INDIA & FRG: ECONOMIC AND TECHNOLOGICAL COOPERATION

1983—1989

Dissertation submitted to the Jawaharlal Nehru University in partial fulfilment of the requirements for the award of the Degree of MASTER OF PHILOSOPHY

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PREFACE

India) and FRG have been friends for centuries. is only after World War II, that the two have built up an enduring economic relationship. Particularly during the 1980s, the economic-ties have been intensified, due to various reforms introduced by India, as to favour such bilateral cooperation. With the major problems of the world assuming global dimensions, healthy cooperation between developed and developing countries, which has created structural hotch - potch in the world economy is necessary. Here, the study of cooperation between India and FRG, would enable us to see, how the two countries could be put on the highways of economic development, making amends for the imbalanced world economic fabric. The fact international studies have generally avoided economic and technological cooperation as an area of study, makes me take up this challenging theme for analysis.

The entire work has been divided into chapters. Chapter I deals with the rationale of the study in the eyes of the major international outcroppings during the 1980s, entists major problems of the world economy and summarises the history of the Indo-FRG cooperation. also Chapter II critically reviews the feasibility of cooperation during the proposed period. Chapter III examines various bilateral economic cooperation during 1983 to aspects of 1989 - trade, investments and joint ventures. Chapter IV the wide specturm of technological throws light on cooperation. chapter V is an attempt to pool the findings of above chapters, and highlight the future prospects of Indo-FRG cooperation vis-a-vis the changing world economic scenario.

Words can hardly express my deep graditude to my learned guide, Prof. H. S. Chopra, with whose inspiration, encouragement and valuable advice, the present work could see the light of the day. I am also indebted to my centre chairman, Prof. R. Narayanan and teachers of my centre, Prof. B. Vivekanandan, Dr. Christopher Sam Raj and Dr. R.K. Jain for enriching my background as a student of European Studies.

Nothing would suffice to express my warm affections for my family and friends who have been moving spirits behind this work.

Finally, thanks are also due to the staffs of JNU Library, Indo-German Chambers of Commerce and Indian Institute of Foreign Trade.

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July 1990

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CHAPTER-1

INTRODUCTION

multiple reasons, interdependence between For different world regions has increased during recent years. It improves opportunity but it also enhances vulnerability. What this underscores is the need for enhanced international Specifically, it requires effective cooperation. coordination of policies among the major industrialized countries - not just to bring existing imbalances into a more sustainable pattern without precipitating a recession off resurgence in inflation, but triggering generally, to achieve the desired degree of systematic stability. And further, there is the need felt to make a collaborative effort to revitalize economic activity in the developing countries so as to enable them to overcome their problems of indebtedness and deficit in balance of payments. Each of these problems is inter-linked in the manner of cause and effect, and each one has spill-over implications for the other 1.

Currently, economies of the Third World countries are passing through critical stages and are variously affected by adverse weather conditions, shortages of food and foreign exchange, widening of trade and balance of payments

^{1.} M. Camdessus, "The Interdependent System", Foreign Trade Review, (New Delhi), vol.13, no.1, April-June, 1988, pp.1-2.

deficits, galloping inflation, rapid population growth and unemployment, inadequate investment, growing dependence on foreign-aid, mounting foreign debt burden etc². Of all these the foreign-debt has alarming implications for India's economy. In quantum terms India is the 5th most indebted country in the world today. The factors responsible are:

- 1. Declining Foreign Exchange Reserves: A fall of Rs.1720 crores from 7686 crores in 1987-88 to Rs.5967 crores on 31 Jan., 1989³. This decline is the result of the liberal policies adopted by the Government of India towards import of capital goods, raw materials and semi-finished intermediates, in order to make our industries competitive and export oriented. It needs to identify appropriate export niches whose marginal intensities are low so-as to maximise net foreign exchange earning. The FRG, with a growing demand of foreign conventional goods is important for a country like India in terms of trade.
- 2. Reduction in the Volume of Concessional Lending: With the limited availability of concessional finance from the multilateral institutions and also toughening of interest rates and cutting down the period of maturity, India has to fall back upon commercial finance. The share of official credit to total external credit which was 96 per cent in the

Abid Hussain, "Current International Economic Trends", <u>Mainstream</u>, (New Delhi), 16 April, 1988, p.13.

^{3.} S.S. Yadav & M. Raj, "India and the Debt-Trap", Mainstream, (New Delhi), vol. 27, no. 40, 1 July, 1989, p. 21.

1970s came down to 65 percent in 1986. Even the percentage of grant element to the total credit has also declined from 71.7 percent in 1978 to 33.3 per cent in 1986⁴. Here, FRG with a surplus economy can be a good source of foreign aid to India.

3. Appreciation of Dollar: It is estimated that during the 1981-85 period about 70 per cent of the increased debt burden was attributed to the appreciation of dollar alone. Between 1980-81 and May 1986, the Rupee has depreciated in terms of the US Dollar by 106 per cent, in terms of Sterling Pound by 138 per cent, in terms of Yen by 213 per cent and in terms of Deutsche Mark by 93 per cent⁵. It implies that in terms of DM, rupee is more stable in relation to other hard currencies and that, Indo-German trade would be more favourable.

Such a critical problem of mounting debt and adverse balance of payments situation, has put India under tremendous economic pressure. It has posed before India a gigantic task of development against the new problems of indebtedness and adverse balance of payments in the not so sound world economy today.

The very success in the post-war economic boom in the west, in part entailed its own later failure.

^{4.} S. Chakravarty, "India's External Debt: Some observations", Mainstream, (New Delhi), vol.17, no.52, 23 Sept., 1989, p.5.

^{5.} Ruddar Dutt, "Debt Trap and India's External Debt", Mainstream, (New Delhi), vol.27, no.46, 12 Aug.1989.p.7.

Competition in the expanding market rewarded the strong rather than the weak, the big rather than the small, and rather than national enterprises. multinational the Innovation and extension of the inter-war elite products to mass consumption markets promoted first boom, then recession as the markets became saturated. Technical progress first raised productivity then technological unemployment⁶. With industrialisation of the third world, western countries including the FRG may have to face stiff competition in industries of coal, steel, textile, shiptraditional building, etc. Due to competition and shrinkage of world market conventional industries have become vulerable, thereby increasing adoption of protectionist measures by the Western countries.

This phenomenon of the growing protectionist tendencies of the west and the horrendous debt proportions of third world have led to the structural imbalances in the world economy. There is an urgent need for concerted international action for economic recovery to extricate the world economy from present stagflation. It is important to note the vital role that accelerated economic growth of developing countries can play. Indeed such a recovery will make the longer term structural changes in the world economy

^{6.} Stuart Holland. The Global Economy, (London: Weidenfeld and Nicolson, 1987), p.410.

that much easier to achieve 7.

The existing international economic order is unsatisfactory for all the members of international community. It produces widening gaps between rich and poor nations and between wealthy and marginal populations within nations; it fails to assure a life free from alienation and unemployment in industrialised countries and free from hunger and deprivation in the developing countries; and it makes the progressive achievement of self reliance difficult for majority of nations and peoples. If continued unchanged, the present international economic order would create more injustice, sufferings and conflicts.

Willy Brandt, Chairman of North-South Commission, has also very clearly observed in the following terms:

"After 1945, the Marshall Plan provided the impetus for the reconstruction of Europe and contributed to the recovery of the world economy. Today we need to make a similarly great effort to combat hunger and disease, the exploitation and destruction of the natural environment, the wastage of energy and raw materials, ignorance and unemployment in the Third World. However, it can not as with the Marshall Plan, be a case of involving the developing countries in the political and economic systems of the industrial state. What is required rather is global cooperation corresponding to cultural and social identity of the

^{7.} Javier Perez de Cueller, "The Imperatives of International Economic Cooperation," in Ann Mattis, ed.

A. Society for International Development: Prospectus, 1984, (North Caroline: Duke University, 1983), p.192.

^{8.} Otto Kreye, "West Europe's Economic & Social Development and the Rationality and Reality of NIEO", in Herb Addo, ed., <u>Transforming the World Economy</u>, (Singapore; United Nations University, 1988), p.935.

developing countries and the political and economic independent responsibilities of the developed countries".

Such a potentially grave situation that has emerged out of the topsy-turvy growth of the world economy has brought it to the brink of a disaster - not of an Atom Bomb but of Debt Bomb¹⁰. The whole third world is suffering from hunger, malnutrition and disease as a consequence of indebtedness whereas the developed countries are suffering from unemployment and stagflation in the economic sphere and consumerism and alcohlism in the social sphere. Such a situation asks for more global cooperation to rectify the imbalances in the world ecomomy and to combat the major global problems of today - poverty, depleting resources of the world, energy crisis and environmental threats.

Here cooperation between India (the largest political democracy in the world) and FRG (the number one economic giant in Europe) becomes necessary for the sound growth of the world economy. And, a comprehensive analysis thereof seems necessary. But before this is attempted, we may have a look at some major changes that are taking place in world which could have a profound effect on the Indo-German coopertion.

^{9.} Willy Brandt, Arms and Hunger, Victor Gollancz Ltd, trans., (New York: Pantheon Books, 1986), p.156.

^{10.} S.S. Saxena, "Can There Be An Indo-German Bilateral Trade Deuce-Advantage India", K. Fasbender, O.G. Mayer, S.S.Saxena, ed., Indo-German Trade Relations: Framework of Indian Exports Efforts, (Hamburg: Verlag, 1988), p.35.

GERMAN REUNIFICATION

is expected that in the 1990s, United Germany would remain busy with the reconstruction and reorientation of its internal economy. As a result, there is a marked uncertainty in relation to United Germany's role in the Third World Development. Mr. Weist, (Head of South East Asia Division, Ministry of Economic Affairs, FRG) concedes that the diversion of resources to GDR might result in less availability of private capital from FRG to other countries for an interim period. However, it is then added that it not affect Indo-FRG trade or cooperation in technology and other areas. He further envisages that with the modernisation of GDR there would be increased demand for capital and consumer goods and this will open up new possibilities of cooperation where India could play a positive role 11.

INDIA & EEC 1992

Europe without frontiers, is destined to be an event of far reaching significance for the entire world over the decade of 1990s., and particularly for India which has almost 30 per cent of its trade with EEC of which FRG is the largest partner. A casual analysis finds that with the growth of Intra-EC trade, there would be a consequent decline

^{11.} FRG to continue economic cooperation, <u>Patriot</u>, (New Delhi), 11 March 1990.

of Inter-EC trade. But this may undermine the growth effect of the market integration which would push the demand for more imports and also more investment for the Third World countries thereby.

The exports of developing countries like India to EEC are mainly in the agricultural sector. Here, on the question of "market disruption" due to imports from low wage countries, certain quotas based on "acceptable levels of market partnership" have been fixed (e.g. under MfA, GSP etc.). Statistics says that a fairly good amount of these quotas has been unfulfilled. Now the question is what would be the Community quota in 1992. If it is to be the sum total of national quotas, countries with below average levels of market penetration would have to face tough competition 12. But, comparatively a larger country like India with better economy may derive much benefit out of it.

Prof. H.S.Chopra hopes that the Community may perhaps make use of the scientific/technological skills available in India, particularly those of computer software, biotechnology, electronics, and superconductivity in its R&D programmes in the hi-tech fields 13.

^{12.} S.S. Saxena & V.K. Pande, "European Community 1992 - A Fact or Fiction: Implications for India", Foreign Trade Review, (New Delhi), vol.18, no.4, Jan-March 1989. pp.383-397.

^{13.} H.S. Chopra, "India and European Community in 1992; Challenges and New opportunites", in M.S. Narang; ed. International Industries, Annual 1989, (New Delhi: Fateh, 1989), p.287.

CHANGES IN THE EASTERN EUROPE

India's exports may have to contend with the uncertainties in the East European Market arising out of economic reforms underway. These markets were until now sheltered and as a result there was a measure of stability to India's exports to that region. Exports from India will now have to face increasing competition in view of switching over by these economies to trading, based on world prices and convertible currencies 14.

But here, one point should be noted that with the reforms in Eastern Europe, the world economy is again going to attain an organic form in which there would be free-play of market forces. This process may induce greater amount of competition in the world economy. Such an incidence may provide India a better opportunity of exports by making its industry competitive, modern and flexible in the world market.

Thus in the midst of the changing international scenario, management of India's external trade and payments in the Eighth Plan period must contend with major new developments in the international economy. In the near term future the growth of world output and trade may be slow. The global trading environment is also fraught with

^{14.} Ministry of Finance, (Govt. of India), Economic Survey 1989-90, p.123.

uncertaincties arising from the final stages of negotiation on the Uruguay Round of Multinational Trade Negotiation, the major steps towards economic integration to be taken by 1992 European Community, the restructuring of the by the Eastern Europe and the growing importance of economies of East Asian economies. Many of these developments will the also have significant repercussion on the existing system of international payments and finance. All these changes and uncertainties pose important challenges for the Indian To deal with them successfully, the economy must economy. be competitive, flexible, responsive to rapid technological change 15.

Now I must make a retrospective analysis of the Indo-German Cooperation on which my research project is based.

GERMAN ECONOMY IN RETROSPECT

industrialists and workers were equally taken care 16. Not surprisingly, the FRG experienced an "economic miracle" and now it ranks high among the developed countries in terms of capital surplus, industrial development and high-technology.

