

SOME REFLECTIONS ON DEVELOPMENT STRATEGIES  
WITH SPECIAL REFERENCE TO THE  
INDIAN GOVERNMENT POLICIES<sup>+</sup>

Ken Bieda

"An irrigation dam, or powerhouse is more exciting while it is being built, than when it is completed or operating."

(Prime Minister of India in an address adopted as Foreward for the Fifth Five-Year Plan 1974-8).

"Even though considerable investments have been made in the execution of various irrigation projects in the country, the experience has been that the projected benefits have not been achieved either in respect of service rendered to the farmers, or in terms of the production from irrigated agriculture."  
(Draft Sixth Five-Year Plan 1978-83, p.136).

I. SOME THEORETICAL ANALYSIS

At heart this paper aims to analyse and evaluate the means and the areas of governmental assistance in the economic development of a country. By economic growth is meant here growth of G. N. P. per capita.

If assistance to an industry is warranted it must be so on the grounds that this assistance will bear G. N. P. fruit of a size that will:

- a) ultimately somehow refund to society the subsidy equivalent of, and the amount of interest on, the cost of assistance;

- b) compensate somehow for the various indirect costs of assistance caused by non-optimal use of factors of production, and losses through a general spread of slackness, generally of non-competitive behaviour, in the economy induced by "underwriting" losses in some sectors.
- c) create larger net G. N. P. gains than would arise if the aid were given in an alternative fashion, to alternative industries.

It should, therefore, be clear that any assistance policy to an industry that looks like a permanent feature would obviously be a very costly mistake. Whenever the economic calculus, on the above lines does not look good, the devotees of such assistance look towards other, allegedly favourable effects of their intervention, such as e. g.:

- a) the distribution of national income;
- b) "defense" considerations;
- c) "external economies";
- d) "the nature" of economic development ("maturity" etc.).

All these are, however, cases of special pleading by a vested interest in industry, or by the misguided indoctrinés because these worthy side objectives can be obtained incomparably better by direct policies aimed at the particular side objective.

There is no space here to analyse those special pleadings, but it might be worthwhile to comment here on one of them, i. e. "external economies" (or linkages), as an argument for protecting a particular industry. This is a case of singularly bigoted logic, because:

- a) One should not consider only the external economies, but also external diseconomies, and really the net balance of them. On that score many of the assisted industries could have a negative externalities effect.
- b) It is in any case just silly to use the "external economies" argument for protecting a particular industry because any economic activity, if increased, will have some "external economies" (and probably some diseconomies).

This paper does not intend to query in general the proposition that governments aid economic development. The facts are that in this day and age governments will attempt to aid, control and guide economic activity no matter what the record of such assistance might be. Further, while numerous cases of gross official incompetence can be found in most countries of the world, some cases of considerable skill and success can be found too<sup>1</sup>. Briefly, on that score no single rule can be found, one would have to consider in the case of each country separately the local circumstances in respect to the intellectual and moral qualities, and motivation, of the decision-makers in the private sector, and compare

them with the qualities of the governmental decision-makers. Then depending on the results of the comparison (which would greatly vary between various countries) one could favour a predominant role for this or that side. What is then to be discussed in this paper is the area and the method of government assistance not the principle of assistance itself.

Here the first point that has to be made is that whenever government gives assistance to some enterprises, or encourages them, it ipso facto discourages the rest of the economy. (Of course, if the policy is very successful, and successful very quickly, then the rest of the economy would soon start to receive some compensation. However, the cases of such quick response are rare).

Then there is the difficult question of how the industries to be assisted are to be selected. Generally speaking any government of any developing country has no other option but to choose one of the three approaches in its strategy, that is:

- a) import-replacement, or
- b) export promotion (plus perhaps assisting some pronounced switch in exports), or
- c) export-import neutrality of government intervention, where the government does not use any rule of thumb but "hand-picks" the industries for assistance on the basis of their promise of G. N. P. growth, i. e. prospects of good use of aid, and quite irrespective of their import-competing, or export status.

