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PACT PROGRAM REVIEW

Price Waterhouse
International Consulting Group

August 10, 1992

Office of Government Services
1801 K Street, N.W.
Washington, DC 20006
Telephone 202 296 0800

Price Waterhouse

August 10, 1992

Dr. John A. Grayzel
USAID/New Delhi
New Delhi, India

Dear John:

We are pleased to submit our evaluation report on the PACT Program as requested by USAID/New Delhi under a buy-in with the FSDP project. This report reflects views of members of ICICI, the PACT Council and USAID/New Delhi, who either reviewed an earlier draft of the report or responded to oral presentations by Ed Mlavsky and me.

PACT is unique and is off to an excellent beginning. It has not yet, however, reached its full potential. Its future is very promising for reasons that are outlined in the report. Our impression is that PACT is expanding into areas, e.g., venture capital financing and debt financing of technology acquisitions, that are more appropriate for other specialized financial institutions.

PACT's strength lies not in financing, but in identifying and forging partnerships in technology development and commercialization. It has operated at the low end of technology to date; it now has the experience which, with the improving Indian economic environment, will facilitate more innovative technological development. The constraints are 1) end of project date (mid-1995), 2) funding, and 3) a perception that PACT should be financially self-sufficient by mid-1995, which it will not be (no failure in my book).

The AID mission should value its support to PACT as a technology development financing facility, a type of facility that is judged on the basis of its benefits to a country (or states) not to its financial return on investment. PACT finances projects that will hopefully lead to new lines of business attractive to venture capital equity investments and commercial bank loan financing for expansion.

Our major recommendation is that PACT should target fewer US start-up companies, concentrating more on companies which have demonstrated the capability to commercialize new products quickly and successfully. This would immediately help Chairman Vaghul overcome concerns about financing the commercialization of products in the US. This strategy would also directly support the GOI's liberalization efforts. Such an effort -- particularly relocating an ICICI/PACT person in the US -- may only be warranted at this

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time if USAID could add some additional funds to PACT in early fiscal year 1993. We hope that is possible.

As to the future -- beyond 1995 -- we see PACT, with additional funding, investing in the development of more innovative technologies, sometimes with collaborative third party financing. We see PACT marketing more aggressively in the US, targeting larger US companies than has been its experience to date. We see PACT working more closely with other sources of US financing for technology development and commercialization. We see PACT taking a lead in identifying opportunities and financing technology development partnerships to solve some of India's social and developmental constraints, such ones as health and the environment. We recommend that PACT do what it was established to do on a larger and more aggressive scale.

We received excellent cooperation from ICICI, Meridian and USAID/New Delhi in the preparation of this report, which is greatly appreciated. If you have any questions, comments, or need additional copies of the report, please let me know.

Sincerely yours,

Edgar C. Harrell, acm

Edgar C. Harrell
Director, Operations and Programs
International Privatization Group

Attachment
ECH/am

cc: Dr. Jack Goldman, Co-Chairman, PACT Council
Mr. N. Vaghul, Chairman, ICICI and Co-Chairman, PACT Council
Mr. P.D. Shedde, Manager, PACT Project
Dr. Ed Mlavsky, Executive Director, BIRD F
Mr. Richard Breen, FSDP Project Director, Price Waterhouse
Mr. Frank Baitman, Meridian

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Introduction

1. Ed Mlavsky and Ed Harrell were asked to evaluate the past five years of PACT operations and to formulate, as appropriate, alternative venture capital strategies and financial options for PACT and other USAID/ICICI-financed projects. Mlavsky and Harrell visited India between April 4-18. A draft report was discussed with the U.S. Advisory Group to the PACT Council on May 28 and with the full PACT Council on July 9-10. Terms of reference for the assignment are attached as Annex B and a list of persons met during the field work as Annex C.

2. The cooperative agreement establishing PACT was signed between the Government of India and the Agency for International Development (AID) in August, 1985. AID initially provided a $10 million grant to establish the PACT Fund to be administered by ICICI. PACT became operational in late 1986, and ICICI signed the first project agreement in 1987. In 1990 AID provided an additional $5 million to the Fund. As of March 31, 1992, PACT had approved 37 projects, committing $12.2 million in investment funds to 31 projects. $8.2 million had been disbursed; $40,000 had been received as royalties from successful projects. The PACT project was initiated "to accelerate the pace and quality of technological innovation in India by building the research and development (R&D) capacity of India's private sector through the promotion and financing of Indo-U.S. joint ventures in R&D."[1]

General Program Review

3. Since its inception in 1987, PACT has made major progress in targeting its resources to promote commercialization of technology by US/India private firms acting in partnership. The Government of India (GOI), particularly in the past year, has contributed to this effort through a series of liberalizing measures which allow Indian private firms greater access to advanced technology, foreign exchange and equity financing in internal financial markets (see Annex F for a summary of actions to date). The GOI plans to further liberalize the Indian economy through tariff reductions, convertibility of the rupee, privatization and expansion of capital markets. These developments bode well for an increase in US/India business ventures to develop new, commercially-viable products and processes and joint investments.

4. Among the array of private sector technology development programs launched since 1987, PACT is unique in 1) its commitment to build US/Indian private firm alliances, 2) its off-balance sheet financing methods, and 3) its provision of dollar denominated conditional grants. Experience to date and changes in the economic environment in India suggest that ICICI should promote more aggressively these PACT special features, particularly to make

[1]AID Project No. 386-0496 Grant Agreement

them known to publicly traded small- to medium-sized US private firms ($5-500 million in annual turnover) with proven track records in bringing technology-based products to market. These companies have not been active participants to date in the PACT program. This approach will require ICICI to step up its promotional efforts in the US on behalf of PACT. It will also necessitate modifications of the standard legal agreement now used to govern PACT projects.

5. Targeting these US companies also has the advantage of supporting GOI's efforts to further liberalize the Indian economy. India's current account deficit is expected to double in the immediate future as imports are liberalized. A foreign exchange deficit will impede GOI's liberalization efforts. Although 19 of the 31 projects that PACT has funded to date are focussed on developing products and processes for the US market, the US companies involved have been predominately start-up companies with an annual turnover of less than $5 million. Focussing on larger, more established US companies would assist in relieving a foreign exchange constraint since these firms have a higher probability than start-up companies of increasing both export earnings for India and royalty payments to the PACT Fund.

6. AID's current perception that PACT should be financially self-sufficient through reflows from royalties on PACT investments by mid-1995 is inconsistent with fundamental PACT objectives and guidelines on financing investments. In any event, it is not achievable. Such a shift has already led ICICI as implementing agency to take steps, such as reducing the size of the grants, increasing the size of the royalty and accepting equity payments in lieu of royalties, which are counterproductive to the success of PACT.

7. The scope for technological innovation by private companies in India in response to perceived market opportunities is large and will expand exponentially with the further liberalization of the Indian economy now contemplated by the Government of India. India enjoys some of the best entrepreneurial and technical talent in the developing world. There are many experimental programs now in place with GOI/IBRD/AID assistance that will provide lessons and guidelines to facilitate more rapid response by government research labs, foreign investors, Indian financial institutions and private firms to take advantage of the opportunities created by this liberalizing trend. The AID/ICICI experience provides a working model of the kind of collaboration possible in managing and financing market driven, private sector technological risk taking and innovation.

8. Within the spectrum of technology related programs in India, PACT should continue to bear in mind that, by contrast to TDICI, it finances projects, not companies, and, by contrast to the SPREAD program, it supports collaborative, risk taking between private firms rather than contract arrangements to develop and commercialize new products and processes.

9. AID is contemplating the addition of a technology acquisition and adaptation program to ICICI's portfolio. Based on what the team learned about this new program, it differs from PACT in two ways: 1) it reduces the time for commercialization since the Indian company will purchase or license largely proven technology from a US company or research institution, and 2) the US participant may not be required to assist the Indian firm in the commercialization of the technology, a primary objective of the PACT program. Given what the team perceives as an increased demand for the PACT program, a case can be made that funds available for the new program could rather be added to the present PACT program. With an aggressive promotional effort, ICICI could commit these additional funds by the end of the current PACT project in mid-1995.

10. ICICI has explicitly targeted as PACT partners non-resident Indians living in the US and US-educated Indians now establishing new businesses in India. Many of these PACT participants are also start up companies. While this combination represents an excellent long-term prospect for PACT and venture capital (VC) investments and for long-term development in India -- as well as for the achievement of broader PACT objectives -- it is not likely in the short-term to bring about quick commercialization of products developed with PACT financing.

11. AID should consider capitalizing on the success of the experimental PACT program by designing a substantially larger private US/ Indian technology development financing facility which contains the unique and successful features of PACT but focusses more specifically on innovative technologies and allows third party financial participation.

Field Observations

12. PACT is considered a successful project. The CDIE report is laudatory, stating that PACT-assisted firms were more successful than unassisted firms in increasing exports. IBRD staff who designed the Bank's technology development project in India observed that the PACT experience was instrumental in the Bank's decision to finance venture capital activities in India. Finally, a member of the PACT screening committee pointed out that PACT-supported projects did not require separate Reserve Bank of India approvals, a unique exception in the mid-1980s, but one which is now standard for technology agreements with fees of less than Rs 10 million and royalties of less than 5% for domestic sales and 8% for export sales. In short, PACT provided some early experience to guide both firms and the government on increasing exports and competitiveness through private sector investments in R&D and venture capital.

