pakistan embarked on an extensive program of defense production it had adopted non-alignment and bilateralism as the major planks of foreign policy It sought external cooperation (technology and funds) for defense production from diverse sources These included the People's Republic of China (PRC) France Sweden Italy and the Soviet Union Out of these countries the PRC contributed most towards building up Pakistan's defence production capacity The U S United kingdom and Federal Republic of Germany had provided technology and funds for defense industry in the first phase 1947-66 However there was no significant contribution of the U S and the U K towards the major arms production projects undertaken by Pakistan in the seventies and the early eighties

The U S and Pakistan entered a new phase of relationship in 1981-82 in the backdrop of the Soviet military intervention in Afghanistan The U S offered a package of arms sales and economic assistance worth about

$3 2 billion spread over the next five year 1982-87 The U S also agreed to sell F-16 aircraft to Pakistan [13] There is however no evidence to suggest that the U S will help Pakistan to improve indigenous production of military equipment The focus of the new Pak-U S deal (like the earlier deal) is on arms transfers rather than arms production In the fifties the arms supply from the U S had dampening effects on indigenous arms industry But now in view of the 1965 and 1971 experiences and many uncertainties about the Pak-U S package deal Pakistan will continue to pursue its present policy of securing maximum self sufficiency in arms production

ARMS INDUSTRY

As described earlier Pakistan did not inherit a single ordnance factory at the time of independence All the sixteen ordnance factories set up by the British were situated in what became independent India [14] Pakistan also inherited an extremely poor industrial infra-structure There was very little industry set up in the Punjab and the North West Frontier Province because these were the major recruiting areas for the British Indian Army Had the British worked towards the industrialization of these regions it would have been difficult to find young Punjabis and Pathans in such a large number readily available for the British Indian Army

Soon after independence steps were taken to set up the first ordnance complex at Wah a naval dockyard (dry as well as floating) at Karachi for repairing and refitting vessels The existing repair facilities for the Air Force were also extended and modernized Once the Wah Ordnance

Factory went into production of small arms and some spares no much attention was given to its modernization due to the paucity of resources and availability of military hardware from western sources

It was in the late sixties and the decade of the 1970s that Pakistan undertook defense production program in a systematic manner and entered many new areas of defense and defense related industry The new strides in this field comprised streamlining the direction and control of the defense production program enhancing the production capacity of the existing facilities setting up of new defense industry and boosting up the industry directly or indirectly relevant to arms production

The first major step in the field of indigenous production of arms after the 1965 Indo-Pakistan War was Pakistan's decision to secure Chinese cooperation to set up a new ordnance factory near Dacc - the first in East Pakistan It was meant to strengthen East Pakistan s defense and to meet the near unanimous demand in East Pakistan for an ordnance factory there This ordnance complex was commissioned in April 1970 [15] but 1' v ars later Pakistan lost this facility when East Pakistan (Bangladesh) became an independent state

A Defense Production Division headed by a Federal Secretary was set up in the Ministry of Defense in 1973 to streamline and encourage indigenous production of arms and ammunition A Defense Production Board under the supervision of Defense Production Division was assigned the task of looking after defense science organization ordnance factories and defense industry The military relies on its organizational attributes and skilled manpower for establishing maintaining and running defen c industrial projects It also hires a large number of scientists technocrats and labor from the civil

The ratio of the civil element in these industrial projects is not known The scientists and engineers associated with universities government or semi-government scientific organizations are also consulted or hired occasionally for certain specific assignments The services of foreign experts are obtained only at the time of transfer of new technology Once the initial phase is over they are replaced by their Pakistani counterparts because the guiding principle is the minimum reliance on foreign experts Pakistani engineers and scientists (civil as well as military) are sent abroad for training or they are given necessary training at the spot

The Wah ordnance complex was given close attention for its expansion and modernization Many new facilities including a new brass mill were added Three new ordnance factories were set up at Gadwar Sanjwal and Havalian - the vicinity of Wah [16] By mid-seventies the Wah complex was producing anti-tank weapons G-3 rifles machine guns recoilless rifles mortars most ammunition shells and other small arms It was also producing engineering goods steel castings for deep-well pumps sulphuric and nitrate acids and spare parts of engineering equipment for use by other industry in the public and private sector It also made available to other industrial concerns machine shops and other facilities and expertise to fabricate complex chemical plants and for other engineering jobs [17] The Machine Tools Factory at Landi (Karachi) was also modernized It produced several types of defense related equipment and small arms The Communication and Electronic Industry at Haripur (Hazara) manufactured communication equipment i e telephone wireless sets and related communication and electronic material

Pakistan Aeronautical Complex set up at Kamra nearly 70 miles north of the federal capital houses three industrial projects These are the

Mirage Rebuild Factory the F-6 Rebuild Factory and the Light-Trainer Aircraft Manufacture Factory

The Mirage Rebuild factory commissioned in May 1978 is the first major aeronautical project undertaken in Pakistan Technology is provided by France but the planning and execution of the work was done by Pakistan Air Force Engineers and other civil technicians It is equipped to overhaul airframes and engines and reassemble Mirage aircraft The availability of these facilities in Pakistan means that the Mirage aircraft of the Pakistan Air Force will not be sent to France for overhaul thereby saving time and foreign exchange [18] The first Mirage aircraft was overhauled and airtested in December 1979 Pakistan is planning to offer overhaul facilities to those Middle Eastern states which have acquired or will acquire Mirages from France in the future Unless Pakistan can demonstrate that the efficiency and quality of its overhaul facility is no less than what France provides the Middle Eastern states will be reluctant to make use of the overhaul facilities in Pakistan Once this credibility is established it will be possible to attract clients from the Middle East