The vast majority of governments in the post-war world chose the first, some very recently tried the second, and perhaps only Singapore tried the third method.

There is an odd variety of reasons why most governments usually chose the first, i. e. the "import saving" approach. For one thing it is a simple, uncomplicated, rule of thumb which once adopted removes the need for numerous and difficult decision-making in respect of each firm, or industry that would otherwise need to be considered case by case. Even the most arrogant politicians and bureaucrats would be painfully aware that they are just not equipped to make that sort of decision, but any ignoramus can apply a rule of thumb. Then, it just happens, and not by accident, that the most commonly accepted rule of thumb has the right emotional ring in the ears of the general public. The term "import saving" is rather a slogan and tends to have an instant appeal to any person even if he knows that he knows nothing about economics.

It is because the concept of "import saving" has so simple foundations that it has found so widespread and utterly uncritical, almost religious

acceptance among the public. Although the word "saving" in general does usually have some connotations of virtue, an obsession with saving *per se* would clearly not be virtue (and Keynes has proved that saving generally need not always be a virtue from society's point of view). In any case, there probably is a semantic confusion in the special case of the concept of "import saving". It should be clear to any sober person that it does not make sense passionately to save on only one input. Common sense would suggest that one should save on all inputs. Some people use the terms "saving", and "behaving in an economic fashion", interchangeably, yet the proper meaning of the term "economic behaviour" does not mean skimping on any particular input, such as imports, but refers to such behaviour as enables us to make the most of our limited resources, and that could conceivably mean that we should make lavish use of imported inputs (and to purchase them we switch some of our productive effort to exports).

Further, the usual estimates of "import saving" of the protected import-competing industries are inaccurate. The import saving industries in most countries are the most voracious users of foreign exchange, yet in many those calculations of "import saving" the increased demand for capital goods and for intermediate goods needed by the "import-savers" is left out of the account. (In Australia, e. g. , about 80 per cent of all imports are producer's goods, not just capital, but mostly intermediate goods used mainly by the "import-saving" industries).

Furthermore, whatever are the net direct savings (or dissavings!) of foreign exchange produced by those "import savers", one should also make allowance for the indirect foreign exchange costs. An obvious indirect loss of foreign exchange caused by "import saving" (or "foreign exchange saving") policies arises from the fact that if we switch our limited resources (including labour) into the import-competing sector the exporting sector must suffer. Thus, if a full estimate were made many "import saving" industries would turn out to have a negative effect. Above all there is the general point that should be clear. Any economic activity, if successful, is import-saving! (If the reader of this paper opens a dancing school, or a massage parlour, that economic activity must prove to be import-saving, given the fact that there are only so many spending dollars available in the country so that every dollar spent by the customers of the dancing school will not be (cannot be) spent even in part on imports. So imports will be saved! Indeed, as these two examples of economic activity have almost no import content, they would have the best chance of being the best net import savers).

Thus after some reasoning we come to the conclusion that any economic activity will have either foreign-exchange-saving, or foreign-exchange-earning capacity, and that there is no good reason to prefer one over the

other. Consequently, the stress in governmental assistance on import saving is misguided, and the concept of import saving is quite worthless.

It is true, of course, that the current account of the balance of payments of any country may be in deficit. This factor does indeed logically necessitate some attention to be given to the availability of foreign exchange. The attention should then be concentrated on the exchange rate of the currency in conjunction with the volume of money fed into the economy by its monetary system. (There is no country in the world that would not solve its balance-of-payments problem if it paid attention to having a correct exchange rate and proper domestic monetary and fiscal discipline). The final conclusion of this paragraph is then that the only criterion in the choice of industries for assistance should be the profit return obtainable to the society.