13. In the team's initial meeting with ICICI, Chairman Vaghul pointed out that his main concern with PACT was how to commercialize products and processes developed with PACT financing, particularly in the U.S. The ICICI/PACT project manager raised some procedural

concerns, e.g., slowness of dollar disbursement, larger than anticipated ICICI contributions to PACT over the life of the project, and the reluctance of some (5) US companies to sign the ICICI/PACT agreement. More fundamentally, the project manager suggested that present PACT procedures were inadequate for identifying resource people in the US and that AID's expectation that PACT would be financially self-sufficient by mid-1995 may not be achievable. These concerns are addressed in the form of responses to specific questions listed in the original terms of reference for the assignment (Annex A).

14. After reviewing PACT's present portfolio and interviewing several Indian PACT partners, the team believes that Mr. Vaghul's concern about commercialization can also be adequately addressed through a better selection of US partners. Of the US partners associated with 31 projects financed by PACT to date, 16 are start-up companies and two are basically R&D firms, that is, firms that have neither product recognition in the market nor capital resources for commercialization. Mlavsky strongly urged ICICI to target larger US firms ($5-500 million in annual turnover) which could incorporate successful PACT-financed products into their existing marketing and distribution channels. He suggested that an initial screening of US companies could be done by using the Corporate Technology Directory.

15. Another, and complementary approach, is to link US VC financed companies with Indian VC-financed companies to forge strategic alliances for potential PACT financing. With TDICI's experience in VC in India, ICICI has the background and contacts to make this approach credible.

16. The above will require a more directed marketing campaign on behalf of PACT. The team suggests that an ICICI official be stationed on the West Coast for two years to aggressively develop strategic ties between Indian private firms and successful US high technology companies for PACT financing. BIRD's experience shows that frequent and direct contact between its own representatives and US companies of merit is essential. Mr. Vaghul suggested he was willing to finance such a person if he saw benefits to ICICI and to India beyond what would accrue to PACT, since PACT investment funds were now quite limited. US companies should be selected in part on the basis of their ability to develop US markets for PACT financed products and also on the benefit of off balance sheet financing to their strategic planning.

17. ICICI seems intent on achieving financial self sufficiency for PACT by mid-1995. It has reduced the size of the PACT grants, increased the royalty rate and obtained AID's concurrence on equity participation in lieu of royalties as repayment. After interviewing a number of Indian PACT clients, the team concluded that these efforts are self defeating. Most US companies earn less than 10% operating income. With royalty rates of 5-10% (except perhaps in the case of software), US companies will be reluctant to participate. They will also view a payback of 250% as excessive.

18. On the India side, cuts in the size of the PACT grants have meant that smaller firms must take out loans to complete the product development programs they propose to PACT, which -- if the firms are able to borrow money at all -- prolongs the R&D phase and reduces the probability of developing a product (or process) with a large market potential. In one case, the US partner in a PACT project was using PACT grant funds to buy equipment for his Indian counterpart in exchange for equity in the Indian firm. On the other hand, PACT should finance no less than 50% of the minimum-size, meaningful project and look for projects which meet PACT's criteria for prudent-size investments within its overall investment budget.

19. Even if financial self-sufficiency is achievable, we question whether it should be the proper measure of PACT's success given the development orientation of the PACT program. BIRD, which is similar in original concept, judges its success rate in terms of the benefits accruing to the US and Israeli economies as a whole. Mlavsky, for example, estimates that the US economy receives 20 cents on each $1 of sales (tax revenue) of BIRD-financed products in the US. In other words, once sales reach five times the grant amount, the US becomes a net beneficiary. With a maximum PACT grant of $500,000, this means sales of $2.5 million, a very achievable goal with proper targeting of US firms. In India, where tax rates are higher, sales of less than $2.5 million would make the country a net beneficiary. Looked at in the aggregate, the estimated $750,000 ICICI contribution to PACT to date in the form of salaries, office space, etc., must generate total sales in India of $2.5 million to be counted as having a positive effect on the Indian economy overall. This sales figure should be exceeded manyfold. We suggest that AID and ICICI define PACT's financial success in terms that capture the net benefits to the US and Indian economies, such as tax revenue earned from sales of PACT financed products in excess of the countries' respective contributions to PACT financing.

<u>Issues and Recommendations</u>

20. During the PACT Advisory Council meeting, on July 9-10, three strategic issues relevant to PACT's future were discussed, but not resolved:

- should PACT marketing focus on types of companies/partners or on specific technologies;
- how should PACT's success be measured;
- should PACT seek additional funding from private sources, other bilateral donors, or from multilateral lending institutions, such as the IBRD and ADB.

21. In our view, PACT will intuitively focus both on companies and technologies. Market experience will indicate a technology gap or highlight a comparative Indian advantage or need. We felt that ICICI has already demonstrated its capability in identifying technologies, and for now, should put additional emphasis on working with U.S. companies with proven success in bringing innovative products to market. The longer term question of financing US-India partnerships (consortia) in "critical technologies" that will likely dominate the 21st century was left to further discussion by a select group from the PACT Council.

22. The Council uniformly agreed that financial self-sufficiency by the end of 1995 was not the correct measure of success and a new measure should be developed (see Annex A, Question 6).

23. The Council wanted to maintain the bilateral India-US character of PACT which precludes ADB or IBRD seed money, except for specifically identified joint financing opportunities for technology development. Opportunities do exist for linkage with US funds and contributions from US companies and foundations and these should be explored in more depth. The PACT Council could play an important role in identifying and nurturing the development of such opportunities even though the present PACT, because of funding limitations, may be a minor financial participant.

24. To recapitulate the main recommendations for the existing PACT program:

- ICICI should station an employee with venture capital experience on the West Coast of the US to:
  - -- generate more interest in PACT projects on the part of publicly traded small- to medium-sized high technology US companies;
  - -- work with US venture capital (VC) firms to initiate PACT projects between companies financed independently by US and Indian VC funds respectively.
- ICICI should consider dividing its portfolio into two groups: 1) projects leading to sales mainly or solely in India, and 2) export-oriented projects which require a strong US partner.
- ICICI should revise the funding agreement by and between the two participating companies and ICICI to eliminate ambiguities unacceptable to established US companies, and perhaps standardize these three-party financing agreements separately for projects leading to sales only in India and for projects that are primarily export-oriented.

- ICICI should review its criteria for determining which US companies would be given preferred status as clients of the PACT program.

- AID/ICICI should review its present and decreasing limit of $500,000 on available financing under PACT projects, its increasing royalty rate, its dollar disbursement procedures, and the detail of approved budgets and work progress plans with a view to making revisions designed to increase the benefits of the PACT program to the two countries, shift the responsibility of successful PACT projects more to the participants, and measure progress of PACT's investments against mutually agreed and better understood milestones.

- AID should consider alternative definitions of progress towards self-sufficiency such as benefits to the two countries in taxes earned from successful projects or an increase in total investment funds available to PACT relative to the funds contributed by AID.

- AID/ICICI should reconsider its general understanding that PACT can take equity in lieu of royalties as a means of repayment to increase the probability of PACT achieving financial self-sufficiency at an earlier date.

- AID should consider increasing its financial commitment to PACT commensurate with a higher participation rate from medium-size US firms (over $5 million in annual turnover), increased benefits to the US and Indian economies, quality of proposals, and the degree of collaboration between Indian and US partners.

Next Steps

25. The PACT Council agreed during its meeting on July 9-10 that the next steps were as follows:

- finalize the PACT evaluation report (July-August);

- request PACT Council members to write their individual ideas about the future of PACT (July-August);

- designate four PACT members to write a PACT Council strategy paper and present it to the AA/ASIA (Ms. Henrietta Helzman Fore) and USAID/New Delhi (September);

- commence discussions with AID on a new strategy for PACT.

Annexes

A. Responses to Questions
B. Terms of Reference
C. List of Persons Met
D. Mlavsky letter to Vaghul 4/22
E. Grayzel to Harrell fax, 4/30
F. "A Year of Reforms." Business India, July 6-19, 1992

ANNEX A: RESPONSES TO QUESTIONS

What follows are specific answers to questions raised by USAID, to be read in conjunction with the foregoing discussion:

Q1: Assess how and if the new economic policies in India, evolving Indo-US commercial relations, and global economic, trade and investment trends, will affect demand for a PACT-like program as we move towards the year 2000.

A: Demand will increase exponentially. With liberalization, particularly convertibility of the rupee and the reduction of import tariffs, India will be a preferred market for trade and investment. India is a large market with non-fuel imports of about $20 billion per annum and a substantial middle income consumer group. Most promising is a substantial increase in US business interest in India, including the return of IBM and Coca-Cola to India.

Q2: Assess USAID's Agricultural Commercialization and Enterprise Project (ACE) and other proposed ICICI/USAID/venture capital-commercial loan activities in terms of mechanism and activity focus to understand the capacities they are and are not addressing.

A: To date, neither PACT's unique financing methods nor its potential to tie in with US and Indian venture capital funds have been fully exploited as means to expand markets through technology development and adaptation. ACE is an entirely different and more traditional AID Development Assistance Program. ACE is not a substitute program for PACT.

Contract research and technology acquisition -- to the extent that Mlavsky/Harrell understand what ICICI/AID have in mind -- can be complementary to PACT by responding to: 1) US/India country needs in those cases in which private firms do not see the risk-reward payoff as sufficiently attractive to undertake development and commercialization within the time frame and financing presently available under PACT, and 2) where development of new products or processes (which can take two to three years) is not required. Contract research/technology licensing is already being done in part under PACT (e.g., Omniview, Ravi Technologies, INDACOM Inc.) which may be all right as long as the US private company partner to the PACT agreement is responsible with its Indian partner to adapt and commercialize the technology. Technology acquisition, e.g., buying or licensing a proven technology, is more of a commercial operation and probably would be financed directly by ICICI.