The Rebuild and overhaul factory for the Chinese F-6 aircraft has been set up with Chinese technical and financial help in a period of three years The work on this project was resumed in 1977 and it was commissioned in November 1980 In addition to overhauling and rebuilding facilities, it can manufacture a large number of spare parts of F-6 aircraft [19] In the past F-6 aircraft needing overhaul were dismantled and sent to China by sea This process including their return, reassembly and test flight in Pakistan took twelve to eighteen months Now with these facilities available

in Pakistan the time needed for overhauling rebuilding and return of the aircraft to the Air Force will be about six months

The third project at Pakistan Aeronautical complex pertains to the manufacture of a light trainer aircraft named mushaak which is of Swedish design These Swedish light aircraft are in the use of the Air Force and the Army [20] In addition to supplying this light aircraft to the Pakistan military the authorities want to sell this aircraft to other Third World states They are however finding it difficult to secure an international market for Mushaak As a result the production program of this aircraft is now under review--whether its production should be continued or some superior aircraft should be produced? There are also plans to add a RADAR rebuild factory to the aeronautical complex One ultimat goal of the Pakistan Aeronautical Complex is to produce sophisticated air raft especially Mirages and F-6 aircraft and helicopters in Pakistan It may be mentioned here that Pakistan has already been manufacturing Ce sna light-transport and trainer planes since the sixties

China has also provided machinery and financial assistance to set up a heavy mechanical complex at Taxila to produce tools machinery and other engineering equipment needed by defense services as well as non-defense industry A Tank Rebuild Facotry attached with the Taxila Heavy Mechanical Complex was commissioned in November 1979 It is equipped to overhaul tank engine repair and manufacture several parts needed for the rebuild program [21] This was described as a milestone in Pakistan's efforts to boost defense production [22] The future plans include the indigenous production of light tanks anti tank-missiles and surface to air missiles

with Chinese cooperation Cobra anti-tank missiles are already under production since 1964 [23] Production of jeeps was resumed in 1973 This project ran into technical problems and had to be abandoned Later Suzuki of Japan was granted permission to set-up an automobile plant at Karachi to assemble/ produce small cars carrier vans and jeeps This plant went into production in September 1982 The Pakistan Army plans to use the jeeps produced at the Suzuki plant which will be in 1983

There has been a controversy since the mid-fifties regarding the advisability of erecting a steel mill in Pakistan The Government of Pakistan was inclined towards setting up a steel mill but it lacked technological know-how and funds to do so The U S Government was not avorably disposed towards providing a steel mill to Pakistan In 1956 the Soviet Union indicated interest in helping Pakistan to set up a steel mill Pakistan spurned the Soviet offer because having recently joined the West sponsored security alliance system (1954 1955) the Pakistan Government could not accept the Soviet proposal In the seventies when Pakistan was embarking on an extensive program of defense production it was felt that Pakistan must have steel and high technology industry to back up its program of sophisticated arms and military hardware industry Pakistan approached the Soviet Union which agreed to prepare the design provide expertise and credit for the construction of the first steel mill They also agreed to provide necessary training to Pakistani scientists and technicians in the Soviet Union and Pakistan [24] The foundation stone of this steel mill was laid in December 1973 [25] The target date for its completion was 1981 but it was delayed for one reason or another which increased the originally estimated cost of the steel mill by several time It is expected to be completed by 1986,

though some production has already started When fully operational it will supply among other things coke pig iron billets hot rolling sheets galvanised sheets and formed sections to engineering and capital goods industry in the civil as well as defense sectors

Pakistan's shipbuilding industry is relatively less developed Karachi shipyard has been able to construct commercial ships which are being used by Pakistani merchant fleet It has also supplied commercial ships to a number of friendly countries including Saudi Arabia and Abu Dhabi But its contribution to defense related shipbuilding has been minimal It is hoped that with necessary support now available from the Heavy Mechanical Complex at Taxila Machine Tools Factory at Landi and the steel mill at Karachi this industry will develop rapidly Plans for the construction of frigates are under active consideration In addition to the Karachi shipyard Port Qasim is fast shaping up as the major centre for service repair and related facilities for the Pakistan Navy

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This study shows that self-sufficiency in arms production has been a favorite theme of the ruling civil and military elite of Pakistan since 1947 It was however after the 1965 Indo-Pakistan War especially in the seventies that major steps were taken in the field of arms production A number of important defense industrial projects were completed and Pakistan acquired self-sufficiency in small arms and conventional weapons These weapons ammunition and communication equipment were also exported to a number of Muslim countries [26] Once several other projects now in the planning and/or implementation stages are completed Pakistan would become an important producer of armament and military hardware including tanks armored vehicles guided missiles and military aircraft in the Third World

These efforts will reduce Pakistan's dependence on foreign suppliers of weapons but it will continue to obtain some of the highly sophisticated weapons and aircraft from external sources. It will also need external cooperation (financial and technological) for the expansion and modernization of the arms industry which is a continuous process. Pakistan's attempt to attract capital from the Gulf states is a strategy to overcome the scarcity of domestic resources. As the defense industry expands, necessary measures will have to be adopted to make sure that the ailments which adversely affect industry in public and private sectors do not penetrate deep into the defense and defense related industry. These include, inter alia, bureaucratic inefficiency, uneven quality, labor problems, pilferage, and low productivity. The ability of the policy-makers to find solutions to these problems will greatly influence the pace of development of arms industry in Pakistan and the sale of arms to other Third World countries.

NOTES

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