Today, FRG is a country which is well integrated to the world economy which exports 33 per cnet of its GNP to the world. Therefore, FRG has been hesitant to all forms of economic restrictions and has always favoured an open economic system. Its economic policies today are based upon three tenets - international division of labour instead of self-sufficiency, global competition instead of trade barriers and accomodation of interests instead of economic confrontation 17. India too has recently made efforts to integrate its economy in the world's mainstream much to the approval of German partners through liberalization. order to make its industry modern and competitive, India needs more and better inputs in terms of capital and technology. From the foregoing it becomes clear that FRG may be a good partner of India.

INDIAN ECONOMY IN RETROSPECT

Indian economy at the time of independence was

^{16.} Alan Peacock and Hans Willgerodt, German Neo-Liberals and the Social Market Economy, (New York: St. Martins, 1989), pp.107-10.

^{17.} Press and Information, Public Documents, Foreign Trade Information. 6, (Bonn, 1987).

characterized by low productivity, population explosion, low per capita income, low rate of savings and hence low rate of capital formation. India went in for industrialization as a panacea to all its ailments. Braving many odds on the way it has created enormous growth potential, and today we have a large pool of scientific and technological manpower, a relatively better infrastructure and a sound environment for investment. Nevertheless, the policy of self reliance and import substitution kept off competitiveness in and beyond Indian economy, which resulted into low growth rate, cost inefficiency, limited exports, balance of payments deficit, debt-trap etc. Amidst these circumstances import based export strategy was taken up during the 1980s, and accordingly the policy of discretionary quantitative control was replaced by non-discretionary fiscal control 18. FRG has welcomed India's changed economic outlook and cooperation has intensified during the decade of the 1980s.

BED ROCKS OF COOPERATION

The bonds of friendship and understanding which today characterize relations between India and Germany are more than spurious outpourings of post-war political pragmatism. They are, rather, sturdy plants with roots that have grown through centuries, off and on, in the course of history.

^{18.} V. Krishnamurthy, "Indo-German Economic Ties", Financial Express, (Bombay), 23 March 1988.

The winds of modernity have however, stirred a new meaning into relationship between two countries. Casual academic contacts have culminated into economic ties based on bilateral trade, investment and joint venture, on the basis of similar fate the two had experienced at the end of These economic ties have been cemented world war II. against a rich backdrop of political undestanding, that we share with FRG our commitment to democratic values, human rights, and also have identical approach to the settlement of international disputes. During the 1980s, it is through super-power detente, latest developments in East-West relations, deepening of new cooperation consequent upon the Soviet Glasnost and Perestroika and subsequent changes in Eastern Europe, FRG and India are fast developing global perspectives and this has led to an era of intense bilateral economic cooperation.

POST-WAR PARTNERS IN PROGRESS

Post-war partnership between two countries mostly rests on three pillars of bilateral trade, aid and collaboration.

Since 1968, India has suffered deficit in its trade with FRG. Although during the period from 1968 to 1988, exports of India have risen by 745 percent and imports by 411 percent, total exports of India remain roughly half of its imports from FRG. Since 1983, the exports have

steadily grown (1983 - DM 1.26b, 1985-DM 1.4b, 1988 - DM 1.8b) but imports first rose and then fell (1983 - DM 2.1b, 1985 - DM 3.4b, 1988-DM 2.8b). During the last three years we have narrowed down deficit and we have to examine the reasons therefar. Although proportion of semi-finished and finished goods in the Indian exports has grown from 6 per cent in 1968 to 47 per cent in 1988, they still constitute bulk of the traditional items. Overall, India's share in FRG's volume of trade has been decreasing over the past few years, and today it stands at paltry 0.5 per cent 19. Comprehensive analysis of this shrinkage particularly in India's exports to FRG has been done in this project.

On the question of financial aid, FRG is a major source for India. Between 1983 and 1989, FRG's bilateral aid to India has risen from DM 337 m to DM 500 m²⁰. This amount is quite insignificant, when compared with FRG's strength of economy. With the slow increase in multilateral aid, and India's increasing needs to accertate the process of its economic development, FRG becomes a rich and reliable source of official credits.

It is noteworthy that since 1957 over 2000 collaboration agreements have been signed with FRG of which Roukela Steel Plant and Neyveli Lignite Project are the flagships. Number of these collaborations has been on 19. IGCC, Indo-German Economic Cooperation, Annual Report, 1988/89 (Bombay: 1989) p.7.

steady increase over the years. Besides, joint ventures are also making improvements but still they are not more than 25 per cent of the total authorised colliborations. In this study an attempt is made to understand various advantages and disadvantages of these collaborations which give us technology and capital etc. so as to deepen Indo-German cooperation.

To sum up, in the today's world, there is an excitement of living through historic transformations. shape them in beneficent and constructive ways demands the of statesmanship and the utmost of human cooperation. The FRG is the simultaneous protagonist of the two tremendous experiments in cohesion to its west and east. India, despite its own regional priorities, can not remain uninvolved by these evolutions and shifts at the global The Single European Market (1992) as well as level. integration of two Germany's are processes calling for anticiptatory responses from India. We have to work with a intelligently combining our ample forces and will, resources, so that India is once again a name to be reckoned In this arduous and urgent task, India has no partner better placed or disposed towards us than the FRG.

CHAPTER-:2

CONVERGENCE / DIVERGENCE OF INDO-FRG DEVELOPMENT PERSPECTIVES IN THE CHANGING WORLD ECONOMY

Having faith in both market and planned economies, independent India sought to attain three objectives of justice, high growth and self-reliance with social industrialization as the focal strategy, so as to respond to the aspirations of the masses. The above three objectives, however, proved mutually contradictory. Whereas high growth demanded heavy investment and technological import and subsequent dependence upon foreign countries for both capital and technology, self reliance laid emphasis upon indigenous efforts. India, therefore, followed the policy of selective imports alongwith indigenous research and development (r&d) efforts.

The policy of self reliance which directed industrial production by licensing industries and controlling imports, inevitably meant reducing competition-domestic competition as well as competition from outside. The result is a high cost industry which in many product range is not competitive in the world market, neither in price nor in quality 1.

Konrad Seitz, "Entering a new stage in corporation", The Indian Express, (New Delhi), 14 March, 1988.

The indigenous scientific and technological development on the other hand with an exogenous base, increased the consumptive capacity of foreign technology and between social technology needs and created qap This development being divorced from technological imports. the productive forces and lack of political will to ensure confidence in the indigenous capability made the cost inappropriate and the technological dependence deepened2. The developed countries through diplomatic manoeuvrings have exploited the weak bargaining power of the Third World Countries and by various measures (e.g. patent protection) delberately inhibited the growth of indigenous have technology.

Thus selective import and poor development of indigenous technology have alienated the Indian economy from the economy of the world which had led to failure of attaining the export target and then falling into debt-trap.

The philosophy of social justice placed increasing responsibility upon the public sector industries. It was seen that while the planned economy and role of commanding height assigned to the public sector did create an impressive industrial infrastructure, major problem of

^{2.} Dieter Ernst, "International Transfer of Technology, Technological Dependence and Underdevelopment", in Dieter Ernst, ed., The International Division of Labour, Technology and Underdevelopment, (Frankfurt: Campus Verlag, 1980), pp. 45-52.

removing poverty and speeding up industrialisation process continue to be a distant possibility. It was mainly the result of the low rate of saving and capital formation aggravated by population explosion³.

The strategy of industrialization emphasized infrastructure building and gave importance to basic and , capital goods industries. Consumer industries were thus neglected and whatever development took place in the consumer industries were largely elite oriented. These products could not be extended to the masses since slow growth of agriculture due to various bottlenecks ranging from institutional to technological, coupled with population explosion, kept down their purchasing power and thereby deprived the consumer industry of healthy domestic competition⁴.

As a result of the unhealthy competition commercial bourgeoisie flourished more than the manufacturing bourgeoisie. The commercial bourgeoisie undermined the importance of efficiency of production and resorted to restric tive selling practices and the control of prices and finance. Thus there has been the growth of monopolistic

H.S. Chopra, "India and European Community in 1992: Challenges and New opportunities", in M.S. Narang; ed., International Industries, Annual 1989, (New Delhi: Fateh, 1989) p.283.

^{4.} Charanjit Chanana, <u>Industrial Economies in Developing Countries</u>, <u>India - A case study</u>, (New Delhi: Verendra, 1983), p.8.

tendencies in the Indian economy and no real export potential was created⁵.

industrilisation strategy Nonetheless. brought India at the threshold of development revolution. The record of growth in the eighties has been highly encouraging - consistent annual average growth rate of Both industry and agriculture have around 5 percent. recorded growth of a desired order-in terms of production as well as investment. Industrial sector - particularly manufacturing-industries has been showing signs of a breakthrough. For development revolution to succeed what the country at present stage inter-alia, needs are:

- * a further step-up in investment;
- * induction of technology on a massive scale;
- * improvement in technological skills of manpower; &
- * increased productivity and better utilization of capital stock 6.

India has at present better industrial infrastructure and surplus technological manpower. Having achieved some of the initial objectives, India is keen to

^{5.} T.J. Byres, "India: Capitalist Industrialisation or Structural Statis", in M. Bienefeld and M. Godfrey, ed., The Struggle for Development, National Strategies in an International Context, (Chichester: John Willey and Sons, 1982), p.148.

^{6.} D.N. Saxena, "Foreign Direct Investment", Foreign Trade Review, (New Delhi), vol.28, no.5, April-June, 1989, p.78.

create an open atmosphere, internationalize its operations, develop closer linkages with the external world on the basis of equal partnership and build an industry that is cost effective, goods that can resemble the best in the world, joint ventures that can utilize large reservoir of human resources in India⁷. Here in this case cooperation with FRG is of prime importance since we need a high dose of foreign capital and technology in order to materialize development revolution.

There has been long discussions and delibrations among the Indian economists as how to utilize the dormant potential of India's economy. Viewed in the context of the depressed international economic and trading environment, by demand squeeze, recessionary trends, characterized restrictive practics and policies pursued industrialized countries, some Indian economists are of the view that librealized import regime in the wake of non too happy balance of payments position and monetary trade deficit is not in the national interest. Another school of thought contends that export production can be generated and given a multiplier effect through adequate imports without starving the manufacturing sector of their requirements. It

^{7.} Indo-German Economic Ties, <u>Financial Express</u>, (Bombay), 23 March 1988.



is the latter view that carries conviction with the policy formulation circles at this point of $time^8$.

Looking at the changing economic structure of India, import based export strategy was taken up, in accordance with the GATT/IMF World Bank prescription for the Third World countries. The following $\underline{\text{steps}}^9$ have been taken in the direction of liberalization:-

- * OGL enlarged in order to ensure better inflow of key inputs.
- * Import replenishment to derive comparative cost advantage.
- * Simplification in the policies and procedures in international transactions.
- * Free imports for 100 percent Export Oriented Units (EOU).
- * Six Free-Trade-Zones for duty free imports.
- * A large number of items decanalised.

It seems however, necessary to make a critical examination of the policy of liberalization as well as various internal and external constraints to it.

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^{8.} M.L. Verma, "Import Policy Framework in India, Trends in Liberalisation", Foreign Trade Review, (New Delhi), vol.13, no.1, April-June 1988, p.77.

^{9.} Ibid, pp. 75-76.

UNCTAD Trade & Development Report (1989) sees little prospects of the export performance of the developing countries in the foreseeable future, since the countries have not achieved the necessary condition for the rapid industrial development, the investment growth in particular, which underpins strong growth of manufactured exports. Underscoring the importance of investment growth the Report maintains that this has become a highly risky proposition in several countries because of instability in real exchange rates due to adjustment programmes which encourage currency Currency depreciation and foreign exchange depreciation. scarcity have consistently been locked into a vicious the scarcity has led to depreciation, which in circle: countries of domestic uncertainties as to relative prices, failed to induce high export earnings. In turn, the continuing foreign exchange crisis has resulted in further currency depreciation. High inflation has made real exchange rate stability difficult to attain, and exchange stability has discouraged investment in tradeables 10.

Looking beyond the domestic policy sphere, a potentially serious problem of incoherence between trade policies in developed and developing countries is seen to be emerging. While more of the latter are liberalizing trade policies, and enhancing their export orientation, the drift

^{10.} Chakravarthi Raghavan", UNCTAD Report: Import Liberalization and Protectionism", Mainstream, (New Delhi), vol.23, no.8, 6 Dec., 1989, p.17.

in the former is towards protectionism. In this regard, a well known German economist avers that application of non-tariff barriers replaces freedom of trade with selectivity, managed trade replaces bilateralism and competition in international market; the linkages described in the theory of free-trade are replaced by those which are represented in the political economy of protectionism11. This implies that developing countries newly entering the export market for manufactures - the large majority, in fact will find going harder than those few which have already made breakthrough 12.

UNCTAD Report also corroborates the fact that despite the assumption from North America and West Europe of undiminished support for the open multilateral trading system these countries have increasingly resorted to protectionist measures. Example of such measure are the US Omnibus Trade and Competitiveness Act of 1988 and the Single European Act adopted by the EEC member states in 1986¹³. Comparing protectionist quotients of FRG with others (France-57 percent, US-43 percent, FRG-12 percent), it

^{11.} Benno Engels, "GATT and the Developing Countries - what can be expected from the Uruguay Round of Negotiations?", Economics, (Hamburg), vol.39, 1989, p.52.

^{12.} R.K. Pandey, "World Trade and Development", Foreign Trade Reveiw, April-June, 1989, p.53.

^{13.} n.10, p.18.

appears that FRG would be relatively more favourable as trade partner 14.

Some economists have pinpointed that the policy of liberalization is basically fall cious. Prof. Raghavan opines that it is to benefit the small sector thriving on the country's parallel economy, as well as to opening of Indian economy to the transnational corporation and comprador capitalism of non resident Indians 15. Others like Ruddar Dutt, feel that excessive emphasis on privatization may boost up production of an elitist character and encourage consumerism. He rather advises to improve the economic management of both public & private sector and not to tilt the economy towards private sector 16.