Q3: Review past PACT evaluations and reviews (e.g., the recent CDIE study) to understand the accomplishments of the PACT program thus far and project

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likely accomplishments and needs for the next four years until such time as AID support ends.

A: In the current climate of economic liberalization in India, the role of PACT as a tried and tested joint financing program would be expected to expand substantially over the next four years. We have no way to second guess ICICI's projections of new PACT projects, success rate and royalty reflows (47 projects by March 1993 and reflows of $500,000). We do believe that targeting somewhat larger US companies with a proven track record of commercializing new products will increase both the success rate and royalty repayments over time. However, it is too early to tell whether the size of a US company alone will be the determining factor in success or failure.

Among the US partners to date in PACT projects, 15 had annual turnover greater than $5 million at the time of application. Three of their PACT-financed projects have subsequently led to commercialization, four are failures, and eight are still in the development stage. This experience is not appreciably different from that of US firms participating in PACT that were start-ups or had annual turnovers of less than $2 million at the time of PACT application. PACT is capable of attracting successful US high technology companies. Success will be enhanced by a strong promotional effort, and through publications (including a public annual report) that feature successes to date by US companies using PACT financing.

Q4: Given the above assessment, determine whether consideration of an expansion of PACT is warranted in terms of both demand and usefulness for continued development of Indian commercial R&D capacities and support for venture capital development, per se, and whether USAID's now starting ACE project and any other foreseen ICICI project activities are sufficient follow-ons.

A: Expansion and better focussing of the PACT program are warranted; ACE as now envisioned is not a follow-on program to PACT. AID/ICICI should consider using the funds ear-marked for technology acquisition to expand the PACT fund directly.

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Q5: If unmet projected needs are identified and future PACT activities found warranted, outline alternate scenarios regarding how a future program might be structured. Among the alternatives to be considered would be:

a. Evolution of the program along the lines of other models from outside India (i.e., US-Israeli BIRD program);

b. Evolution of PACT into more commercial ventures, moving beyond technology development perhaps into some sort of international venture capital fund;

c. Increasing the size of conditional grants or offering other forms of traditional and innovative financial instruments;

d. Making use of intermediary brokers for deal formation, as is now done by Indian financial institutions for savings mobilization; and,

e. Focusing on specific technology areas (i.e., biotechnology).

A: The following considerations bear on decisions about the future structure of PACT:

a. BIRD is different. India has a large internally-driven market, which is naturally less export-dependent. The life cycle of technology developed for the Indian market is also longer, and Indian wage rates and currently competitive exchange rates will extend the market penetration of most products now under development with PACT-financing beyond what is contemplated by BIRD for its portfolio. In addition, US companies have less incentive, and are therefore less likely, to set up subsidiaries in India than in Israel to exploit developed technology. Indian government regulations make it difficult for Indian firms to do so in the US (or elsewhere outside India), though this may be changing.

b. PACT is a complement to venture capital funds and a source of projects for financing by such funds, particularly if the VC funds identify potential strategic alliances for PACT financing. PACT has funded four projects to date with TDICI, partly because the US partners were start-ups. The potential market was in the US and the US partner needed dollar financing. We envision TDICI coming to PACT with companies they like but the product is not sufficiently developed to warrant a TDICI investment. These need not be start-up companies.

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c. It would make sense to increase or reduce the size of conditional grants commensurate with the size and marketing ability of the US/Indian partners and the calculated benefits to the Indian and US economies. The product/process and its development costs will dictate the size of the grant, particularly if PACT wants to be 50% of the financing which we support (see Paragraph 18). We do not recommend that PACT itself undertake other forms of innovative or traditional financing but rather work with venture capital funds, pension funds, and development and commercial banks.

d. Not recommended.

e. If PACT is well publicized, the private sector will largely dictate commercial opportunities, though AID/ICICI may have some areas they wish to target for other reasons (e.g., environment). Neither ICICI nor PACT may wish to see a portfolio that is concentrated in only one industry. PACT is already heavily committed in the computer hardware and software industries. With the recent 301 decision by USTR, pharmaceuticals and chemicals may be less attractive industries for PACT emphasis in the immediate future.

Q6: Make recommendations for further analyses and studies to best determine the future directions of PACT.

A: The following activities would be helpful in determining future directions for PACT:

- Developing a data base on companies contracted by PACT and its advisors. The data base, at a minimum, should include basic information on size, products and markets, persons contacted, their interests in India, and their plans for new product/process innovations.

- Developing and publishing some first rate promotional literature, including a publicly available annual report that features PACT success stories.

- Developing alternative indicators for measuring the success of PACT, other than financial self-sufficiency, which is probably not achievable.

Q7: Provide an illustrative draft, if appropriate, of a proposed amendment to the present PACT Project.

A: Not required to carry out the principal recommendations in the report, except perhaps to add additional funds.

ANNEX B

DRAFT

Terms of Reference:

1. Assess how and if the new economic policies in India, evolving Indo-US commercial relations, and global economic, trade and investment trends, will effect demand for a PACT-like program as we move towards the year 2000.

2. Assess USAID's Agricultural Commercialization and Enterprise Project (ACE) and other proposed ICICI/USAID/venture capital-commercial loan activities in terms of mechanism and activity focus to understand the capacities they are and are not addressing.

3. Review past PACT evaluations and reviews (e.g. the recent COIE study) to understand the accomplishments of the PACT program thus far and project likely acccomplishments and needs for the next four years until such time as AID support ends

4. Given the above assessment, determine whether consideration of an expansion of PACT is warranted in terms of both demand and usefulness for continued development of Indian commercial R&D capacities and support for venture capital development per se, and whether USAID's now starting ACE project and any other foreseen ICICI project activities are sufficient follow-ons

5. If unmet projected needs are identified and future PACT activities found warranted, outline alternate scenarios regarding how a future program might be structured. Among the alternatives to be considered would be:

a. Evolution of the program along the lines of other models from outside India (i.e. US-Israeli BIRD program);

b. Evolution of PACT into more commercial ventures, moving beyond technology development perhaps into some sort of international venture capital fund;

c. Increasing the size of conditional grants or offering other forms of traditional and innovative financial instruments;

d. Making use of intermediary brokers for deal formation, as is now done by Indian financial institutions for savings mobilization; and

e. Focusing on specific technology areas (i.e. biotechnology).

6. Make recommendations for further analyses and studies to best determine the future directions of PACT.

7 [illegible] e an illustrative draft, if appropriate, of a proposed [illegible] to the present PACT Project

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ANNEX C

Meetings in India

1. **ICICI:** A.J. Advani, P.D. Shedde, U.A. Deshpande
   Detailed discussion about PACT
2. **ProfiTech:** Dr. Prakash Hebalkar, Screening Committee
3. **NOCIL:** M.S. Patwardhan, PACT Council
4. **Globe Auto:** Rojan R. Zatakia, Ashvin C. Shah.
   PACT Grantee
5. **National Chemical Laboratory:** Dr. R.A. Mashelkar, R.R. Hirwani,
   Dr. Mashelkar, PACT Council
6. **Precision Automation & Robotics:** Mangesh Kale, Dr. Ranjit Date.
   PACT Grantee
7. **TurboTech:** Krishna Kumar, with P. Sudarsan, ex-TDICI.
   PACT Grantee
8. **TDICI:** G. Sabarinathan
9. **N CORE Technology:** Vinay L. Deshpande. PACT Grantee
10. **Heuristix Systems:** B.P. Bhat. PACT Grantee
11. **Biocon India:** (Ms.) Kiran Mazumdar. PACT Grantee
12. **U.S.A.I.D.:** Walter G. Bollinger, Steven P. Mintz,
    John A. Grayzel, R.K. Berry, et al
13. **Ministry of Industry:** N. Biswas. PACT Council
14. **Public Enterprises Selection Board:** H.C. Gandhi, former member, PACT Council
15. **Private Consultant:** Dr. K.K.G. Menon, Screening Committee
16. **Frontier Software Development:** Shirish Deodhar. PACT Grantee
17. **TDICI:** K.S. Nadkarni, President
18. **Technology Exchange Network:** Ramesh Ramaswamy
19. **Phytotron:** Dr. Ashok K. Raina, PACT Grantee
20. **DCM Data Products:** Keer Sagar
21. **ICICI/PACT:** D.K. Parikh, Lalita D. Gupte, A.J. Kusre,
    R. Venkataraman
22. **IRBC:** V.K. Laroia

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ANNEX D

BIRD ISRAEL-U.S. BINATIONAL INDUSTRIAL RESEARCH AND DEVELOPMENT FOUNDATION

קרן דו-לאומית למחקר ולפתוח תעשייתיים ישראל-ארה"ב

April 22, 1992

Mr. N. Vaghul
Chairman & Managing Director
ICICI
163, Bombay Reclamation
Bombay 400020
India

Dear Mr. Vaghul:

Please accept our sincere thanks for the generous hospitality of ICICI on the occasion of our recent visit.

The competence, frankness and openness of ICICI staff, in general, and of PACT personnel, in particular, added greatly to the usefulness of the visit.

Dr. Harrell will be submitting a detailed report which will include my own observations. To summarize briefly, however:

A. PACT has made an excellent start.

B. The perceived necessity to have PACT become self-sufficient through reflows is an unrealistic condition. The success of PACT should be measured, I believe, in terms of the overall effect on the economies of the partners, but especially of that of India.