(A martian visitor on earth, if uninfluenced by the bullionists and mercantilists, would be extremely puzzled by the Earthlings' most-preferred rule of thumb, that is, that the import-competing industries only should be aided and that the export industries should pay for that aid. This rule of thumb would probably appear to him to have some religious origin, or connotations. It would look to him like giving scholarships only to students with blue eyes, or with short noses, for with long noses. Further the Martian would notice that usually the assisted import-competing sector is less competent and less economic than the export sector, just as if the preferred scholarship candidates, and candidates for entry in music schools were the tone-deaf students. He might then think that the policy is based on some egalitarian tenderness for the "underprivileged underdog". But he would soon notice that the recipient of aid is seldom the underdog, but rather the captain of industry, and that some of them are in the millionaire class. The Martian would be puzzled even more.)

## II. THE EARLY INDIAN THEORETICAL FOUNDATIONS OF ECONOMIC POLICY

At the time the First Indian Five-Year Plan was being prepared the question arose as to from where and what resources for modernisation could be mobilised. Since foreign aid can have only a marginal role, it was decided that the domestic Indian agriculture had to muster some surpluses and pass them on to the rest of the economy to build up the modern industrialised sector. The Indian planners in this case had in mind not only savings for industrial investment, but also surplus labour,

and surplus food. Surplus food to be extracted from the villages to feed the growing numbers of industrial workers was seen as a separate problem from extracting rural savings - a strange view since:

- a) Rural cash savings automatically guarantee the appearance of marketable surplus food.
- b) In any case the workers shifted from villages to urban industries would, of course, have there some output which could buy food too at home in the countryside, or abroad (and they had no output whatsoever before).

Regarding the extraction of "product surplus" from farming for capital formation it was thought that voluntary saving would be inadequate and that therefore agriculture had to be taxed somehow (directly or indirectly). Regarding labour transfer from agriculture to manufacturing there was some question as to what might be the consequences of this for agricultural output.

The proposition that agriculture in underdeveloped countries has "surplus labour" in the sense of having a zero marginal product was popularised by Ragner Nurkse, Arthur Lewis, and Joan Robinson. They argued that siphoning off that labour to manufacturing would be costless in the sense that agricultural output would not decline. In the analyses underlying the foundations of the early Indian Five-Year plans the issue of the existence of this surplus labour in agriculture loomed large, though as it later turned out quite unnecessarily. The point here is that India and many other underdeveloped countries have much unemployment<sup>2</sup> in the non-farm sector, and that their investment programs in manufacturing can hardly absorb the surplus labour of the non-farm sector, not to speak of being unable to provide jobs (on a net basis) for the rural unemployed or under-employed. None the less, in the literature in both the developed countries, and of India, there has been a lot of discussion, some suggesting that in fact there is no surplus labour in agriculture. The main reason why some Western economists (T. W. Schultz, G. Haberler, J. Viner) doubted whether there was a surplus of labour in agriculture was the observable fact that all countries whose programs seemed to be based on its existence performed badly and experienced heavy inflation rather than significant G. N. P. increases. Yet this was a quite wrong connecting of cause and effect. The obvious correlation here was most likely produced by a third factor. This third factor was the fact that the policies aimed at siphoning off labour from agriculture also pressed hard to siphon off too much of the product and of the funds out of a relatively efficient agriculture to a less efficient manufacturing, and to grandiose infrastructure programs, such as river waters projects which did not fulfil expectations. The true cause of lack

of success has been treating agriculture as a Cinderella in all other vital respects, not because of depriving it of labour force<sup>3</sup>.

Here follow two sources of evidence that Indian agriculture does have a "labour surplus":

- a) The Prime Minister of India in an address adopted as Foreword to the Fifth Five-Year Plan 1974-78 said: "... Its study shows that a dent can be made on rural unemployment by augmenting agricultural productivity and vigorously implementing land reforms". (No trendy reference here to siphoning off surplus agricultural labour to import-competing manufacturing.)
- b) For what worth, and for what use the estimates of the "labour surplus" in villages might have (and the concept is complicated), here is a finding of an Indian study<sup>4</sup>. Bhattacharjee discusses various concepts of under-employment and comes to the conclusions that: "The removable labour surplus varies in different States from being probably negligible in Punjab, West U. P., and a few parts of the South, to being about 9 per cent in North Bihar, and 20 per cent in South Bihar, if only male workers were considered removable, and 15 and 23 per cent, respectively, if also female workers were considered removable." It should be clear that under the circumstances such estimates are purely "academic".