Being more specific to the issue, it is pointed out that liberalisation has not increased the domestic competition as OGL lists only those items which are not produced in India. Moreover, the efficacy of EPZ is dependent upon the environment of production including transport, communication and other infrastructural

^{14.} n.3, p.286.

Mainstream, (New Delhi), vol.13, no.16, 10 Feb., 1990, p.15.

^{16.} Ruddar Dutt, "New Economic Policy: Myth and Reality", Mainstream, vol.26, no.39, 9 July, 1988, p.16.

facilities which in the case of India is not free of problems 17.

Graph (2.1) of the Indo-German trade, shows that during recent years, in quantum terms, India's exports have increased more than the increase in imports. For the first few years the imports had teken a long leap but later on they have fallen and exports have grown at a faster rate. This has ultimately led to the downturn in the balance of trade. However, this rise has been consistent with the growth of the world trade as in 1983 and 1988, the share of India's exports to the total German imports and its imports to the total German exports, to the World have almost stagnated at 0.3 percent and 0.5 percent respectively 18. But, it should be noted that such a small period of 5-6 years is not sufficient to make concrete conclusions about the policy of liberalization.

The impact of liberalization can not only be viewed in the context of the trade alone. More significantly it should be examined as to what impact it has brought for the masses. On that count, the experience of liberalization has not brought relief in terms of arresting the rising trend of Consumer Price Index (CPI) as well as Wholesale Price Index (WPI). Rather we observe a disturbing 17.

^{18.} IGCC, Indo-German Economic coperation, Annual Reports (1983 to 1989), (Bombay).

trend, the CPI of industrial workers has been rising at a faster rate than the WPI. Taking the WPI growth in percentage averaging at 7.49 percent, CPI for industrial workers has grown at an average of 8.75 percent 19. It indicates that the positive effect of liberalization did not increase the purchasing capacity of the workers. Therefore, the question is, should economic liberalization be accompanied by the unemployment of labour force or should it help to absorb more labour if it has to have any meaning for the masses 20.

Thus the real obstacles in the growth of exports have been structural in character and no amount of deregulations can boost up exports which would have real meaning impact on the masses. The changing international economic scenario is also not conducive for the growth of exports of the developing countries. Therefore, import based export strategy can not be the lever of growth. Far more important is that there has to generate healthy competition in the domestic circle, curbing down the monopolistic tendencies of the Indian economy. South Korea and Taiwan have not produced miracles by doing away with state interventionism²¹.

^{19.} Ministry of Finance, (G.O.I.), Economic Survey, 1989-90, (New Delhi: 1990), p.58 and p.62.

^{20.} n.10, pp.17-18.

^{21.} Alok Ray, "Economic Liberalisation in India", Economic & Politcal Weekly, (Bombay), 11 July, 1987, pp. 1142-43.

As noted earlier, India in order to materialize development revolution needs a step-up in investment. The 8th Plan seems quite optimistic regarding investment. But statistics reveal that despite lots of efforts, saving has not been more than 23 percent²² during the recent years. It implies that we have to depend upon foreign loans if we want to accelerate the pace of economic development. Here a question arises, whether these aids in the past have really uplifted the economic conditions of the masses or not.

B.P. Koirala thought that foreign aid did not advance the cause of development but merely created a new class whose prosperity has nothing to do with the condition of the people. This new class is not economically rooted in the Third World. It exists solely on the basis of the manipulation of the foreign aid by means of corruption and foreign trade. Gunnar Myrdal also thinks the same way that foreign aids are wasted due to incompetent bureaucracy and enrichment of elite²³.

In India on the other hand, foreign aid has been taken as 'shock absorbers' releasing pressure on saving and importing goods of capital importance. But the foreign aid constraint is more dangerous than the saving constraint in the light of the present debt service obligations of India.

22. 1989-90, n.19, pp.S-8-9.

^{23.} Willy Brandt; Arms and Hunger, Victor Gollancz, trd. (New York: Pantheon Books, 1986), pp. 40-41.

Moreover, given the shrinking share of external assitance during the past few years coupled with the dwindling grant element and toughening of interest rates, India has had to aaproach external commercial market. Although it is very difficult to bid farewell at present to the foreign aid but there should be increasing reliance on our own resources, eschewing the mirage of development through aid only when highly essential.

In the case of foreign funds raised by way of loans and other kinds of borrowings, one drawback is that interest payments on borrowed funds start right from the very beginning irrespective of whether the industries utilizing them have reached the stage of profitability or not. Also the payments have foreign exchange constraints in the sense that if domestic currency gets depreciated, the borrower has to pay higher amount. Here joint ventures are of immense importance since in their cases, flow of capital takes place only when there is profit.

However, India's attitude towards direct foreign investments has been full of apprehensions²⁴ and it is this attitude that has led to a small direct foreign investments compared with other developing countries; a fact supported by statistics below:

^{24.} Narhari Rao, "The Steps Towards Liberalization-Chances and Barriers", in K. Fasbender, O.G. Mayer and S.S. Saxena, ed., <u>Indian-German Trade Relations:Framework of Indian Export Efforts</u>, (Hamburg: Verlag, 1988), p.76.

NET DIRECT FOREIGN INVESTMENT IN SELECTED COUNTRIES(1987)²⁵
(in US \$m)

India	_	253		Malaysia	-	575
China	_	1,669		South Korea	_	418
Pakistan	_	62		Mexico		3,248
Indonesia	_	425		Brazil	-	582
Thailand	_	270	•	Egypt	· <u>-</u>	869

As regards Indo-German JVs, during the decade of 1950s and 1960s, they found a favourable climate of growth. But in the 70s, the govt. became critical about the flow of foreign capital and technology, reflected in the establishment of FERA in 1973, see Graph (2.2). In the 1980s, however, liberalization was set in and the statistics below show that the proportion of Joint Ventures to the total number of Indo-German collaborations has increased since then.

PERCENTAGE OF JOINT VENTURES TO TOTAL NUMBER OF INDO-GERMAN COLLABORATIONS 26

Year	1956- 60	61-65	66-70	71–75	76-80	80–85	- 86	87	 88
percentage of JVs to the total number of colla- borations		33.7	24.5	12.8	11.0	13.5	21.86	26.17	26.40

Nonetheless, the net financial investment (direct)
made by West Germany in India is very modest. The most
fundamental reason is that the flow of foreign investment in

25. D.N. Saxena, "Foreign Direct Investment", Foreign Trade
Reveiw, April-June, 1989, p.81.

26. IGCC, <u>Indo-German</u> <u>Joint</u> <u>Venturs</u>, A study about the experience of <u>Indian</u> and <u>German Entrepreneurs</u>, (Bombay: 1989), p.18.

India has been taken as a vechicle of the technology transfer and not as a source of funding industrial projects. Therefore, the total ammount of capital invested by German firms in India is a mere DM 400 m - negligible compared to the total West German investments worldwide of a whopping DM 131 b at the end of 1985²⁷.

It is true that many of the Indian regulations may not be acceptable to the foreign partners (eg. equity limit). However, there can not be any compromise with our economic independence. And, we should not be condemned to repeat the blunder. But many other hurdles must be overcome by ensuring punctuality in procedures. Moreover for such joint ventures, to be enduring it is necessary that our German partners should also share the responsibility in a positive way.

Having examined the various outcroppings of the world economy during 1980s, and their implications for Indo-FRG cooperation, we may now arrive at some conclusions.

India must speed up its industrialization and establish its credibility as a competing factor on the international plane. Our increased cooperation with-FRG is vital for financial and technological inputs, to keep our

^{27.} Rajiv Shirali, "Technogerma '88-High-profile hardsell", Business Standard, March 28, April 10, 1988, quoted in <u>Technogerma Report, Nov. 88</u>, (Bombay: IGCC, 1988), p.51.

industries flourishing. The foregoing may be read in conjunction with the new National Front Govt's plan to make drastic changes in the industrial policy so as to slow down the liberalization, reinforced Import Substitution, and tighten up the MRTP and the FERA. It has to be realised that a healthy generation of competition can not take place in the private sector without revitalising the public sector which has yet miles to go. Furthermore, steps should be taken to reduce red-tape, simlify procedures and inject a measure of efficacy in the functioning of the industries irrespective of whether they are public or private. On the external front, however, India has to take her consistent and determined approach against protectionism of the west through political discourses and also attempt to secure higher financial and technological cooperation with the developed countries in general and with FRG in particular.

Finally, we find that at the present stage of the World economy we can not live in isolation and to reap the benefits of our economic potential we have to be competitive. For this, cooperation with a country like FRG is vital. At present our dependence upon FRG can not be done away with, but we should increasingly rely upon building our own resources in order to make the cooperation bilateral in the true sense, so that it is not episodic but organic.

CHAPTER - 3

BILATERAL TRADE, INVESTMENTS AND JOINT VENTURES (1983-1989)

Historical relations between India and FRG confined mainly to the fields of Indology, Philosophy and Linguistics. It was only after the World War II that the two countries developed economic ties against the backdrop of cultural understanding. This economic relation rests upon three planks - bilateral trade, investments and Joint Ventures. The problems regarding the three have been analysed in this chapter and attempts have been made to find rooms of improvements.

BILATERAL TRADE

Ever since industrial revolution took place in the West, India has been the supplier of raw materials and importer of finished products. After 1947, India started its independent economic career and strove for uplifting the living standards of its people through industrialization. In pursuance of the above objectives India started importing bulk of capital goods from the developed countries. Among the developed countries, FRG, being competitive on the international plane became a choiced partner of trade for India.

However, massive import of capital goods kept
India in deficit with FRG since the 1950s when India also

started consuming its own raw materials through industries, and it widened the deficit further. Inelastic demand for the Indian goods in the international market as well as growing protectionism of the developed countries for these goods also constricted the growth of exports and listed India as one of the highly indebted countries of the world.

As a response to it, Indian Government initiated an outward looking development stretegy during the 1980s. This strategy aims at integrating Indian manufactures to the world economy by utilizing comparative advantages which mainly result fom relatively low labour costs and availability of raw materials. It is hoped that by relaxation of import regulations and incentives for exports, Indian exporters will be in a better position to enter foreign markets. In this context the industrially advanced country like FRG could play a major role 1.

This change in the economic perspectives of India was clearly reflected in the Import Policy of 1984/5. Measures were introduced with the intention of increasing the productivity and efficiency of the Indian economy. These measures include among other things -

- * a comprehensive tax reform,
- * reduction of price distortions,

^{1.} C.T. Kurien, "Indian Economy in the 1980s and on to the 1990s" Economic and Political Weekly, (Bombay), 15 April, 1989, p.789.

- * adjustments in industrial and technology policy, and
- * liberalization of imports and promotion of exports.

These reforms were introduced in order to

- * push ahead the modernization of Indian industry.
- * open up the Indian market to foreign products gradually,
- * reduce bureaucratic barrier, and
- * increase international competitiveness².

During the early 1980s, FRG's economy also suffered, from industrial stagnation and soaring unemployment. But there have been unmistakable signs of recovery as 1983 drew to a close. Industrial production slowly picked up in a faltering but a clearly perceptible uptrend; pages rustled as new entries were made in order books and the unemployed no longer swelled in their ranks as before.

The impulses of growth came both from the domestic as well as the export sectors - a striking development at a time, when it seemed as though exports, the traditional mainstay of the economic activity, were shedding their role. In fact, between April and July 1982, export orders were

^{2.} K. Fasbender, A. Naini, "Basic Aspects of Indian-German Trade", K. Fasbender, O.G. Mayer & S.S. Saxena, eds.

Indian-German Trade Relations: Framework of Indian Export Efforts, (Hamburg: Verlag, 1988), p.50.

nothing but a trail of negative growth rate. Since summer 1983, however, things started looking up with 2.2 percent more orders booked during July, 10.2 percent more in August and 8.6 percent more in September³. Table (3.1) provides the list of articles and the changes in their exports over the previous year.

TABLE (3.1)

MAIN INDIAN EXPORTS TO FRG (1983)⁴

Items Exports in Indian Exports (percent) * Wool, animal hair and articles there- of mainly carpets * Cotton and cotton goods * Leather and Leather 171.4 13.7 + 0.2 goods * Precious, semi- precious stones and pearls * Silk, rayon, syn- thetic textile fibres and articles thereof * Oilcakes 49.3 3.9 - 23.4					
and articles there- of mainly carpets * Cotton and cotton 266.5 21.2 - 10.3 goods * Leather and Leather 171.4 13.7 + 0.2 goods * Precious, semi- 65.8 5.2 + 48.9 precious stones and pearls * Silk, rayon, syn- 51.1 4.1 - 36.1 thetic textile fibres and articles thereof		Items	in	Indian Exports	previous year
<pre># Leather and Leather 171.4</pre>	a	and articles there-		24.5	+ 13.1
<pre># Precious, semi- 65.8 5.2 + 48.9 precious stones and pearls * Silk, rayon, syn- 51.1 4.1 - 36.1 thetic textile fibres and articles thereof</pre>			266.5	21.2	- 10.3
precious stones and pearls * Silk, rayon, syn- 51.1 4.1 - 36.1 thetic textile fibres and articles thereof			171.4	13.7	+ 0.2
thetic textile fibres and articles thereof	F	precious stones and		5.2	+,48.9
* Oilcakes 49.3 3.9 - 23.4	t	chetic textile fibr	ces	4.1	- 36.1
	* (Dilcakes	49.3	3.9	- 23.4
* Tea 42.9 3.4 - 5.9	* 7	Геа	42.9	3.4	- 5.9

^{3.} IGCC, <u>Indo-German</u> <u>Economic</u> <u>Cooperation</u>, <u>Annual</u> <u>Report</u> <u>1982/83</u>, (Bombay: 1983), p.5.