C. Increased emphasis should be placed on attracting medium size ($5 - 500 million pa turnover) U.S. high tech companies into partnerships with Indian companies. This will require a PACT physical presence in the U.S., and modifications to the Financing Agreement to accommodate U.S. practices and expectations. Reasonable royalty rates and aggregate maxima thereof will be a sine qua non.

D. Perhaps PACT should consider its portfolio as having two parts, with some significant differences in operating procedures:

- Projects leading to sales mainly or solely in India.
- Export-oriented projects which require a strong U.S. partner.

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E. I believe significant simplification of procedures would result if there were two legal agreements governing every PACT project:

1. The agreement by and between the two companies and ICICI.
2. The private agreement between the two companies.

In our view, these agreements should be quite separate and distinct, such that the three-party financing agreement is essentially identical in structure for all projects of a given type (D.1 or D.2, above) whereas the company-company agreement covers all aspects of that relationship, including considerations such as which party receives what funds from PACT, how the requirement for repayments is to be shared, who owns equity in whom, and so on.

I will be pleased to discuss matters further, by telephone or in person. The latter, I hope, will be made possible by your acceptance of our suggestion that you visit us in Israel on your way to or from the U.S.

Once again, many thanks for your many kindnesses, and congratulations on the quality and professionalism of your staff.

With best regards, and from my wife, Sally.

A. I. Klavsky

Dr. A.I. Klavsky
Executive Director

Copies to:
Dr. Edgar C. Harrell, Price Waterhouse
Dr. Jack Goldman, Softstrip Inc.
Dr. P.D. Shedde, Manager - PACT Division

AIK/dm

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ANNEX E

FAX

FAX: (202)-467-4405

April 30, 1992

Dr. Edgar C. Harrell
Price Waterhouse/International
Privatization Group
1801 K Street, N.W.
Washington, D.C. 20006

From : John A. Grayzel, TDE/USAID

Dear Ed:

Subject: PACT Study

Thank you for leaving the first draft of the report of the subject study with the Mission before departure from India. We have carefully looked at this draft report. We believe the draft should undergo revision and expansion. For this purpose you may want to wait till after you and Dr. Mlavsky have had opportunity to meet with the U.S. PACT Council members and U.S. business people engaged in technology development. We foresee the final report keeping a major topic of discussion at the Council's July meeting.

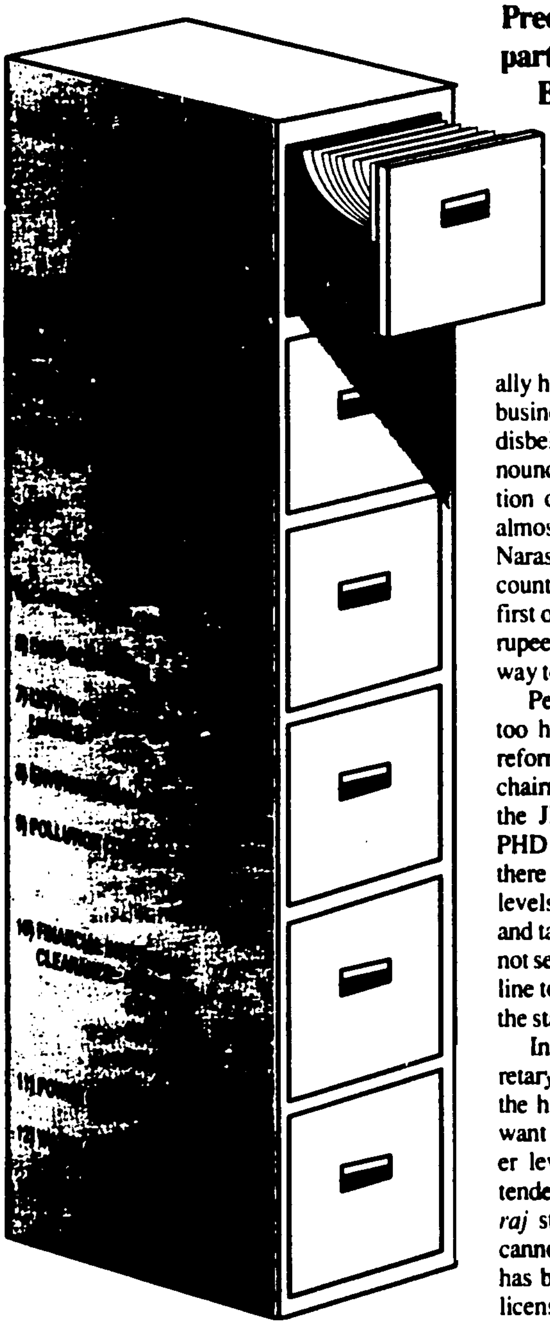
As regards the draft, while we agree with most of the findings of your study we feel there is need for substantially more details and in-depth response to the specific questions raised in the terms of reference, especially question nos. 1, 5 and 6. Basically, since PACT ends in 1995 and after ten years cannot be extended without special permission, we feel many of the interim changes suggested are not going to be operationally feasible for the present project. Concommitantly, looking towards the year 2000, we need to look beyond PACT as it is to what it or something else should be between 1995 to 2000. This vision of options for the future is what is most needed at this time. We therefore look forward to your's and Ed Mlavsky's ideas and observations providing spark and substance for a lively consideration of options for PACT's July advisory board meeting.

We look forward to your responding to the above points while finalizing your report.

A year of reforms

On 1 July 1991, the Narasimha Rao government devalued the rupee against the major currencies, inaugurating a series of reforms that continues to this day. Basically, the reforms initiated the dismantling of controls on industry, external trade and foreign investments to an extent never attempted before. Predictably, these measures invoked hostile reactions from opposition parties but, by and large, the country has received them well.

But what have these reforms achieved in the past 12 months? How have they affected industry and trade? And what do they hold for the future? A *Business India* survey



"It seemed like manna falling from the heavens. We could not believe that what we wanted was actually happening." Those words from a businessmen summed up the sense of disbelief that greeted the spate of announcements heralding the deregulation of the Indian economy. Today, almost exactly a year after the Narasimha Rao government set the country on the road to reform with the first of a two-stage devaluation of the rupee, that early euphoria has given way to a cautious optimism.

Perhaps expectations were pitched too high in the initial phase of the reforms. Says Raghupat Singhania, chairman of a clutch of companies in the JK group and president of the PHD Chamber of Commerce, "While there is a commitment at the highest levels of the government to liberalise and take the policy forward, this does not seem to have percolated down the line to the lower bureaucracy or even the state governments."

In the same vein, B.P. Gunaji, secretary-general, Assocham says, "At the highest level, they say that they want less government, but at the lower level there is still a compulsive tendency to interfere. The inspector *raj* still persists." But even Gunaji cannot deny the significance of what has been achieved. The abolition of licensing in most industries has caused a substantial improvement in the functioning of the industries ministry, he admits. The only procedural requirement at the moment is to fill a form and submit it to the Secretariat of Industrial Approvals. Clearance is obtained within a month, whereas it would have taken four to five months even in the case of delicensed industries in the past.

The most striking improvement in the SIA has been the abolition of the capital goods committee that evaluated the suitability of the technology proposed to be adopted. Today, an industrialist can buy whatever equipment he wishes to. Large projects, he says, have been hampered by the restrictions on foreign exchange requirements and the condition on forex neutrality. Even so, the perception is that large projects are likely to be cleared quicker than small ones, since they receive a lot of personal attention.

Says Erich Reinhardt, managing director, Siemens, "Clearance for the EWSD (telephone switching equipment) project came within ten days of submission. Similarly, the software project was cleared by the Reserve Bank of India within 15 days and thereafter by the ministry of industry in a month's time. In the past such clearance would have taken six months to a year. The government, as we see it, is committed to the changes announced and has been extremely receptive."

But not everybody is as convinced. C.K. Mehta, chairman and managing director, Deepak Fertilisers, complains, "There is still lack of trust, transparency and recognition of the value of time. Despite claims to the contrary, our telexes and letters have not been answered. We just want clarifications. If there is liberalisation, then it applies only to the prime minister, finance minister and the commerce minister."

A recent incident illustrates this: At a discussion on private-sector participation in the power sector, industrialist L.M. Thapar asked the union power minister Kalpanath Rai whether he expected private power generators to realise their dues from state electricity boards (which distribute the power). Rai could not first understand the question and when it was explained to him, replied to the consternation of all those present, "That's your problem, not mine."

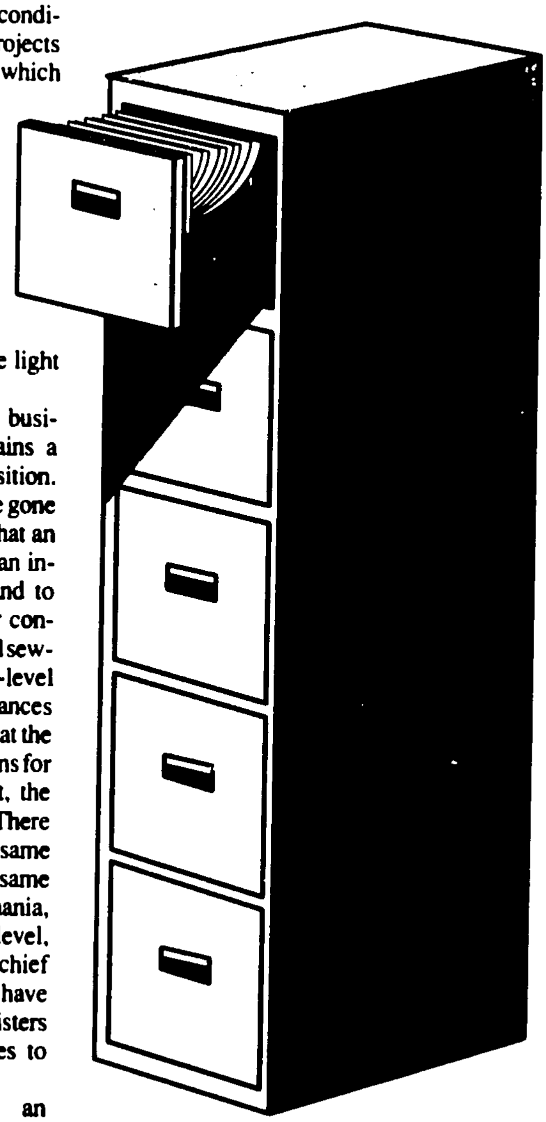
Says Raunaq Singh, chairman, Apollo Tyres, "It is the lower level of bureaucracy that is stalling the process. One of my proposals got stuck with the *babus* and it is only when I sought the intervention of the concerned joint secretary that it got cleared within seven days." As Deepak Khaitan, president of the Indian Chamber of Commerce, Calcutta, wryly observes, "I think it is a misnomer to call it a process of liberalisation. Rather it should be called freeing of controls."

But even in this limited sense, the changes effected have been dramatic. And nowhere more so as in the case of foreign collaboration agreements. In the place of a cumbersome process involving no less than 15 different departments, last September, the government substituted a system of automatic approval by the RBI exchange control department. Bombay-based lawyer Ashok Pratap, whose clients include major US multinationals like General Electric, Hewlett-Packard, Lockheed and Texas Instruments, describes the "unprecedented receptivity" in government to foreign investors, exemplified by the willingness it has shown to further simplify procedures.

On the representation of organisations like the Indo-US Chamber of Commerce, which Pratap heads, the FC form has been twice recast, the condition linking remittances to export earnings further diluted, and it is now reported that government might be willing to permit foreign 100 per cent equity participation. The "attitudinal change in government" that he perceives has already begun to pay dividends, he claims. "Since September 1991, $700 million worth of foreign investment have been approved," says Pratap. "We can attract as much as $2 billion a year over the next two years."

Says P. Krishnamurthy, director supervisory board, RPG Enterprises, "We cleared two projects, RPG Goldstar and RPG DuPont, with an estimated investment of Rs.500 crore. These were cleared in three months. The only condition was that the projects should be forex surplus, which was what they were. Within this, we have broad freedom." The RPG group is looking at possible collaborations with ICL and Fujitsu, he says, adding that "major firms are viewing India in a more favourable light today."

Nevertheless, doing business in India still remains a rather difficult proposition. The licence *raj* may have gone but that does not mean that an entrepreneur can set up an industrial unit at will. Land to build a factory, a power connection, water supply and sewerage lines, and state-level environmental clearances have to be obtained. And at the levels at which permissions for these have to be sought, the world has not changed. There is the same red tape, the same bureaucracy and the same bribes. Says Singhania, "Awareness at the state level, even at the level of the chief minister, is taking time. I have had to meet the chief ministers of the six northern states to convince them."



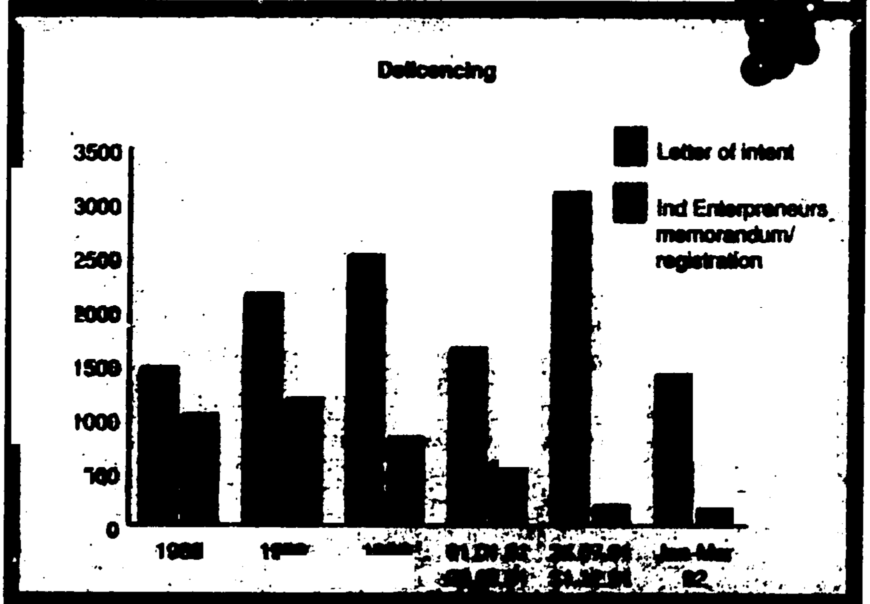
The states present an

interesting paradox. Notwithstanding Singhania's bleak assessment, after the abolition of the licence *raj*, many states (especially the politically powerful ones) have realised that gone are the days when through the system of licences they can get investments directed to their favourite locales. States now vie with each other for industrial investment and several have been holding investment jamborees in places like Delhi and Bombay. Industrialists have responded positively but once they get down to business, they find that problems crop up. Says industrialist Vikram Thapar, "States are hankering for investments but not cleaning up their act. At the central level before, maybe 16 approvals were required which took 16 months, but now only two approvals are required which takes two months, but at the state level 45 approvals are still required which take 45 months."

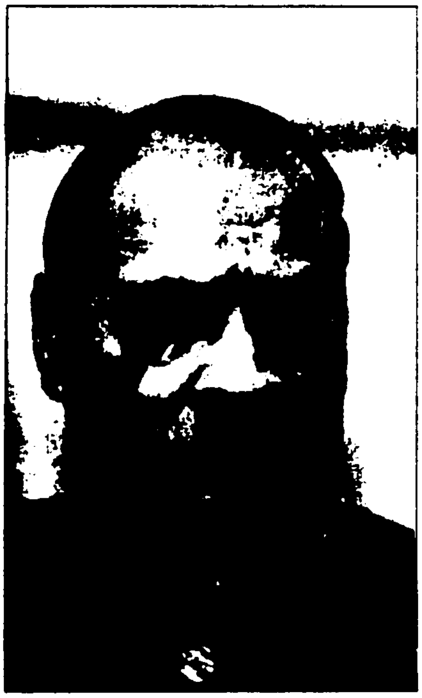
However, all states are not the same and some of them are obviously better than the others. Says Raunaq Singh, "In states like Gujarat, Madhya Pradesh, Karnataka and Kerala there are no problems." Probably, Maharashtra can be added to that list. FICCI president V.L. Dutt says, "Apart from Gujarat, Maharashtra and Madhya Pradesh which are competing with each other to attract investment by encouraging innovative marketing like the escort services etc, no other state is showing any kind of enthusiasm."

Environmental clearances, however, remain the biggest problem for the industrialist. "There is some ambiguity concerning environmental problems," says Gunaji. "Previously clearances were necessary only from the Central Pollution Control Board while present regulations require clearances from Central and state pollution control boards. Besides, environmental evaluation is itself uncertain—what is called evaluation from the 'fauna-flora' angle." Industrialists feel that the ministry of environment and forests lacks the necessary expertise to make such an evaluation, besides which the term itself is ambiguous.

FRUITS OF DELICENCING



Although 1991 witnessed [illegible] the first quarter of 1992 shows a [illegible] the rate of growth.



Industrialists encounter difficulties not just in setting up new units but in other areas as well. Exports are a major priority in the new scheme of things but the woes of exporters never seem to end. One of the problems they face is that banks are finding it unprofitable to engage in foreign exchange transactions because of the increase in operational costs after the introduction of partial convertibility. Exporters can now convert 60 per cent of their foreign exchange earnings at market rates, surrendering the rest at a rate quoted by the Reserve Bank. Of the 60 per cent, 15 per cent can be kept in dollar accounts.

While all this has increased the cost of handling foreign exchange transactions, banks' performance is assessed purely on considerations of profitability. Exporters do not figure in a bank's profit calculations, since there is no incentive for the banker to maintain complicated forex accounts. V. Ananthakrishnan, chief executive, Foreign Exchange Dealers Association of India, admits that procedures in banks have become more complicated after the introduction of the 'liberalised exchange rate mechanism'. Many authorised bank branches lack adequate information required to handle forex accounts, he says.

There is another important story that demonstrates how things have not changed on the export front. One year ago, J. Thomas & Company submitted a proposal to the government for setting up a fresh flowers export unit at the Cochin Free Trade Zone. The proposal entailed setting up of a 'greenhouse' in the zone to develop seeds

F-3

V0

"Prices must be curbed"

Finance minister* Manmohan Singh, *in conversation with* Business India'*s Ruchira Gupta, talks about priorities of the reform agenda and how far it has permeated the bureaucracy

What has the deregulation of trade and industry over the past year concretely achieved?
It has created the right atmosphere and built confidence in trade and industry within the short span of a year. In the short term, the reduction in the rigours on import will allow entrepreneurs to store less in inventories and so their capital output ratio can be more effectively used. Also, on the industrial side, with deregulation, the production stage is reached faster as we have shortened implementation of projects. So, we have also minimised time and therefore cost overruns.