^{4.} IGCC, Indo-German Economic Cooperation, Annual Report 1983/84, (Bombay: 1984), p.5.

With the end of a period of stabilization in 1983. Indo-German trade appears to be heading towards more firm ground subsequent to its almost vertical ascent since 1984, when it reached what now most certainly appears to be pinnacle in its recent history (Graph 2.1).

TABLE (3.2)
MAIN INDIAN IMPORTS FROM FRG (1983)⁵

	in	Share in total Indian Exports to FRG (percent)	Change over previous year (percent)
* Machinary	853.0	40.3	+ 17.8
* Iron and steel goods	369.9	17.5	- 12.5
* Chemicals and Phar- maceuticals	295.5	14.0	+ 6.9
* Electrotechnical goods	163.0	7.7	- 13.3
* Vehicles	153.0	7.2	+ 68.3

³⁸

exports elsewhere, because Brazil, its main traditional market has gone into financial crisis⁶.

another year for German exports in 1984, which 13 percent worldwide, its exports to India rose by 24 percent. On the import side, German imports were up by percent from countries all over the world, its imports from India, however, on the other hand went up by 13 The year 1985, was a year of spectacular growth percent. when Indo-German trade increased by 20 percent, to reach a new record figure of DM 5 b. The growth was mainly on imports from FRG, exports to FRG expanded by just 3.5 percent. Major increases in imports were recorded once again in electrotechnical goods with 55 percent growth over 1984 after that of 73 percent over 1983. Iron and steel items expanded by 32 percent over 1984 after 73 percent over 1983. Machinary exports which had declined in 1984, jumped by 40 percent and vehicles also recovered by 25 percent as against a fall of 33 percent in the previous year. The growth had been mainly due to the rise in aircraft imports which accounted for a total of DM 67 m as against only DM 17 m in 1984/

In 1985, Germany's trade with the rest of the

^{6.} Arvind Bhandari, "India and West Germany, Economic Links", The Hindustan Times, (New Delhi), 5 Jan. 1984.

^{7.} IGCC, <u>Indo-German</u> <u>Economic</u> <u>Cooperation</u>, <u>Annual</u> <u>Report</u> <u>1985/86</u>, (Bombay: 1986), pp. 3-4.

world expanded by just 8.5 percent compared to 20 percent increase in its trade with India. German exports worldwide rose by 10 percent, whereas its exports to India leaped up by 29 percent. On the imports side, however, the rate of growth of imports from India was lower at 3.5 percent as compared to the growth of total German imports which was 6.8 percent 8.

After the tremendous boom in the Indo-German trade in 1984 and 1985, it again fell marginally in 1986. Indian imports from West Germany fell from approximately DM 3.4 b to DM 3.3 b and it exports to West Germany declined from DM 1.5 b to DM 1.35 b (See Graph 2.1).

Again in 1987, India's imports from FRG declined by 4 percent to DM 3.2b but its exports to FRG rose by 13.7 percent to 1.6b and therefore trade gap was reduced by 17 percent. Sectorwise analysis reveals that cotton garments and fabrics made an ascent which had lost considerable ground in 1986, and FRG became second largest buyer after USA. Leather goods and leather footwear, and precious, semiprecious stones followed the trend. It was responsible for the reduction of trade gap in 1987. But, carpets, rugs etc., of wool and silk garments declined. Exports of engineering goods, however, increased marginally. As far as

^{8.} Ibid, pp.5-6.

^{9.} n.2, pp.104-5.

India's imports from FRG are concerned, vehicles registered a decline by 25 percent. Iron and Steel, electrotechnicals and machinary also came down but machine tools and pharmaceuticals improved slightly 10.

In 1988, India's trade deficit with West Germany was reduced further by 31.5 percent to DM 1.1b as against DM 1.6b in the previous year. This improvement was mainly due to a rise of 13.5 percent in India's exports to West Germany for the second year in row. Declining imports, a trend which has been evident since 1986, also helped close the trade gap. This decline of imports has increased over last three years, 1986-0.2 percent, 1987-4.2 percent & 1988-9.2 percent. Total trade volume in 1988 was DM 4.8b in which India's exports to West Germany was DM 1.8b and imports from that country were DM 2.9b.

India's sales jumped by 29 percent in 1989, for handmade carpets - DM 254 m over DM 194 m in 1987. Silk soared again by 41 percent after 15 percent over 1986 from DM 117 m to DM 167 m. Garment exports rose by 45 percent. Gems & jwellery also registered a healthy increase by 24 percent. Exports of cotton fabrics and garments slowed down as compared to the growth in the previous year expanding by a modest 5 percent. Although a major importer of chemicals

^{10.} IGCC, <u>Indo-German Economic Cooperation</u>, <u>Annual Report</u>, 1987/88, (Bombay: 1988), pp.2-3.

and pharmaceuticals - a total of DM 66 m worth of chemicals were exported to West Germany in 1988. Bulk of exports comprised primary products including dyes and pharmaceuticals.

Despite general uptrend in India's exports certain major items of exports suffered decline. Leather goods seemed to have reached a plateau after dramatic increases over past few years, its exports in 1988 declined by 3 percent to DM 334 m. Tea also seems to have stagnated at DM 48 m¹¹. (Table 3.3).

In 1988, West Germanys total imports worldwide increased by only 7 percent as compared to 14 percent increase in its imports from India. West Germany's exports to the rest of the world improved by 8 percent over 1987, but in relation to India, they declined by 9 percent.

export

Comparing the individual items of during the year 1983 to 1988, we find that cotton and cotton fabrics have increased in percentage terms from 21.2 percent to 23.9 percent and also leather goods from 13.7 percent to 18.4 percent. Woolen articles and carpets of rugs etc. have however declined very sharply from 24.5 percent to 14 percent. Tea also declined due to the emergence of other Asian competitors. However, the exports in chemicals and

^{11.} IGCC, <u>Indo-German</u> <u>Economic Cooperation</u>, <u>Annual Report</u>, <u>1988/89</u>, (Bombay: 1989), pp.4-5.

Items	Exports	Share in total	Change over
	in (m DM)	Indian Exports to FRG (percent)	previous year (percent)
* Cotton and cotton goods	435.6	23.9	+ 4.6
* Leather and Leather goods	334.3	18.4	-· 3.4
* Wool, animal hair and articles there- of mainly carpets	254.2	14.0	+ 29.1
* Silk, rayon, syn- thetic textile fibre and articles thereo:	es	9.2	+ 41.3
* Precious, semi- precious stones and pearls	85.2	4.7	+ 24.1
* Chemicals and Phar- maceuticals	60.7	3.3	+ 20.3
* Tea	47.7	2.6	-1.0
* Engineering goods	46.2	2.5	17.4
Total thereof		100.0	+ 13.5

pharmaceuticals showed impressive growth. On imports side, chemicals and pharmacuticals' share declined (due to the development of India's indigenous capability to produce these goods) from 14.0 percent to 11.7 percent. Share of vehicles also declined from 7.2 percent to 3.6 percent due to India's collaboration with other countries like Japan.

12. Ibid, p.6.

TABLE (3.4)

INDIA'S MAJOR IMPORTS TO FRG (1988) 13

Items	in (m DM)	to FRG (percent)	(percent)
			
* Machinary	1056.6	36.0	- 3.7
* Iron and steel good	s 599.8	20.4	+ 17.5
* Electrotechnical goods	346.1	11.8	- 9.4
* Chemicals and Phar- maceuticals	344.6	11.7	+ 10.2
* Vehicles	105.6	3.6	+ 1-1.5
Total thereof	2934.4	100.0	- 9.2

Share of electrotechnical goods, however, increased from 7.7 percent to 11.8 percent due to India's growing needs out of its determination to accelerate the pace of its industrial development.

Taking an overall view, the share of Indo-German trade with West Germany's total trade has remained constant at 0.5 percent from 1983 to 1988. Total imports from India and exports to it have also stagnated at 0.4 percent and 0.6 percent with slight fluctuations. It seems that although the total Indo-WestGerman trade has increased during the above period in quantum terms, it has just remained constant

^{13.} Ibid, p.6.

with the growth of West Germany's world trade. The trade deficit during the late 1980s has started moving down but it is still very high and India has to go a long way to surmount it.

Indian manufacturers have to realize that they are to face tough competition from the other suppliers (particularly from East Asia) of almost the same goods of better quality and at lower price to West Germany. That is why West Germans are not willing to sign buy-back arrangements. Buy-back arrangements are only useful for buyers with these options if they offer the possibility of a long-term supply at better conditions than offered by other manufacturers. However, most Indian manufacturers can not offer this conclusively. In this respect there is not much difference between the situation in the leather sector and in the jewellery, silk or engineering sectors 14.

Late deliveries and the poor quality of products hurt Indian exports. It is true that power cuts and poor transport and communication are not the excuses of the manufacturers but they hamper the exports and Germans cannot pay for India's lapses. Moreover, pessimistic assessments about the local political conditions and bussiness climate, based on much negative news which currently characterize the reports of the western media about India, also undermine the

^{14.} IGCC, "Good Chances for a Breakthrough in Exports", <u>Technogerma Report, November 1988</u>, (Bombay: 1988), p.87.

efforts to establish long-lasting export relations. In this case, frequent visits of business delegates between India and West Germany may improve the conditions 15.

The foregoing difficulties must not be a reason for discouraging efforts at exports. Potential exporters have to be aware of the existing problems, and they must try to learn the tricks of the trade. For an enduring export business they have to be competitive and should not look for a single contract or tie-up as a panacea. The intensity of competition that is prevailing today on international plane requires of the Indian exporters to produce goods of higher quality at competitive price. It is only this way that India's economy may carve out a place for itself in the world economy that is commensurate with its size and population.

INVESTMENTS

15. Ibid, p.87.

The managers of the developed countries have realized that their own upswing can be maintained and sustained only if the developing countries are also allowed to make some progress. Therefore, with the enlightened self-interest West Germany is giving developmental assistance to India in various ways. West Germany is the third largest aid giver to India after the US and UK. Its

earliest financial assistance dates back to the mid 1950s for the Rourkela Steel Plant.

External Assistance: German external assistance to India comes in both through bilateral and multilateral channels. Multilateral German aid to India is received from the World Bank (IBRD/IDA), UN Special Fund and the EEC. On an average about DM 300 m German aid to India is allocated multilaterally every year.

Since 1986 FRG has been the largest bilateral donor to India. However, the amount of bilateral aid given to India is quite insignificant when compared with the strength of FRG's economy. With the unification of Germany and, socialist economies turning to the market ecomomies, bilateral aid given to India might be affected 16. India, with a desperate need to make its industry competitive and to lift up the socio-economic conditions of its people through faster growth, has to rely on FRG for external finance. Such a situation demands use of diplomatic skills to attain the objective.

German bilateral aid for India was raised to DM 360 m in 1984 against DM 337 m last year. This growth of DM 27 m is not remarkable because since 1980 the amount of bilateral aid has been stagnant at DM 360 m. It was reduced

^{16.} Towards an eco-political resurgence, <u>The Hindustan</u> Times, (New Delhi), 28 March 1990.

to DM 337 m in 1983 but again it rose to its earlier level in 1985. This financial aid saw an impressive rise only in 1986 when it went upto DM 395 m and then again in 1988 to DM 448 m and in 1989 to DM 518 m, (Table 3.5).

Out of the bilateral aid, the Project Aid has been the chief component which has kept pace with the growth of the total aid except for 1988 when DM 100m was given for the drought relief. These project aids are utilized for various developmental purposes. For example the project aid for 1989/90 was given for the projects 17, dealt on the next page.

TABLE (3.5)

GERMAN FINANCIAL ASSISTANCE TO INDIA (m DM)

	1983/4	- - 84/5	85/6	 86/7	87/8	88/9	89/90
Total	337	360	360	395	395	484.4	518.2
Project Aid	196.5	210	210	230	215	183.4	352.5
Commodity Aid	53	40	40	55	45	45	50.7
Capital goods Aid	47.5	60	60	60	60	60	60
Loans to Indian development banks & NABARD	40	50	50	50	75	60	45
Study & Expert Fund	**	-		-	-	-	10
Drought relief	-	-	_	-	-	100	-

Based upon Annual Reports 1985, (p.31); 1988, (p.27) and 1989, (p.35) - of Indo-German Economic Cooperation, (IGCC: Bombay)

^{17.} no.11, pp.35-36.

- * Dadri Combined Cycle Power Station
- * Rourkela Steel Plant
- * Water Supply in West Bengal
- * 30 MW Solar Thermal Power Station
- * Railway Investment Programs
- * Watershed Development, Karnataka
- * Kashipur Sewage Plant
- * HUDCO Building Centres
- * Special Forestry Programs

The main features of West German aid are :-

- 1. Commodity aid, completely unified since Aug. 1973.
- 2. Partial funding, introduced in July 1974.
- 3. The terms of aid, identical with those of IDA since 1976. German aid thus carries an interest rate/service charge of 0.75 percent and has a repayment period of 40 years 18, inclusive of a ten year grace period.

However, we find that the prospects of cocessional aid are dim. With the super power detente and the end of the cold war coupled with the reforms in Eastern Europe; the industrialized west might be a bit less enthusiastic for the development of the Third World. This reduction of

^{18.} Earlier the repayment period was 50 yrs., but in 1989 IDA reduced it to 40 years and FRG did, accordingly.

concessional assistance has to be compensated by the growth of exports 19 .