With delicensing, we have created more competition. This will directly benefit consumers. This may not happen immediately but over a period of time. All this cannot be visible in a single year but, with more choices available in the market, the consumer will get a better value for money. Industry and trade will also become more efficient with more competition.

Has the simplification of procedures resulted in a larger number of projects proposed and approved?
The climate for direct foreign investment has undergone a dramatic change. Approvals for foreign investment in the last year have reached a welcome Rs.1,800 crore which is quite dramatic. I cannot give you exact figures of industrial approvals but even that has risen sharply.

How far has reform permeated through the bureaucracy and how does it reflect at the state and local levels?
The civil servant always follows the lines laid down by his political boss. And, in this case, the leadership has made its position amply clear. The ruling party's unambiguous stand on economic reform has filtered down to the bureaucracy. I can tell you if they get the right sort of message, the *babu* will carry it out.

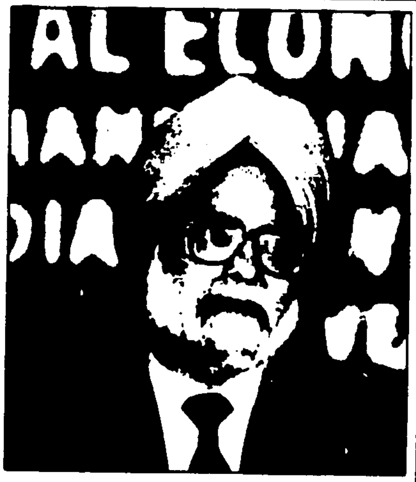
Even politicians across the country seem to have realised the urgency of restructuring our economy. At the state level, where governments are now directly in touch with industrial development, the realisation is greater. Even a communist chief minister, Jyoti Basu, of a state like West Bengal, realises the urgent need for reform. Basu is going all out to attract industrial investment for West Bengal. Delicensing and the minimisation of state control has percolated down to most states from Haryana to Gujarat which now have single-window clearances. There is a new atmosphere created not just in Delhi but all over the country.

What remains to be done?
We have only just begun. But as the adage goes, well begun is half done. Our trade reforms are not complete: we have to get to the root of convertibility, end exchange control, overhaul the tax structure and clean the banking system. Moreover, the public sector has to be made more efficient and forced to perform. The tax regime must be changed to reward incentives and risk bearing activities.

What is your major priority in the coming year?
Tackling inflation. Prices must be curbed if we have to carry the commonman with us on the reform programme.

What have you achieved in concrete terms to cut government expenditure?
We have reduced fiscal deficit from 8.5 per cent to 6.5 per cent of the GDP and the total expenditure has not gone up over the budgeted expenditure. We are very seriously going about cutting government expenses. We have raised fertiliser prices by 30 per cent and abolished export subsidy. This year we will bring the fiscal deficit to 5 per cent of the GDP.

What about phasing out of sick PSUs?
We cannot close everything overnight but we are reducing budgetary support to them. Over the next three years, we expect only efficient and self sufficient public-



sector units to remain. We have already referred sick PSUs to the BIFR to revive or phase out so that they are not a drain on our resources. We are also talking to trade unions to work out a concrete solution to stop the burden of some white elephants on our exchequer. Results do take time in a democracy but are more durable if you take the working classes along.

How far has the support of your ministerial colleagues and party helped you to implement reforms?
The fact that I have had two budgets passed by Parliament speaks for itself. Even at Tirupati, my economic reform programme was endorsed by the party through the passing of the economic resolution. So you should not pay much attention to rhetoric at public rallies but see in concrete terms whether anyone is blocking reform. No one is. After all, the prime minister's unwavering commitment to liberalisation is quite clear.

Do you think that the recent stock scam has changed the mood for economic reform? People have lost faith in the finance ministry's commitment to cleanse the system since all those involved have not been brought to book?
It only means we must move faster. It shows that we put so many shackles on the banking system that the banks were forced to cut corners. So we want to deregulate the banking structure and simultaneously reform the financial sector. That is my main priority.

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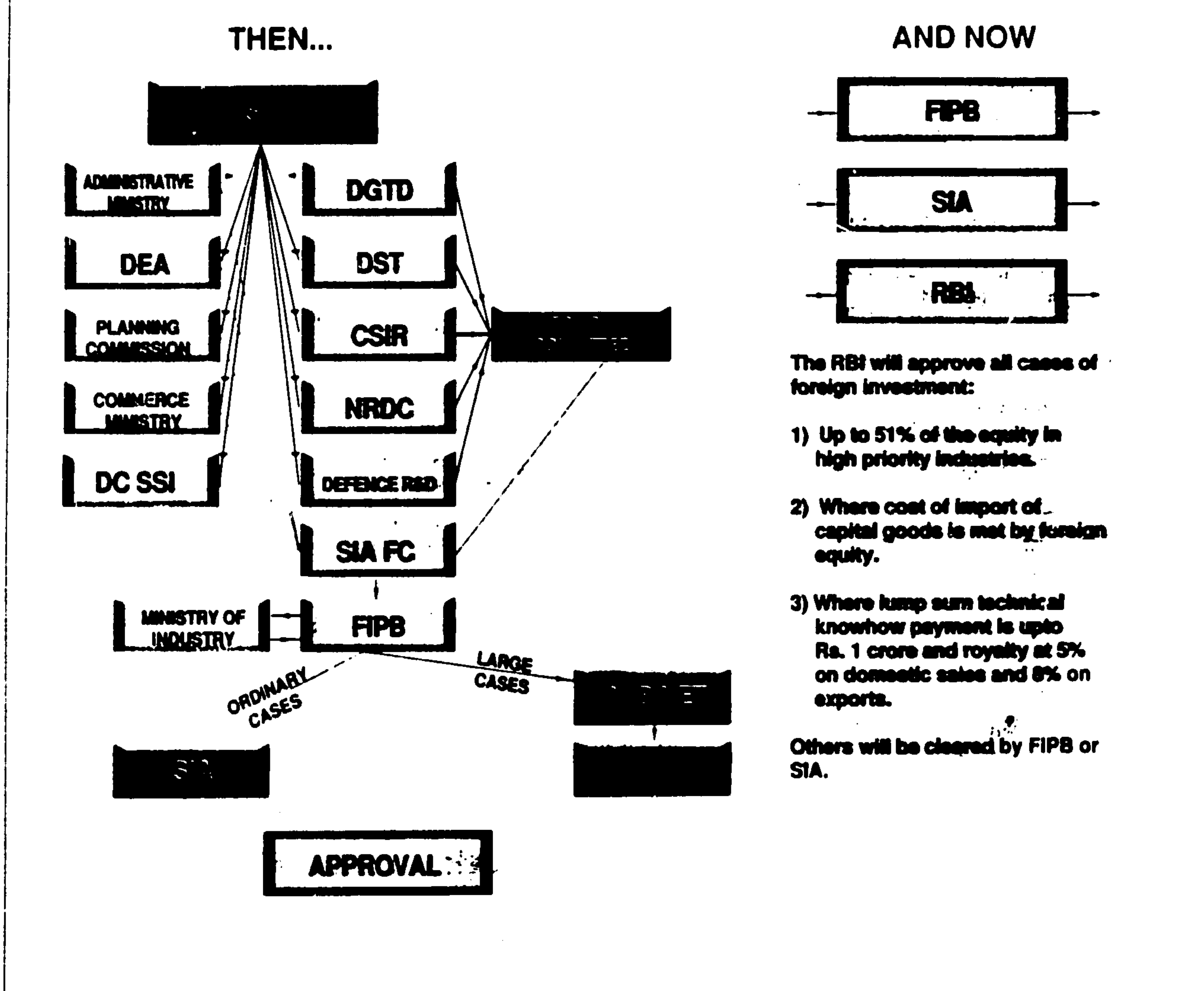
which would be distributed to households to grow flowers in their backyards. The flowers would thereafter be exported, by J. Thomas through the FTZ. This innovative proposal was rejected outright. Thereafter, after continual lobbying for a year, the company was able to convince the Cochin FTZ authorities of the feasibility of the proposal. But by then a lot of valuable business had been lost. "The officers are just not able to comprehend such proposals," says an analyst.

According to Gunaji, "At the level of operating customs officers, whose actions make a real difference, there is still a concern more for notifications than for policy." But it is not only operational constraints that bedevil exporters. In certain areas, the policy of liberalisation has not been carried through fully. Says Shekhar Bajaj, "For exporters, packing credit is now available at 15 per cent against the 7.5 per cent before. Interest rates have gone up from 16-17 per cent to 24 per cent. This has somewhat negated the advantage given by devaluation..."

Importers, however, appear to be happy with the liberalisation measures. For instance, Anil Singhvi, senior finance manager, Gujarat Ambuja, says that since he does not require a licence for the import of capital goods any longer, he can simply open an LC and get his imports. This has saved the company four to six months on a one million tonne cement plant being put up in Gujarat. More important is the confidence of the foreign party. "They no longer ask us whether we have our clearances, etc. As long as the LC is opened on a good bank, they are satisfied."

However, Viral Doshi of Co-Nick Alloys has some reservations regarding import duties. His company is a new one that makes high grade alloy steels and cobalt and nickel alloys. He finds that import duties on raw materials, cobalt and nickel should be cut to encourage high value addition. "With high import duty on our products, how can we compete in the international market?" he asks. Import

PROCEDURE FOR FOREIGN COLLABORATION



duties have, in fact, been reduced to a maximum of 110 per cent, the system of multiple lists has been abolished and procedures have been simplified.