Technical Assistance - In addition to financial aid, West Germany also grants technical assistance to India. This comparises the supply of equipments, training of personnel etc. Since 1977/8, however, German experts, whose assistance is required in connection with implementation of Indo-German Projects are no longer being sent for long periods. Rather they come only in a 'fire-brigade' style when serious difficulties require ther presence on the spot.

Technical assistance allocated by West Germany in 1984 was DM 30 m, which stayed at the same level in 1985. It was however raised to DM 33 m in 1986. In 1987, it was again raised by 18 percent to DM 39 m. The years 1988 and 1989 saw further increases to DM 45 m and DM 48.5 m respectively.

The establishment of IIT Madras, Prototype production-cum-training centre at Okhla etc. have been the
landmarks of technical assistance of West Germany to India.
Among the ongoing technical projects are New Tool Rooms at
Ahmedabad, Aurangabad and Indore; Computer Centre and
Materials Testing Laboratory at IIT Madras; Institute of

^{19.} Alok Mukherji, "Crucial issues in foreign trade", <u>The Hindu; Suvey of Indian Industry, 1989</u>, (Madras, 1990) p.27.

Remote Sensing at Anna University Madras; Promotion of Telecommunication Research Centre, Delhi; and Ocean Engineering Centre, Madras²⁰.

Direct Foreign Investments

Various studies have cited major developments in foreign investors plans of coming to India in a big way and they are beginning to take shape. The foreign investors are mainly impressed by the comparatively sound financial structure of India and an overall stability that has become rarity in today's world²¹.

Private investments from West Germany rose marginally in 1983 by DM 3.1 m, bringing the cumulative total of investment in India since 1952 to DM 214.4 m. Out of the total West German investments abroad of 7.9b in 1983 for the most part, West German private investment has been flowing to western countries like US, UK, Belgium, Luxemburg and Switzerland. Developing countries share, however, rose marginally from 25.3 percent to 25.6 percent among which Brazil & Spain continue to be favourites. Notwithstanding the marginal increase of 1.5 percent in West German investments during 1983, India continued to be the 6th most

^{20.} Khub Chand, "India and Federal Republic of Germany: Partners in Progress", in Satish Kumar, ed., <u>Yearbook on India's Foreign Policy, 1989</u>, (New Delhi: Sage, 1990), pp.169-70.

^{21.} FRG: Partner in India's development, <u>The Hindustan Times</u>, (New Delhi), 28 March 1990.

attractive country for German investors in the Asian after Japan, Iran, Singapore, Israel and subcontinent Hong Kong²².

Despite the favourable climate of investment with potentially large market, relatively good infrasturcture and large pool of trained manpower, German investments have been modest, not exceeding DM 345 m in 1987 (Table 3.6). This is largely because foreign investments in India is permitted on a selective basis, in high priority and export oriented industries and areas where import of foreign technology is considered necessary. Foreign investment is

TABLE (3.6) GERMAN PRIVATE INVESTMENT IN INDIA/(INDIAN INVESTMENT IN GERMANY)

CHULL THE VILLE	III DOIII III III	THOMAS THE THE THE SERVICE STATE OF THE SERVICE STATE STATE STATE STATE OF THE SERVICE STATE STA
Upto the year	m • DM	percent change over previous year
1980	205 (22)	+ 20.6 (+ 8.3)
1981	244 (25)	+ 19.0 (+ 1.9)
1982	281 (31)	+ 15.2 (+ 7.5)
1983	320 (30)	+ 13.9 (- 1.8)
1984	358 (33)	+ 11.9 (+ 10.0)
1985	355 (48)	- 0.8 (+ 45.5)
1986	340 (51)	- 4.2 (+ 6.3)
1987	345 (50)	+ 1.5 (- 2.0)

Based upon, Indo-German Economic Cooperation, Annual Report, 1988/89 (Bombay: IGCC, 1989), p.28.

^{22.} n.4, p.29.

not regarded as a source of funding of Industrial projects, but as a vehicle of transfer of technology.

- H.G. Hansmann, Advisor to the Indo-German Investment Promotion Services, after discussions with German entrepreneurs have noted several "stumbling blocks" 23 given below:
 - * 40 percent clause regarding equity participation.
 - * Adminstrative delays at various stages from project clearance to the commencement of production.
 - * Visa problems for the German expatriates to work in India.
 - * Problems regarding land allocation/location of project in India, and,
 - * Difficulties relating to licencing agreements.

Furthermore, various informations reveal that FRG does not have a wholesome knowledge about modern India. India should propogate its plus points like size of market, standard of industrialization and the skilled manpower. This could help greater investment to the secured by $India^{24}$.

^{23.} H.G. Hansmann, "Foreign Investments in India: Recent Developments", Technogerma Report, Nov.88, (Bombay: IGCC, 1988), p.83.

^{24.} Commission on the ECs, <u>Industrial</u> <u>Cooperation</u>; <u>the key</u> to <u>investment</u> in <u>India</u>, (Banglore: Maini Industrial <u>Consultants</u>, 1982).

JOINT VENTURES

The main strength of the Indian economy resides in its in-built capacity for sustained growth buttressed by long-term planning and careful financial management. The strength of West German economy vis-a-vis India's needs is its ability to deliver appropriate technology in a broad spectrum of inportant fields, the increasing willingness to part with technological know-how and investible funds for cooperative ventures and last but not least, a strong and buoyant consumer market open to developing countries like India 25.

Such a favourable condition in India is conducive to the German entrepreneurs for establishing joint ventures in India. The primary motives of the German partners are :

- a) long term expectations with regard to market potential,
- b) opening up of new market, and
- c) retaining/consolidating the old market.

Indian partners are genrally interested in Joint Ventures for various reasons listed in the Table (3.7), which shows that Indian partners are not strongly motivated by procuring capital. Still they prefer joint ventures instead of technology transfer. The reason is, they want a long-term commitment with regard to the technology transfer.

^{25. &}quot;Indo-German Economic Cooperation", Economic and Political Weekly, (Bombay), 12 March, 1988, p.AS-1.

In joint ventures the German parterns are said to be taking interest in the quality of products and do not obstruct transferring the required technology.

TABLE (3.7)

	Numb	er of Comp	panies	
Motives	(Choice) ²⁶			
	1	2	3	
To secure know-how	81	18	12	
Diversification of production range with hi-tech & high quality products	18	27	1 4	
Market potential	11	32	17	
To secure capital	3	9	5	
India's import policy	3	7	11	
To improve the companies image	2	4	8	
Profitability	2	3	15	
Export: production of goods in export quality	1	9	16	
The good reputation "Made in Germany"	-	11	8	
Other motives	2	3	15	

Source: IGCC, <u>Indo-German</u> <u>Joint Ventures</u>, (Bombay: 1989), p.33.

^{26.} Foundation motive-choice from 1 to 3, based upon the opinion poll conducted by IGCC of 123 J.V. Companies, in 1987.

Factors 27 on which Depend the Investment Conditions:

- 1. Political Stability Despite sporadic troubles and turmoils and the diversity inherent in India, Indian polity is by and large stable. Moreover various plitical parties existing in India have very minor differences in their economic perspectives which gives security to foreign investments (RS^{28} -1.82).
- 2. Danger of Nationalisation Although India was one of those countries which released the pre-war German capital after World War II, today Indian attitude is very cooperative on track-records, with few cases but adequate compensations (RS-1.40).
- 3. Availability of Capital High rates of savings by both India (over 20 %) and FRG (over 10 %) are impressive. Even the framework obtaining share capital from private capital market is also favourable for the two (RS-2.05).
- 4. Profitability Against many odds, profitability of Indo-German Joint Ventures has averaged between 15 to 20 percent which is not disappointing (RS-2.29).

^{27.} IGCC, <u>Indo-German</u> <u>Joint</u> <u>Ventures</u>, <u>A Study about the experience of Indian and German entrepreneurs</u>, (Bombay: 1989), pp. 4-16.

^{28.} RS = Rating Scale, According to the Survey conducted by IGCC, of Indo-German JV Companies, the answers were rated as 1 to 2, ++ (very positive); 2 to 3, + (positive); 3 to 4, +- (neutral); 4 to 5, - (negative); and 5 to 6, -- (very negative).

- 5. Inflation Normally India's inflation has been in single digit, a fact not true with many developing coutnries. Moreoever India's foreign debt is not so enormous compared with other developing countries (RS-3.28).
- 6. Balance of Trade Over years, India has been in deficit in its balance of trade but the deficit has been moderate compared to other developing countries. Undemanding domestic market has proved a major handicap, for export efforts. Efforts are underway to boost exports through liberlization, the result of which can not be assessed at present (RS-3.82).
- 7. Economic Growth India's economic growth during the plan period has averaged 5 percent with industrial growth ranging from 6.5 to 9.1 percent. Although smaller compared with East Asian countries, constancy is impressive (RS-2.49).
- 8. Bureaucratic Delays Wheels of Indian bureaucracy still move slowly. Despite lot of governmental efforts. This red-tapism has created much of disappointment for the entrepreneurs. Recent efforts to avoid cost of time have met with some success (RS-4.33).
- 9. Labour Costs and Labour Productivity Labour generally cheaper but not so in economic metropoles. Labour productivity is not very favourable (RS-3.16).

- 10. Availability of goods and services Firms in industrially advanced areas have proper services but not goods. Reverse is the case with backward areas (RS-2.36).
- 11. Transport and Communication Transport has improved a lot but communciation is not yet efficient enough. Recent efforts by the Indian government. to improve communication through technology missions, are commendable (RS-3.07).
- 12. Availability of Skilled Labour Very fair and far better than other developing countries (RS-2.40).
- 13. Environmental Legislations Strict environmental laws, but seldom enforced. Recently various environmental movements have cropped up but India being a developing country can not say no to economic development and has to strike out a balanced approach (RS-2.98).

The above descriptions reveal that bureaucratic delays have been the biggest hurdle. It is the focus of criticism made in the highest echelons of EEC circles. This has perhaps reference to the obligatory requirement of approval by the Indian Government of all major industrial/investment proposals, whether they relate to capital goods or joint ventures ²⁹.

^{29.} H.S. Chopra, "India and European Community in 1992; Challenges and New Opportunities," in M.S. Narang; ed; International Industries, Annual 1989, (New Delhi: Fateh, 1989), p.285.

Recently, a system of 'fast-track' has been introduced by the Government for speedy processing of applications complying with formalities in respect of such collaborations. During 1985 to 1987, approval was given to as many as 2,834 collaborations which form 26 percent of the total of 10,891 foreign collaborations approved since 1951³⁰.

Apart from inordinately long delays in Govt. clearances of proposals, other unfavourable factors in the Indian situation include provisions relating to ceiling on foreign held equity, insistence of government authorities on Phased Manufacturing Programme (PMP), implying usually greater use of domestic inputs, export obligations, restrictions on the entry of foreign investors in certain lines of production, inadequate protection to intellectural property rights, etc³¹.

Under the regime led by Rajiv Gandhi, policies bearing pragmatism were introduced so as to promote liberalization. It was then left for the Indian and German partners to decide what type of collaboration, whether technical collaboration or joint ventures they would like to make. Regarding 40 percent clause, the Chambers' (IGCC)

^{30.} M.L. Verma, "Import Policty Framework in India, Trends in Liberalization", Foreign Trade Review, vol.23, n.4, (New Delhi), Jan-March, 1989, p.74.

^{31.} D.N. Saxena, "Foreign Direct Investment", Foreign Trade Review, April-June, 1989, p.77.

delegation to Germany in Sept. 1986 had made a suggestion at its meeting with the Federal Minister of Economics, Dr Martin Bangemann for gaining the confidence of German investors - "If any of the German partners were reluctant to be a minority shareholder because of 40 percent limit on shareholding under FERA, they and their Indian partners could agree to 11 percent of the share capital being held by KfW or DEG on the German side and the ICICI or UTI on the Indian side. Both the Indian and German collaborators would thus be minority shareholders" This proposal is under active consideration. Still the German partners make complaints that their expectations from the liberalization have not been fulfilled.

Table (3.8) shows that after the peak achieved in the number of collaborations in 1985/86, there was a marked decline in 1987. Reasons were - (a) import liberalization encouraged direct import of machinary and plant equipment, and therefore, collaborations for drawings and designs declined. The trend was: 1985-53, 1986-35, 1987-25, (b) the waves of liberalization cleared the backlog in 1985 & 1986 and in 1987 there was no such backlog 33.

^{32.} n.11, p.23.

^{33.} n.10, p.22.

TABLE (3.8)

INDO-GERMAN COLLABORATIONS (YEARWISE)

Year	Total number of collaborations	Number of Technical collabora- tions		percentage of Joint ventures of total collabora- tions
1957	2	0	2	100 ક
1980	100	90	10	10 %
1981	74	60	1 4	18.92 %
1982	110	91	. 19	17.27 %
1983	129	107	22	17.05 %
1984	135	106	19	14.07 %
1985	180	144	36	20 %
1986	183	143	40	21.86 %
1987	149	110	39	26.17 %
1988	178	131	47	26.40 %

Based upon various IGCC Reports of Indo-German Economic Cooperation (Bombay).

Again there is a problem of underutilization of existing capacities mainly due to the sales problems, supply of raw materails and power cuts. Main difficulties after the commencement of production are import licence, bureaucratic restrictions from central and state govts. etc. Table (3.9) comprehensively list them.