One good example of the process of reforms not being carried through fully, relates to the policies governing establishment of Indian joint ventures abroad. Even at a time when the avowed objective of the government is to globalise, Indian entrepreneurs are still hamstrung by the requirement that they hold a maximum of 25 per cent equity in their overseas ventures, and where the entrepreneurs invest hard currency, that he secure the RBI's prior permission. "This is creating problems," says Dilip Piramal, chairman, Blowplast Ltd. Says Gunaji, "With these kinds of policies, if you are going to set up a joint venture in Thailand, it will not be possible because your policies will come in conflict with the local laws there." A committee set up by the board of trade had as early as last December recommended easing of these restrictions on hard currency investment in equity overseas.

Although the liberalisation policies have given a tremendous impetus to the capital market, says M.R. Mayya, executive director Bombay Stock Exchange, unfortunately developments in the government securities market have marred the scene. However, he feels this will be a passing phase. The primary market has improved over the year, with the number of companies tapping the market increasing from 342 to 504. The amount raised, through public and rights issue, increased from Rs.9,373.82 crore to Rs.10,858.60 crore.

The secondary market experienced an unprecedented boom, with the Bombay Stock Exchange sensitive index shooting up from 1,290 in June 1991 to more than 4,500 in April 1992, before declining to around 3,000 by June 1992. Although, this was, to a large extent, a result of the flow of money from the banking system to the stockmarket, the liberalisation measures also contributed to this uptrend.

M.G. Damani, a stockbroker, feels that the capital market has responded positively to the liberalisation policies announced by the government during the course of the last one year. The secondary market has been affected by the securities scam; this is gradually affecting the sentiment in the primary market. But the corporate sector during the second half of the last financial year has shown substantially higher profits. Further, exports have become extremely profitable and the corporate sector is mak-

"Reform is not a one-stop journey"

Commerce minister **P. Chidambaram** *talks of his priorities to* Business India's *Ruchira Gupta*

What has the deregulation of trade and industry over the past year concretely achieved?
The deregulation of trade and industry has created a more friendly environment between business and trade. The suspicion between businessmen and traders has ended. Today, more than ever before, there is a willingness to work together.

Has the simplification of procedures resulted in a larger number of projects proposed and approved?
Yes, the number of proposals for industry and investment has quadrupled. In every category, foreign collaboration proposals, proposals involving foreign equity, the number of approvals for EOUs and for units in EPZs and the number of memorandums registered for industries in the delicensed sector have all seen a sharp increase.

How far have the reforms permeated through the bureaucracy and how does it reflect at the state and local levels?
At the higher level of the bureaucracy, there is by and large a measure of consensus and acceptance of the economic reform. I suspect this is because people at the higher level who have had opportunities to travel abroad and have been exposed to changes in other countries were already inclined towards economic reforms and liberalisation but could not say so because of the government's socialist rhetoric. And now that we have publicly announced liberalisation as a goal, they are enthused. But this has not percolated to the middle-level bureaucrat. There is still resistance and scepticism there. This is probably because they felt a sense of deprivation in letting go of authority, with their power being taken away. Because, without this power they will have little to do since there is no system to devolve other functions to them.

What remains to be done?
Much remains to be done. Reform is not a one-stop journey. It has to percolate down to the state and then the district and finally the panchayat level.

What is your major priority in the coming year?
In the Lok Sabha, I had announced the areas on the top of my agenda. They were:

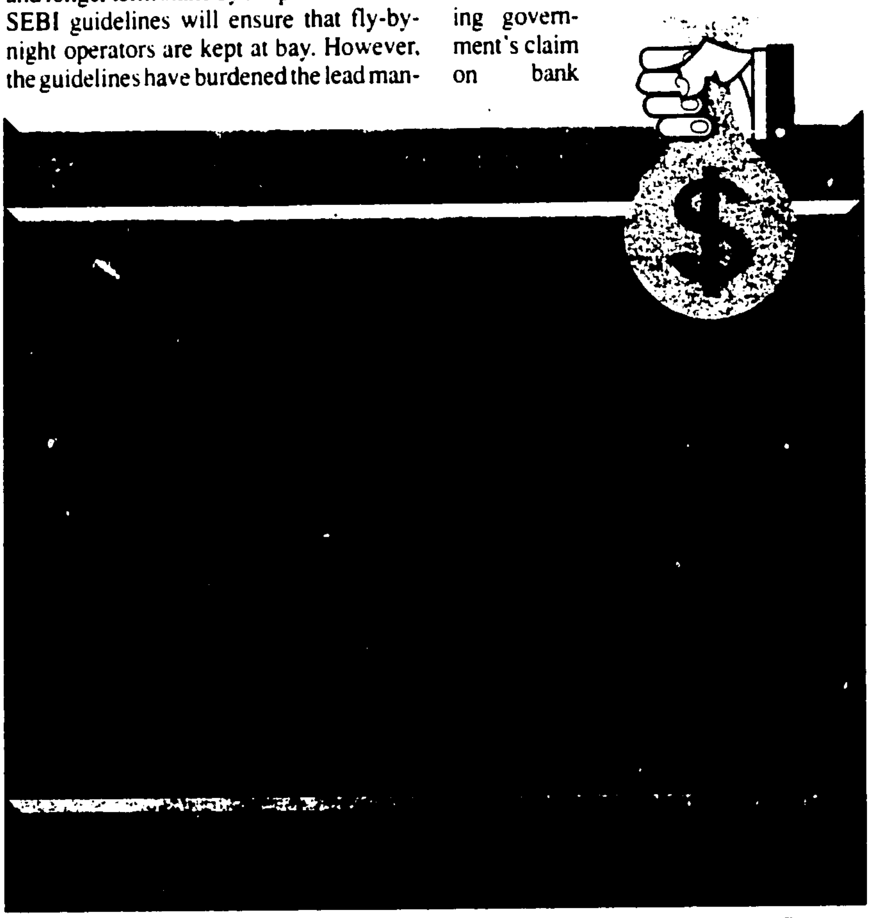
- Meeting industrial and export houses and motivating them to perform better.
- Working out a plan for the 35 extreme-focus items and implementing it to achieve at least 30 per cent growth in them.
- Reorganising the office of the Controller of Exports and Imports and reorienting it so that it becomes a body to promote export rather than to regulate it.
- Reorienting our foreign policy so that India's trade promotion becomes the priority of our external affairs ministry.
- Launching a quality awareness compaign. In 1991, I had drummed into the consciousness of businessmen that they must step up exports. This year I will stress on quality.

ing real efforts to increase them.

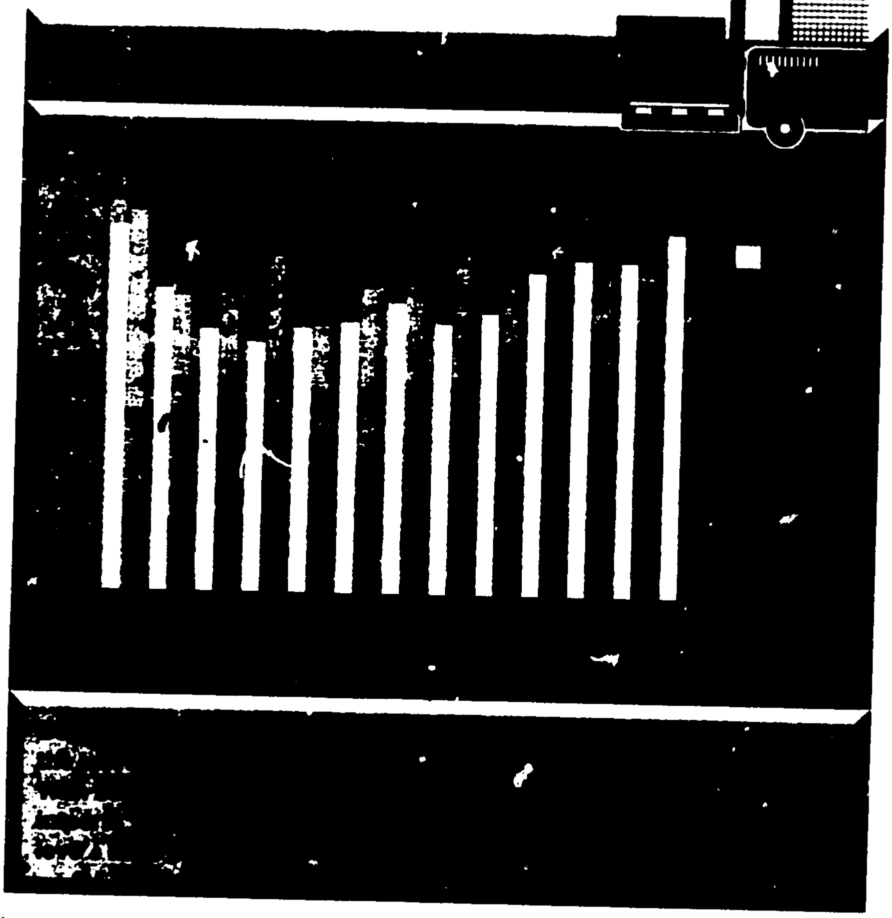
The SEBI guidelines will help the capital market as it encourages greater transparency and assigns greater responsibility to the lead managers to the issue, says A.V. Jog, assistant general manager, BoI Finance. He feels that by insisting on a larger and longer term stake by the promoters, the SEBI guidelines will ensure that fly-by-night operators are kept at bay. However, the guidelines have burdened the lead managers to issues with too much responsibility and this will inevitably force a postponement of issues. As a result there is likely to be a lull in the primary market in the short run.

It is too early for the liberalisation policies to have an affect on the capital market, says Shitin Desai, vice-chairman, DSP Financial Consultants. The policies are positive in that by ensuring transparency, they will lead to greater investor confidence in the market. The policy change most directly related to the capital market has been the freeing of interest rates on debentures, said R. Vishwanathan, managing director, SBI Capital Markets. This has resulted in the greater access to the debt route by companies for financing their projects.

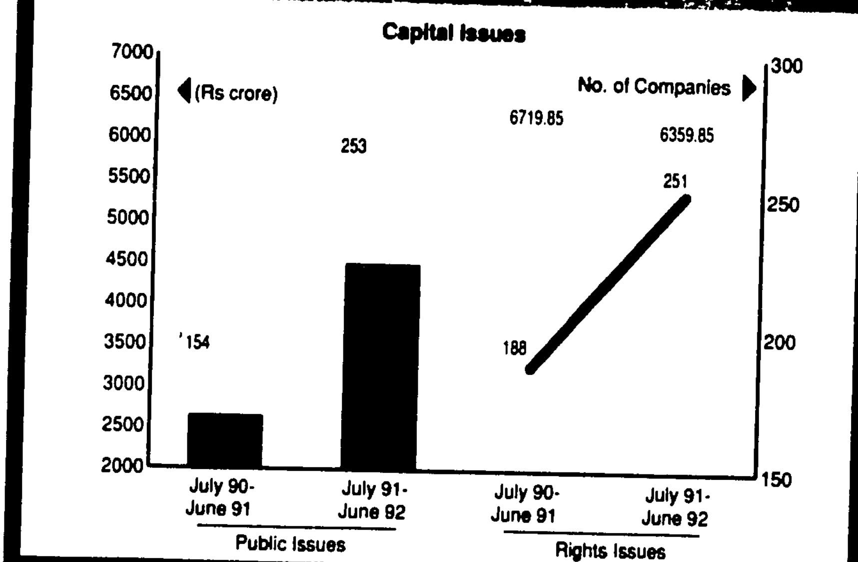
The Narasimham report on financial sector reform notwithstanding, the government's approach on this front has been cautious to the point of inviting criticism for dragging its feet. But the direction of movement is all too clear, it has been towards granting banks greater freedom in running their business, while at the same time reducing government's claim on bank funds. Banks are now free to fix rates on deposits accepted by them, subject to an overall ceiling of 13 per cent. They are free to open branches without RBI sitting in judgement, just as they are free to close branches down if they find them unprofitable, rural branches being the exception. The money market is sought to be given more depth, with the induction of more players and the introduction of more instruments. Longer term treasury bills have been introduced too, this will help RBI have greater control over money supply by reducing the demand from the government for automatic monetisation of debt.



Decontrol might have freed industry from the tyranny of the state but it cannot, of itself, relieve them of the rigours of a scarcity economy. Poor infrastructure rep-



FEWER THOUGH ARGER



The public issues market during 1991-92 was dominated by the Rs.1,360 crore issue by Mangalore Refinery and Petrochemicals Ltd.

[illegible] POLICY

[illegible] compensatory scheme and [illegible] replenishment (REP) rate of 30 [illegible] all exports suspended. REP [illegible] be called Exim scrip [illegible] freely traded. (July 91)

[illegible] imports shortened. Sixty [illegible] decontrolled and 17 [illegible] OGL. (Sept 91)

[illegible] of goods other than [illegible] of 30 per [illegible] ceiling of Rs.10 [illegible] manufacturer, [illegible] trading [illegible]

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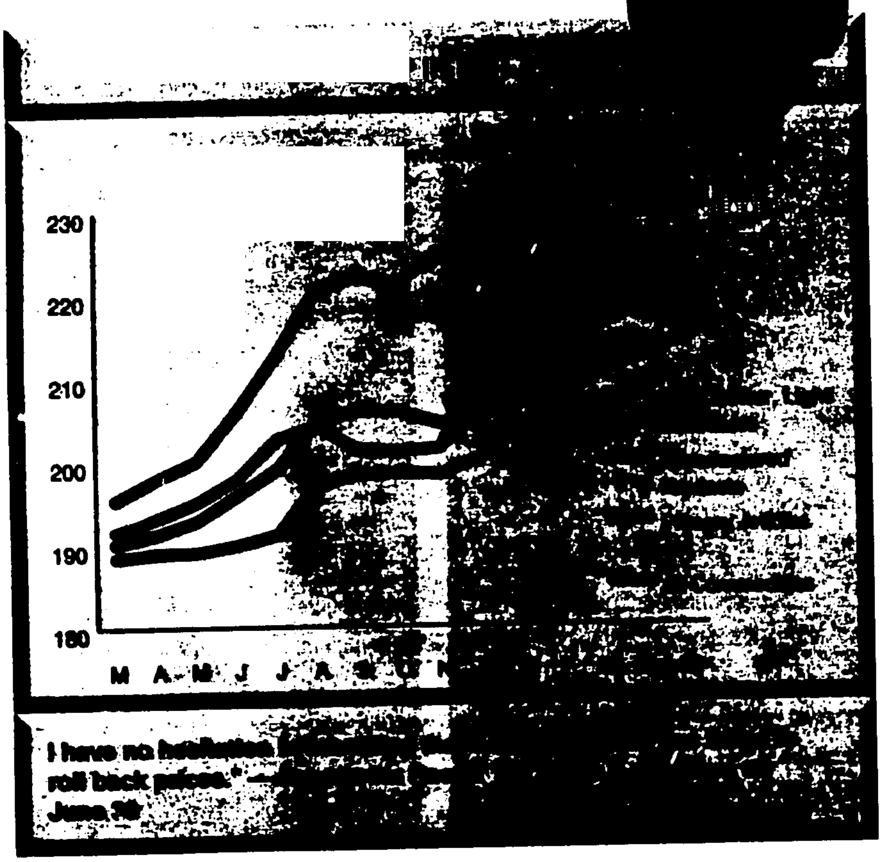
resents as serious an obstacle to increased growth rates as licensing did in the past. Says an industrialist, "The government wants all this investment but where is the power, transport, etc to sustain all this? And where is the money for investment in these areas? Khaitan feels that the infrastructural constraints hamper Indian industry's capacity to compete in the world market. "Do you think our ports can handle $50 billion of exports, which is the announced target? Can we produce that kind of power, do we have enough roads, bridges? There has to be investment in these sectors."

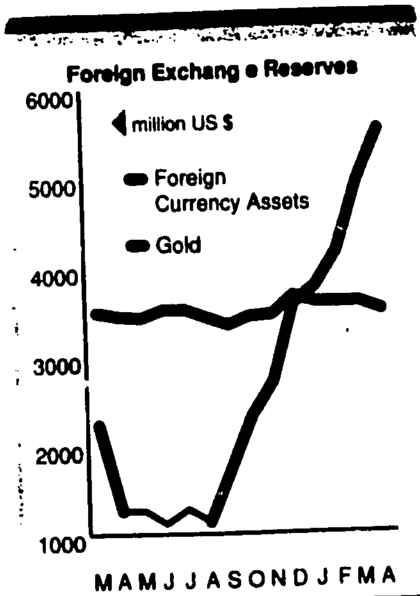
A major concern of industry is the government's apparent inability to push through the so called 'exit policy'. Most of them dealing with militant labour for years knew that it would not be an easy task, especially for a government that depended on maintaining a social consensus for its survival. Yet hopes had been kindled by early pronouncements which encouraged organisations like Assocham to demand the right of industry to trim the labour force by 1 per cent annually. Says V. Srinivasan, vice-chairman, of Madras-based WS Industries, "We need much clearer and bolder policy initiatives regarding the rationalisation of the work force."

While industrialists might sound a bit more cautious now than they did a year ago, they are still pretty optimistic. They know what it takes to change the status quo. As Vikram Thapar puts it, "The government is trying to liberalise with the least pain. If everything opens up quickly, there could be a lot of disruption." But there is also the distinct feeling that government is for the first time speaking the language of industry — of productivity and profits. The award of the *Bharat Ratna* to J.R.D. Tata is widely seen as proof of this and a vindication of a position they have held to for the best part of four decades.

In short, it can hardly be denied that the last twelve months have been marked by bold initiatives by a government whose minority status should have, in ordinary circumstances, led it to follow tradition. But the circumstances were not ordinary: India was on the verge of a major default on its external commitments, its forex



REASSURING FOR NOW



After a disastrous dip in foreign exchange reserves in the year 1990-91, the country witnessed a dramatic increase following a vote of confidence in Rao's reforms.

position was precarious, and credit rating agencies had downgraded the country to the position of a virtual bankrupt. To Rao's credit, India has redeemed itself. Although Standard and Poor still have us on their speculative list, multilateral assistance has increased, international investors are eyeing India and the forex position has vastly improved. And this has helped convince people within government and without of the basic sense of what the Rao government has done in the crucial areas of industry, foreign investments and external trade.

But the task in the coming months will be harder because it will involve more than the simple dismantling of existing structures. New policies will have to be framed in a more systematic manner as part of a reform package that goes beyond damage control. The worst is over and now Rao must work for a period of sustained growth. A framework has been created within which business can flourish unhindered by the dead hand of bureaucracy. It is, hereafter, up to industry to demonstrate what it is capable of.