TABLE (3.9)

MAIN DIFFICULTIES AFTER COMMENCEMENT OF PRODUCTION

Problems	Number	of Comp	anies
	(Choice) ³³		13
	1	2	3
Import licence	16	19	6
Bureaucratic restrictions from Central Govt.	16	8	14
Energy Supply	14	14	8
Raw Materials Supply	8	15	8
Taxation	6	1	7
Bureaucratic restrictions from State Govt.	5	3	. 3
Workers	4	8	6
Industrial license	4	5	3
Maintenance of machinary, Govt's Industrial settlement policy and other difficulties	7	2	5

Source: Indo-German Joint Ventures, (Bombay: IGCC, 1989), p. 48.

Supply of qualified staff generally presents no problem. Some of the companies have their own training schemes and apprentice workshops. But unlike West Germany, the apprentice education in India is substandard and there are pressing needs to improve it. Working climate is generally positive but the relationship between management

^{33.} Foundation motive-choice from 1 to 3, based upon the opinion poll conducted by IGCC of 123 J.V. Companies, in 1987.

and union is not upto the mark. Strikes and lock-outs are not infrequent but due to adequate social facilities provided by these companies, they are kept under check. Particularly regarding Indo-German joint ventures, backward areas are relatively not so deprived.

Structural Characteristics of Joint Ventures in India

Foundation structure - During the decade of 1950s and 1960s Joint Ventures found a favourable climate of growth in India. But in the 1970s, the government, became critical about the flow of capital and technology, reflected in the establishment of the FERA in 1973. In the 1980s, however, liberalization was set in and the statistics below show that the proportion of Joint Ventures to the total number of authorized collaborations, has increased since then.

				<u> </u>	_ 			- 	34
Yr	1956-60	61-65	66-70	71 – 75	76-80	81-85	86	87	88
- 8	68.4	33.7	24.5	12.8	11.0	13.5	20.9	26.2	26.4

Chemical and vehicle industries were introduced at an early stage whereas mechanical engineering came later.

Sector Structure - Conscious of its economic independence,
India has shown greater interest in foreign technology than
capital. That is why, the proporption of Joint Ventures to

^{34.} Based upon <u>Indo-German Joint Ventures</u>, <u>1989</u>, and various Annual Reports of <u>Indo-German Economic Cooperation</u> (Bombay: IGCC)

the total collborations is still not very high. And, therefore, Joint ventures are allowed only where the production of domestic industry is insufficient or non-existent, or where technology is underdeveloped or, if the production is for export market.

If you look at the nature of joint venture companies, you would find that the Joint ventures producing investment goods with almost 70 percent, form the largest group. Within this sector, machines and machine tools dominate with the greater emphasis placed on textile machinery. The electronics and vehicle industries are also particularly dominant. The second largest group is that of the raw materials and producer goods industries. Within this group, the chemical industry, in which most renowned German firms are involved form the largest single sector (Table 3.10). In general, it can be observed that these are those sectors of German industry which are the most export oriented and where FRG is highly competitive in the international market 35.

Whilst the majority of Joint Ventures are in the areas of high technology, only 6 percent produce consumer goods or food and drink. As a matter of principle foreign investors are not allowed to produce consumer goods unless they are for the export market. Due to this stipulation,

^{35.} n.27, p.18.

these JVs export upto 100 percent of the production (e.g. leather goods). Foreign investors are also forbidden from taking part in the trade sector.

TABLE (3.10)

INDO-GERMAN COLLABO	ORATIONS	SANC	TIONED	(INDUS	STRY WI	SE)
To do a to a				Year		
Industry	1983	1(3) 18(1) 17(3) 14(2) 21(5) 2 2(1) 2(1) 5(2) 5(3) 8(4) 1 3(4) 7(2) 17(3) 26(6) 13(4) 1 5 6(1) 8(3) 11(3) 7(1) 1 4(1) 12(2) 9(1) 14(6) 8(3) 1 2(2) 12 15(4) 9(2) 6(1) 7 0(1) 5(2) 15(4) 12(4) 10(1) 4	1988			
Industrial machines and parts (general)	39(8)*	52(8)	71 (9)	53(7)	53(12)	59(13)
Chemicals & Pharma- ceuticals	9	13(1)	15(4)	24(4)	13(5)	25(5)
Electrical machinary & equipments	21(3)	18(1)	17(3)	14(2)	21 (5)	21(7)
Consultation and Engg. services	2(1)	2(1)	5(2)	5(3)	8 (4)	15(6)
<pre>Instruments, handtools etc.</pre>	13(4)	7(2)	17(3)	26(6)	13(4)	12(7)
Ferrous & non-ferrous products	5	6(1)	8(3)	11(3)	7(1)	12(3)
Vechicles and ancillaries	4(1)	12(2)	9(1)	14(6)	8(3)	11
Machine tools & small tools	12(2)	12	15(4)	9(2)	6(1)	7(1)
Glass, ceramics & refractories	10(1)	5(2)	15(4)	12(4)	10(1)	4
Textile machinaries	7	2(1)	2	6(1)	2	2
Others	7(2)	6	6(3)	9(2)	8(3)	10(5)
Total	129 (22)	135	180 (36)	183 (40)	149 (39)	178 (47)

number in brackets indicates the number of joint ventures.

Source: Annual Reports of Indo-German Economic Cooperation by IGCC, 1986-p.21, 1989-p.26.

Company size structure - In chemicals large scale companies are predominant but in mechanical engineering small scale companies are larger in number. In vehicles, there is no clear cut trend.

Location Structure - Regionwise analysis reveals that for years Bombay/Pune region was the favourite but in the year 1988 Delhi/Faridabad region has taken over (Table 3.11).

TABLE (3.11)

INDO-GERMAN COLLABORATIONS SANCTIONED (REGION WISE)

Dogion	Year							
Region	1983	1984	1985	1986	1987	1988		
Delhi/Faridabad	18(3)*	35(6)	22(5)	26(7)	29(9)	51 (17)		
Bombay/Pune	45(6)	36(6)	58(13)	50(11)	46(13)	47(12)		
Madras	8(3)	10(1)	7(1)	17(2)	4(3)	15(6)		
Calcutta	16(3)	7	20(5)	32(4)	15(4)	11(1)		
Gujrat	8	7	16(1)	14(5)	18	11(2)		
Banglore	10(1)	13(3)	13(3)	10(6)	10(2)	8(3)		
Andhra Pradesh	3(1)	4	6(1)	7(1)	11(4)	8(1)		
Madhya Pradesh	1	2	5(1)	3	2	5(1)		
Others	20(5)	21(3)	33(6)	24(4)	14(4)	22(4)		
Total	129 (22		180		149			
						<u>~</u>		

^{*} number in brackets indicates the number of joint ventures.

Based upon the Annual Reports of Indo-German Economic Cooperation by IGCC, 1986-p.21, 1989-p.26).

Western region has suffered from the labour problem but has overcome the problem of power-cuts by installing their own generators. In southern region, however, this problem still exists. In the west chemicals and in the south vehicles and electronics are very frequent. Mechanical enggineering industries, however, are widely distributed, as industrywise analysis would indicate.

Profit Analysis

Regarding the profits of the joint venture companies, it is apparent that the raw materials and production goods industry earn a lot of profit and can therefore offer above average dividend payments. But chemicals earn profit below average, due mainly to government's drug policy and pricing policy. Vehicles and mechanical engineering are less successful sectors and textile machinary has particular problems due to crisis in the Indian industry.

German partners are found candid and cooperative. They are also praised for their keen attention to the production and export of the products. But they are criticized for their overcautious approach which is unaccomodative to a country like India. They are also found less aware of the Indian mentality, business methods etc. Opposed to it, Japanese & US firms are found more adaptable to Indian conditions and show greater tolerance

and understanding. But they (Germans) are more cooperative in technological matters than Japanese, who stick to the terms of contract³⁶. A notable factor of the above problem is the language barrier as the Germans are very poor in English. Of those interviewed 60 percent of Indian partners said Germany to be better partners, 37.4 percent expressed indifference, and 2 percent felt them worse.

Contribution of Joint Ventures to India

Contributing directly to the improvement of trade Indo-German JVs earn more foreign exchange than balance. they give out in terms of profit transfers, payment of licence fees as royalties. In 1985-86 for instance, 130 German JVs covered by IGCC survey, transferred Rs. 93 m. as dividends, Rs. 43 m as license fees in the form of lump-sum, Rs. 9.8 m as royalties, in a total of Rs. 144.1 m. the other hand in the same period, the JVs recorded an export earning of Rs. 1.61 b. Even if one were to add the costs of the products, imported by Indo-German Joint Venture companies from the German partners (Rs. 577.1 m) to the foreign exchange cost, there would still remain a foreign exchange surplus of Rs. 888.8 m³⁷, which means that one can say without any reservation, that the Indo-German JVs make a

^{36.} Japanese techology import bearing no fruits, <u>Financial</u> Express, (Bombay), 9 April, 1987.

^{37.} n.25, p.AS-3.

positive contribution to the easing of balance of trade. Far more important is the saving of foreign exchange reserves from import substitution.

Compared to the size of the Indian economy, the contribution of 168 Indo-German JVs is naturally small, but they still manage to create high quality jobs for about 80,000 people, for whom 4.42 thousand milion Rs. were paid out in the form of wages, salaries and other personnel contribution in the year 1985/86. The indirect employment was even more.

The profitability of Indo-German JVs in international comparison is assessed as follows -

			38
Return on the Indian JVs in comparison with	Positive	Negative	Indifferent
a) Mother country	21 %	34 %	45 %
b) Other comparable foreign JVs	28.5 %	35.7 %	35.7 %

The good profit situation, influence on the expansion plans of mother company, and an increase in the exports to India, were the most important positive factors of the parent German companies alongwith access to the Soviet market and retention of Indian market, despite the low profitability of the Joint Venture Companies.

^{38.} n.27, p.77.

Apart from the above benefits, manufacturing products with higher qualities, increasing export potential, promoting education and management know-how, developing widespread end-processing industries, improvement of infrastructure, encouragement of r & d etc., are seen as to be the significant contributions in the eyes of German partners. When asked about reinvestment, 97 percent of India partners and 81 percent of German partners replied in the affirmative.

Indian developmental policy has been towards strengthening independence in all spheres of economic activity. With a traumatic past, India has been cautious about financial participation of the foreign companies. But to accelerate the credo of economic development for the welfare of the masses, Joint Ventures can not be said good bye in the light of diwindling external assistance at concessional rate. Few suggestions regarding Joint Ventures are -

- * Cost of time should be saved by toning up the bureaucracy. Recent efforts of the Govt. of India are commendable but it has still a long way to go.
- * Definite time concept should be introduced for all procedures.
- * A high level board of investment with Prime

 Minister at the top should be set up to look into

 these affairs.

- * Export obligations should be made reasonable, so that the foreign companies do not see them as burdens rather these obligations help in the extension of the products, and finally,
- * We need to take a hard look at our policies and procedures, if we have to really go out aggressively to attract FDI. The prevailing folklore of negative policies and diatory, criss-cross procedures must be given an immediate burial.

CHAPTER - 4

PROBLEMS AND PROSPECTS OF COOPERATION IN SCIENTIFIC AND TECHNOLOGICAL DOMAINS

today's world, technology has In become internationally traded commodity. For various reasons, technology has become dominant theme in the relationship industrialised West and the Third World between the countries. Western industrialization which began in the late 18th century was product of development of science and technology. Various socio-political factors inhibited technological revolutions to break out in the countries, now developing countries. Such a differential known as development between the developed and developing countries led to a wide gap in their levels of technology. Developing countries after throwing off colonial fetters took to industrialization as a means to promote socio- economic As such industrialization conditions of their people. required high dose of technology, and as a result third world countries have become technological appendages of the developed countries.

The real motives of the developed countries in exporting technology to the Third World countries are -

^{1.} Dieter Ernst, "International Transfer of Technology, Technological Dependence and Underdevelopment", in Dieter Ernst, ed., <u>The International Division of Labour, Technology and Underdevelopment</u>, (Frankfurt: Campus Verlag, 1980), pp.7-20.

1. Extending the product life-cycle of the technology substituting innovations, as a part of the global strategy of 'planned obsolescence'.

It is manifest with the new themes of the Uruguay Round that US, EEC and Japan are emphasising the regidities regarding the 'patent protection' so as to contain the development of technologies in the Third World. It has become a major issue for the west at present because the new technologies being skill intensive can be screened out very easily in the Third World countries².

- Effective and enduring instrument for penetration of closed markets, given the high level of protectionism in the Third World.
- 3. Shifting of the cost-burden of r & d, (research and development) which has increased mainfold over the years due to inflation and inherent risks.

In this regard Dieter Ernst says:

"According to the data supplied by the German chemical industry, its r & d expenditures have increased by at least 100% during the last ten years. For west German industry in general, the direct cost of establishing one industrial r & d job has increased from 140,000 DM in 1970 to nearly 220,000 DM in 1977 - nearly 60%"3.

^{2.} Anna Murphy, <u>The European Community and the International Trading System: Completing the Uruguay Round of the GATT, (Brussels: CEPS, 1990), p.98.</u>

^{3.} n.1, p.1:2.

This burden sharing among unequals is an important precondition for the present global patterns of technological dominance/dependence. Apart from these general reasons for the export of technology discussed above, some specific reasons are also there. For example, in the case of pharmaceuticals, new drugs are tested on the patients of the Third World countries as they are banned in the mother country.

On the other hand India, as well as other developing countries after independence realized that the complete dependence on foreign goods was undesirable and tended to cause balance of payments (b-o-p) problems. Therefore, the focal strategy of industrialization was import-substitution. In this direction, a shift took place from the import of goods to the import of technology.

The import of foreign technology to India takes place in coordination with Technology Policy Statement, 1983, which clearly says that import of technology will continue to be permitted only on a selective basis where it has been established that technology does not exist within the country and where the time taken to generate the technology indigenously would delay the achievement of development targets⁴.

^{4.} M. Satypal, "Impact of Technological Imports on the Indian Economy", in <u>Technology Transfer & Trade</u>, Department of Scientific and Industrial Research, (New Delhi: Technology Bhawan, 1986), p.66.

The technology is imported in India in two ways -

1. TECHNICAL COLLBORATIONS

a) Licensing agreements - Pure technical collboration, (forming the largest proportion of collaborations) where only know-how is provided by the foreign partner against royalty and/or lump-sum payments. Royalty payments, normally not more than 5 percent except for export oriented goods, is calculated on the basis of the net ex-factory sale price of the product, exlusive of excise duties, minus the cost of the standard bought out components and the landed cost of the imported componets, irrespective of the source of procurement including ocean freight, insurance, customs duties etc. 5

The duration of such agreement is normally 10 years. Royalty payments start three years after the commencement of production. Lumpsum payments are made in three standard instalments. Besides royalties, fees for technical services may be made part of the agreement. Royalties as well as fees for technical services are taxable in India. According to the Indo-German Double Taxation Agreement, which I have discussed later in details, the tax is 20 percent on the gross amount, whereas for others it is 30 percent.

^{5.} Christian Pollak and Jurgen Riedel, German firms' strategies towards Industrial Cooperation with Developing Countries (Munich: IFO, 1984), p.76.

- b) Agreements for designs and drawings It is outright import of technology and is the simplified form of licensing agreements. Such an agreement provides no scope of linkage for development of the know-how. Outright import is gaining ground because, the procedure of sanctioning is much easier.
- 2. JOINT VENTURES - It is the most enduring of all the three collaborations where foreign technology comes with the and also with the experiments of the parent capital Existing Joint Ventures are governed by the companies. regulations of FERA. Under this act, companies have to dilute their foreign equity upto 40 percent except in Those companies with more than 40 percent special cases. equity are known as FERA companies and are subject to limitations on their expansion and diversification. several companies are only permissible if technology is Such sophisticated or the industry falls cases under priority For 100 percent export oriented companies, equity sector. participation is allowed upto 100 percent⁶.

It is quite often argued that outright acquisition of foreign technology through technical collaboration, without equity participation has the merit that payment is made either on lump-sum basis or is spread over a limited period, in the case of foreign held equity, payment of royalty and fees do not stop after a certain specified 6. IGCC, Indo-German Economic Cooperation, Annual Report

1988-89, (Bombay: 1989), p.25.

⁷⁶

period. Another advantage claimed in this context is that Indian parties acquiring technology becomes owner of the technology and they enjoy a good deal of freedom in assimilating, adopting and developing the acquired technology. However, as against these arguments, there is the stark fact that under outright sale arrangement, foreign parties do not really part with their latest state-of-art, and make available to Indian parties technology that has either become obsolete or would soon become so⁷.

In the case of Joint Ventures (JVs), the basic advantage of inflow of technology alongwith investment is that, foreign collaborator continues to have long-term interest in the future of the venture. The foreign party here is not averse from bringing into the unit fresh dose of technology, for this would improve the unit's profitability and would thereby benefit him too. Yet another advantage of JVs is that alongwith capital and technology foreign parties bring management techniques and culture, work ethos, production development experiences, industrial expertise and skills etc. Above all, in JVs, flight of capital takes place only when there is profit.

India's attitude towards Direct Foreign

Investment through JVs has been that of Mark Twain's Cat.

^{7.} D.N. Saxena, "Foreign Direct Investment", in <u>Foreign</u> Trade Review, (New Delhi), April-June, 1989, p.83

^{8.} FRG: Partner in India's development, The Hindustan Times, (New Delhi), 28 March 1990.

Having suffered in the colonial past, India's apprehensions about foreign entrepreneurs are - choosing only soft areas in industry could provide set back to indigenous labour intensive industries; exploiting market for expanding exports; negating indigenous development of science & technology by bringing in obsolete technology; trying to change consumption habits; drain of wealth; unfair practices like transfer - pricing, high management fees, and high interest payments to the parent company 9.

Accordingly, India has taken various safeguard measures like, ceilings on equity participation; scrutiny with regard to the nature of foreign technology; export obligation; phased domestic manaufacturing programmes; ceiling on royalty or other payments; regulations relating to the employment of foreign technicians and appointment of non-resident directors 10.

India's critical attitude towards direct foreign investment has led to the dismal figure of such investment and India has, henceforth, preferred technical collaboration rather than Joint Ventures. It is this reason that the proportion of Joint Ventures to the total number of collaborations has not increased more than 27 percent as per

^{9.} n.7, p.89.

Munesh Kumar, <u>International Transfer of Technology to India</u>; (New Delhi: Anmol, 1983), pp. 15-21.

the latest data available 11. However, during the 1980s, liberalization and, the basic condition for technological collaboration like the duration of agreements, royalty fees etc., have been made more flexible 12. A noteworthy development that came up in this regard is

Indo-German Double Taxation Avoidance Agreement -New brought into force on 10 Aug., 1985. The most striking among the new regulations are incentives for the new investors. Dividends paid on share capital issued after the date of coming into force of new agreement are taxed at a rate of only 15 percent instead of 25 percent which is charged on dividends earned from all investments. Further, the tax charged on investors payable with respect to a loan given on debt created after the date of coming into force of the new agreement is limited to 10 percent if such interest is paid on a loan granted by a bank and to 15 percent in all other cases. In addition, the minimum shareholding in a JV, which entitles it to the intercorporate privilege, has been reduced to 10 percent from 25 percent. This is an important step since around 80 percent of the Indo-German JVs have minority shareholding with German share capital of less than 25 percent 13.

^{11.} See Graph (2.2).

^{12.} Foreign investment procedures simplified, The Economic Times, (New Delhi), 1 Oct., 1988.

^{13.} IGCC, <u>Indo German Economic Corporation</u>, Annual Report 1984/85, (Bombay: 1985), p.27.

and switchboards, AEG is leading in transformers. Cables and insulators form vital links in power distribution. Cable Corporation of India enjoys collaboration with Siemens. Turning to, the conversion of electric power into mechanical energy, here again, German companies like Siemens, Schanzlin and Becker have significant contributions 15.

In the field of thermal energy, feeling the need for more competitions in cooling towers Wig brothers have entered into collaboration with German Companies (E. Heitkamp GmbH for design & consultancy and with Black-durr for thermal design) with latest world technology 16.

In the field of nuclear energy, ABB (Asea Brown Boveri) is involved in the construction of light water reactors and the associated servicing work. Hochtemperatur-Reaktorban GmbH, an ABB subsidiary, has developed and built the high temperature reactor 17. Looking at the growing needs of India's electric power in order to provide basic facilities to the people and accelerating the process of industrialization, cooperation with FRG is important and needs to be intensified.

^{15.} Indian Investment Centre; Development Through Cooperation, India and Federal Republic of Germany, (New Delhi: 1970), pp.22-24.

^{16.} Pioneers in Construction, <u>The Hindustan Times</u>, (New Delhi), 28 March, 1990.

^{17.} Wide Product Range, The Hindustan Times, (New Delhi), 28 March, 1990.

Again in 1988, within the braod framework of govt.

policy several procedural simplifications were made -

- * For helping entrepreneurs to generate alternative offers for technology, the govt, allowed by a Press note dated 21 March, 1988, payment of a "disclosure fee" for total technology payments exceeding Rs.10 m, subject to certain conditions. By another Press note dated 21 July, 1988 this facility was extended to all industries.
- * The upper limit for the import of technical know-how/capital equipment under the aegis of Technical Development Fund Scheme by an industrial unit in any financial year has been raised to the foreign exchange equivalent of Rs.30 m as against Rs.20 m earlier. Both lump-sum payments as well as royalties are covered.
- * For rewriting royalties and technical fees, a "no objection certificate" from the income tax authorities will no longer be required if the tax is deducted at 30 percent and is paid into an authorized bank 14.

Still, however, the German partners are not very much satisfied and complain that their expectations from liberalization have not been fulfilled.

^{14.} IGCC; <u>Indo-German Economic Coopration</u>, <u>Annual Report</u> 1988/89, (Bombay: 1989), pp.31-32.

SELECT AREAS OF TECHNOLOGICAL COLLABORATION

The spectrum of West German assistance technological field covers a wide range of infrastructure, agriculture, education, health, mass communciation etc. experiences of industrialization in various countries reveal that it can only be feasible if agricultural surplus is generated . which would not only make our industry domestically competitive by raising the purchasing power of the masses but also by providing raw materials. In order to raise the productivity of the land, it is necessary to develop modern agricutlural inputs like implements. fertilisers and plant protection chemicals. The prerequisites to modernization of agriculture are development of infrastructure - irrigation, power, transport In each of these, the impact of German and communication. technological cooperation has been marked.

Electric Power - West Germany's association in India's power generation programme dates back to 1912, when Siemens supplied four 10 MW generating sets to the Tata Hydro Electric Project at Bombay. Since then this German firm has continued to play a significant part in this field through supply of equipments for multipurpose projects, like Hirakud, Chambal, Patni, Khapadkheda, Durgapur and Rourkela. Outstanding help in the distribution field has also come from three other leading West German firms: Calor Emag, AEG and Dominitwerke. While calor Emag is producing switchgear

Agriculture - With the help of the Germans, India has launched a joint agricultural development programme in Mandi, Almora, Nilgiris and Kangra. The Dauladhar Project has been taken up to prevent soil erosion 18. In the production of tractors, cooperation of Eicher and Humboldt Deutz are impressive. In pest-control and fertilisers also the contribution of FRG is noteworthy. These fertiliser plants are based upon diverse raw materials like naptha, coal etc., where the most renowned German firms like UHDF and Lurgi are in operation. In the area of plant problem, the German firms like Bayer and Carl Platz have significant role.

Transport - Transport and communication facilitate the movement of goods and provide basic services to the community and henceforth important from development point of view. One of the proudest achievements of Indo-German collaboration in this field, is the factory for producing diesel engine heavy vehicles (trucks) at TELCO with Diamler Benz. For meeting the requirement of the defence services, manufacturing facilities for trucks known as "Shakti-Man" have been set up at Jabalpur in collaboration with M.A.N. The collaboration of Bajaj with Vidal Tempowerk for three wheelers is also popular. In the development of automobile

^{18.} Khub Chand, "India and the Federal Republic of Germany: Partners in Progress", in Satish Kumar, ed., <u>Yearbook on India's Foreign Policy</u>, 1989, (New Delhi: Sage, 1990), p.168.

ancillaries, the Joint Venture of Motor Industries Banglore with Bosch enjoys reputation, where Bosch has a major equity participation. Here again the collaboration of Escorts with Goetze Werke, Mahle and Suko produces wide range of automobiles, railway and electrical ancillaries, says H.P. Nanda, Chairman of IGCC¹⁹. In the manufacture of tyres, Modi Rubber Ltd. in collaboration with Contineutal Gummi Werke AG of FRG is a pioneer in the automotive tyre industry having the largest market share²⁰.

Steel and Allied Industries - Steel forms the backbone for a nations industrial development. Rourkela'Steel Plant (RSP) is a gigantic monument to Indo-German collaboration. Since the beginning of the 1960's West Germany has invested DM 1.3b in the RSP, the largest Indo-German cooperation The Indian govt. envisages an increase in the project. volume of steel production from the present level of 11 mpta mpta by the end of this century. Recently, FRG has promised to help modernize the RSP by financing DM 660 m and by this, is making a vital contribution towards industrial development²¹. FRG's firms like Didier-Werke, Wiesbaden etc. are collaborating with TISCO for the production of FRG: excellent business partner; The Hindustan Times, (New Delhi), 28 March, 1990.

^{20.} IGCC; "Modi Rubber Ltd: Brief History", <u>Technogerma</u> Report, Nov. 88, (Bombay: 1988), p.131.

^{21.} H.Holl, "Rourkela: Flagship of Indo-German Relations", <u>Technogerma Report Nov.88</u>, (Bombay: IGCC, 1988), pp.89-91.

refractories. M.A.N. is helping India in the manufacture of cranes. Various other German firms are also helping in the production of industrial furnaces which are vital for steel plants and metallurgical and chemical industries.

Machine tools - The state of development of the machine tool industry reflects the industrial potential of a nation in as much as machine tools are mother tools that make machines for all production activities. A number of leading German firms like Fritz Werner, Hermann Kolb, Hans Liebherr, Berg & etc. have extended not only technical but also Co. financial support to us²². Dr. Beck & Co. (India) Ltd., in which BASE Lacke + Farben AG has a 49 percent participation, produces insulation systems for the electrical industry in Pimpri and Ankaleswar²³. Rohde and Doerrenberg are assisting in the production of cutting tools. Gedore India is yet another joint venture producing hand tools. The contribution of German technology has enabled India to produce variety of tools which are used by its engineering industries.

^{23.} IGCC, "BASF Products for a Promising Market", Technogerma Report, Nov.88, (Bombay: 1988), p.102.

the west, Indian industries are facing export problems.

Here again contribution of German firm Glanzstoff in production of nylon yarn is note-worthy.

Cement and Sugar - Two other old and basic industries which have also received German assistance though in an indirect manner, and leading to self-sufficiency in the matter of development of required plant and equipment are - cement and sugar. Notable instances of Indo-German joint ventures which have made possible this development are the ACC-Vickers Babcock & Wilcox, in agreement with Kloeckner - Humboldt - Deutz Koeln for manufacturinh cement machinary; and Buckau Wolf-New India Engineering works, Pune which have a financial and technical collaboration with Maschinenfabrik. Buckau R. Wolf of Germany for the manufacture of sugar mill machinary 24.

Drugs & Pharmaceuticals - The lowering of the mortality rate the increase in life expectancy have been achieved by and many sided developmental programmes catalysed by drugs the pharmaceuticals. Here collboration with Merck, and Boehringer, Bayers, Lohmann etc. have produced variety of and pharmaceuticals ranging from antibiotics to drugs In other allied articles like multivitamin preparations. leukoplast and X-ray equipments also, the contribution of

24.

n.15, p.34.

FRG is unforgettable²⁵. However, drugs and pharmaceuticals are sensitive items and have enormous health implications and, therefore, demands considerable caution.

Chemicals and Plastics - India has recently entered the palstic age in a big way and produces a variety of products like ethylene, butene, styrene and polystyrene, where many of German firms like BASF and Hoechst are invovled. Polyvinyl acetate emulsion which finds use in textile finishing and printing, emulsion paints and wood working industries is again a product of Indo-German collaboration. Bayer has a special contribution in the manufacture of resin. Meissner Koeln has technically helped in the production of gun-powder²⁶.

The Kinetics Technology of India, a company of Mannesmann Group of FRG, is providing various technology ranging from Gas Generation and Treatment using Catalytic Reforming Process, Hydrogen plants, Synthetic gas plants for Ammonia, Methanol, Oxo-alcohols and Inert Gas Plants; Gas purification systems for removal/recovery of $\rm H_2S, CO_2, CO$, Thermal Cracking Furnaces for $\rm C_2H_2$; to PSA systems for Nitrogen Generation and Hydrogen Purification $\rm ^{27}$.

^{25.} Ministry of Science of Technology, (DSIR), Foreign Collaboration-1984, A Compilation: National Register of Foreign Collaboration, (New Delhi: 1984).

^{26.} n.15, pp.35-36.

^{27.} Leader in Patrochemicals, <u>The Hindustan Times</u>, (New Delhi), 28 March, 1990,

Mass Communication Media

Indo-German collboration in the field of manufacture of radio receivers has helped in the gradual extension of radio facilities. The German firm Telefunken has a joint venture in India manufacturing various types of radios including transistors. In the fields of TV and Wireless also the contribution of FRG is noteworthy.

TECHNICAL ASSISTANCE

Apart from the collaboration in the fields of technology, Germany provides valuable technical assistance to India. Prototype production and Training Centre at Okhla; Indo-German Technical Institute for Industrial Foreman Training at Bangalore; Tool Rooms at Lucknow and Ludhiana for upgrading tools; skills and management techniques; IIT Madras etc. are the monuments of such assistance.

Geo-seismic research, rocket technology and oceanology are the new areas of technical assistance. German built 'Sagar Kanya' has put India on the map for marine biology and exploitation of ocean-bed resources. Moreover, apprentice training institutes run by the Indo-German joint ventures also provide technical assistance in an indirect manner. The Siemens Engineering Corporation, Bombay; Mico-Bosch, Banglore; and Rourkela Steel Plant are

well known in this direction. These industries also provide training facility for Indian workers in the FRG. Yet another channel of such assistance is through scholarships offered by Alexander Von Humboldt Foundation and German Academic Exchange Service which continue to widen horizons of many scientists and scholars²⁸.

From the foregoing it is obvious that German contribution to the development of India's economy has been all pervasive and more importantly has been worked out in an integrated manner leading to the development of India's requirements in the sequential order. This covers scientific farming techniques leading to increased agricultural yields, manufacture of various agricutlural inputs, involvement in educational and technical training programmes and transport, manufacture of basic drugs and pharmaceuticals, and other necessities, and induction of modern technology in the textiles, dye-stuff and basic more significant is the chemical industries. Even fields of steel-making, heavy contribution in the engineering, machine tools and a variety of other light and heavy engineering goods enabling the country to march forward on its path to self-reliance. West Germany has also contributed either through supply of equipment or through technology and other services, to the manufacture of

^{28.} n.18, pp.168.

consumer products like radios, textiles, readymade garments, pharmaceuticals and cameras. In fact, it might be somewhat difficult to identify any major area which has not received the impact of German assistance either in the form of supply of equipment or of technology.

Alongwith the above projects which are the records Indo-German collaboration, other ongoing development projects are thermal power stations at Singrauli, Korba, Ramagundam and Farakka; Neyveli Lignite Combine III; Urban combined gas-steam power plant; Kapurthala Railway coach factory and a railway spring factory; Modi radial ply-tyre factory; rural water supply in Madhya Pradesh benifiting 700 villages; minor irrigation in Rajasthan; supply of breeding HUDCO and Environmental cattle; housing project of Protection. Among ongoing technical projects are new Tool Rooms at Ahmedabad, Aurangabad and Indore; Computer Centre and Materials Testing Laboratory at IIT Madras; Promotion of Telecommunication Research Centre; Delhi; Institute of Remote Sensing at Anna University, Madras, and Ocean Engineering Centre, Madras²⁹.

Indo-German cooperation in Science & Technology aims at the development of new technologies, adaptation of existing technologies and demonstration and testing of new technologies apart from strengthening r & d facilities at 29. IGCC, Indo-German Economic Coopration, Annual Reports 1983 to 1988, (Bombay).

various universities, research institutes and industrial by training and exchange of informations, enterprises scientist and engineers. Indo-German cooperation has been particularly marked in space research, flight mechanics & non-sensitive nuclear aerodynamics. research in disposal, decontamination, waste reactor safety and functioning of accelerators, non-conventional energy sources including thermo-solar energy and gasification of coal, marine science, medicine and biology, biotechnology particularly plant tissue culture and plant protoplast geology including earthquake research and fusion and tectonics³⁰.

In the areas of new technologies like computers, superstrength steel, newer sources of energy, superconductors etc. India has made recent headway which has generated enough market demand for these goods and therefore, India needs German cooperation in a massive way. Among the five new areas particularly computers which are based upon the syntax of Indo-German language can be a choice area of technological cooperation between India FRG³¹.

However, FRG is lagging behind Japan & US, in the above areas. This is particularly due to the state policy of helping old ailing giants and not new micrales. An elment number of number

31. Konrad Seitz, "India and FRG in an emerging globle economy", <u>German News</u>, (New Delhi), vol.31, May 1989, pp.6-7.

of conservatism has also crept in the German industrialists who are avoiding risky ventures. All have led to the growth of mergers and takeovers and technological competiton in these industries are not very sound in the domestic market ³². FRG has to go harder if it wants to be number one in these areas.

Still in so many fields German technology is reliable and competitive on the international market. If we are really interested in a fruitful cooperation, we have to come closer and get to understand each other better. More and more Technogermas and CeBITS would improve the climate of cooperation.

^{32.} M. Balfour, <u>West Germany</u>, <u>A Contemporary History</u>, (London: Croomhelm, 1982), pp. 123-41.

CHAPTER - 5

CONCLUSION

the end of the lean period of the 1970s, FRG have entered into an era of intense and cooperation. Such a fillip to economic and technological cooperation has been provided by the fast developing global of the Indian economy coupled with a better outlook international political climate. In the 1970s, India's Soviet leanings and FRG's key role in the NATO, always kept the two countries at bay, under the backdrop of superpower confrontations. This had important bearings upon their economic relations. India during the 1970's period was critical of direct foreign investments, which was reflected in the enactment of FERA in 1973. As a result, the share of Joint Ventures to the authorized collaborations which was on average 29.1 percent during the 1960s came down to merely 11.9 percent in the 1970s. India's apprehensions about the western capitalist economies inhibited the growth of Indo-German cooperation.

However, in the decade of the 1980s, important developments have taken place in international politics. With the turning of socialist economies to free enterprize, decoupling of alliance systems, and super-power reconciliations, have improved the climate for more intense

Indo-FRG economic relations. Accordingly, Indian economy was liberalized and a shift was noted in the economic policy, from import substitution to import based export promotion in the light of India's recurring deficit in its balance of payments and its falling into debt-trap. In this context, India's economic policy planners have been of the view that these wrongs could be rectified by the growth of exports, for which high dose of foreign capital and technology should be allowed to the Indian industries. Here, an attempt is made to delineate some of the factors relating to the growth of exports.

First, the growth of exports is explained by the growth of market rather than by the extent of market penetration. Viewed in the context of the depressed international trading environment, characterized by demand squeeze, recessionary trends, restrictive practices and policies pursued by the developed countries like FRG, the growth of market is limited and no amount of deregulation can boost India's exports. The integration of European Market in 1992 is also going to increase the intra-EC trade which would eventually reduce the size of the European market for a country like India.

Second, exports could be developed along healthy lines only if surplus produce is exported, rather than producing only to export. This means that there has to be

intense domestic competition, which may be possible only if purchasing power of the people is increased. We have seen in the preceding chapters that after liberalization of our economy, purchasing power of the masses has not risen, in relation to the price-index of the basic commodities. are of the opinion that instead economists Some developing domestic competitiveness, policy of. liberalization led to the growth of monopolistic has tendencies in the industrial sector.

As far as Indo-German trade is concerned, we have that, during the period of 1983 to 1989, imports from FRG have increased manifold which has affected India's foreign exchange holdings. We have also seen that during last three years, we have narrowed down the deficit. But the reduction in its deficit has not been significant for, it is due to the multiplier effect of liberalization, which may take many more years to materalize, provided the domestic and international situations remain favourable. Moreover such a reduction in the trade deficit has been rather modest and that too as compared to the large deficit in the preceding years. Statistics reveal that the deficits in the years - 1980, 81, 82, 83, 84, 85, 86, 87, 88 have been approximately of the order of 0.2b, 1.0b, 0.9b, 0.8b, 1.1b, 2.0b, 2.0b, 1.5b, $1.1b^{1}$. Therefore, if we want to escape from falling into debt-trap by more exports, we have

^{1.} See Graph (2.1)

to generate greater and healthier domestic competition and to fight hard against protectionism of the developed countries and FRG in particular.

The policy of liberalization requires more capital imports which is a dangerous proposition in the current financial situation. international With the rate of stagnating 22% domestic savings almost around (1980/81-22.78, 81/82-22.68, 82/83-20.88,83/84-20.8%, 84/85-20.1%, 85/86-22.8%, 86/87-21.7%, 87/88-21.7%, $88/89-23.9%)^2$, we have to depend upon external finance. However, we see that the growth of the external assistance from the FRG has been modest(1983/4=334 m DM, 84/85=360 m DM, 85/86=360 m DM86/87 = 395 m DM87/88 = 395 m DM89/90=518.2 m DM). As the growth of the 88/89 = 484.4 m DMmultilateral finance has been slow during the recent years, India will have to rely upon commercial borrowings which may add up to its present debt liabilities. Therefore, India has to generate more savings so as to keep the inflationary tendencies under check. With the integration of the GDR with the FRG, it is also likely that the FRG's finance may be diverted to help reconstruct and reorientate the East German economy which, in any case, is now under the charge of the Unified Germany's fiscal discipline. Therefore, India will have to use diplomatic skills so as to raise official borrowings from FRG.

^{2.} Ministry of Finance, (Govt. of India), Economic Survey 1989-90, pp.S-8-9.

It is also argued that much of the foreign aid received by India has been wasted due to its incompetent management by the bureacracy. More often than not, it has only led to the enrichment of elite with serious social and economic implications. Joint Ventures may provide answer, but in this case too much depends upon the dividends that the capital investment may bring in.

In the 1980s, India liberalized its policy towards direct foreign investment which has led to the increase of Indo-German Joint Ventures (1980=10, 81=14, 82=19, 83=22, 84=19, 85=36, 86=40, 87=39, 88=47). Still the growth of Joint Ventures is slow and whatever growth has taken place is the result of the clearing of backlogs by the punctuality displayed by administration. India is still apprehensive about the direct foreign investment and has taken an attitude of Mark Twain's Cat. Even though, India is not a banana republic, its apprehensions are valid.

One of the important characteristics of Joint Ventures is that they are not taken to be the lever of economic growth but as the vehicle of technology transfer. In order to make our industry competitive in the international market, and also to reap the benefits of India's structural economic plus points of cheap labour and abundant raw materials, we need tangible inputs of foreign technology. Apropos, a few points need to be mentioned.

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First, there has been a steep hike in the price of technology because of the growing expenditure on r&d, which transferred to the importing countries like India. Secondly, foreign technology has been highly alienated from the productive forces and has created a structural gap social technology needs and technological imports. Lastly, but most significantly, the recent debates over Intellectural Property Rights and the insistence of OECD countries including FRG to bring it within the purview of may only inhibit the growth of the indigenous GATT. technology. The new technologies being skill- intensive can easily be copied and the countries like FRG have tacit understanding with other developed countries to check the growth of indigenous technological capacity in the third world.

Such a non-too-happy situation places emphasis upon the indigenous growth of technology. Although we can not bid good-bye to foreign technology at this stage, we must strive towards technological self-reliance which must cover two aspects - the ability to generate, adapt and use of technological systems relevant for meeting social technology needs, and, the ability to choose and control the areas of partial technological dependence, which, in many years would remain unavoidable by identifying the priority sectors for selective technological delinking from the world market. In view of the fact that the choice of technologies

will depend upon the prevailing needs and not vice-versa, an appropriate political system must exist for the aspirations of the masses to be realized.

Yet, we can not take pains for reinventing the wheel, but we can not sit for long on a bike driven by others.

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