In the Indian development literature there is a concern about how to extract "food surplus" from agriculture<sup>5</sup> when "surplus labour" is shifted out of agriculture into industry (seemingly to feed them in towns) after the shift. A logical Westerner might think that there should be no such problem because that "surplus" labour ate in the villages and when they moved to cities the food might move after them. But the result in India would be different. The Indian family behaves on family principles, not on commercial ones. Whoever is in the village will be fed (even a foreigner), but once the labourer left, the food would be distributed among those who remained - it would not be saved. Throughout Indian development literature there is a fear that the farmers might eat off the potential surplus (that fear is also present in the context of regulating agricultural prices, or in the context of growth of agricultural incomes). For the rest, the concern is there perhaps also because of a fear that farmers might not save much (or not enough for the planners' liking) in cash, and in such case the concern for a "food surplus" is really a concern about the level of the farmer's cash saving (to be used for the planners' projects).

It is for these reasons that the Indian planners decided to impose somehow some levies, pressures, institutional or formal arrangements

compulsorily to extract from agriculture a "surplus" to be invested according to the planners' preferences (big river valley irrigation projects, and import-competing manufacturing). The transfer or purchasing power from agriculture to the planner-preferred channels of investment or economic activity could be effected by:

- a) Heavier, or new taxes.
- b) Changing the terms of trade between the farming sector and the industrial sector in favour of the latter through protection of manufacturing or through price control of agricultural products.
- c) Increased voluntary savings, induced either by persuasion or higher interest rate on savings.

Extracting heavier taxes from Indian villages would not be an easy matter. Subsistence economy peasants cannot be easily taxed. An income concept has almost no meaning in an extended family system in a village. Consumption cannot be taxed through outlay taxes, because the peasants have little outlay. Salt sales tax could not possibly carry much revenue (because of easy smuggling) and in any case it would increase the cost of living in cities, whereas the political dogma was to keep it down.

In the light of this the Union Government ("the Centre") tried to use formal taxes as far as it could, but essentially had to fall back on the transfer of resources out of agriculture through arranging unfavourable terms of trade between Indian agriculture and Indian manufacturing.

The third alternative, increasing voluntary savings, offered little scope for increases of resources saved. In such matters verbal persuasion is futile, and the carrot method of higher interest rates was against the political dogma.

In the tax matters the Union Government imposed a tax on fertilisers (and in 1978 a State government imposed a very modest token tax of Rs. 150 on tractors). Any economist would be extremely puzzled by the imposition of taxes on intermediate, or capital goods, essential for the introduction of modern technology. Indeed one Australian economist of world-wide reputation castigated India for that tax. However, the Union Government probably did not have any alternative. What is not known in the West is that the Indian constitution withheld the right of income tax collection from the Union Government in the case of agriculture. Since some farmers, especially after the "green revolution", have very high incomes and therefore would be suitable sources of tax, the Union Government imposed a tax on technological input that rich farmers use in large quantities, i. e. fertilizers - to be able to finance the Government's glamorous and ambitious (but in the end not very productive) river valley water works, and also its very heavy (and somewhat oppressive -



in terms of bureaucratic delay, and bureaucratic resistance to the wishes of the public) army of bureaucrats. The State governments do have the reserved right to collect agricultural income tax, but as they are controlled by the farming community they choose not to impose such tax, for political reasons. As the Union government could not impose a consumption-outlay tax that would hit only farmers, it had to impose a productive-input outlay tax that would hit only the farmers.

Needless to say, the tax on fertilizers is particularly obnoxious given the fact that the new miracle seed perform well only in the presence of very large inputs of fertilizers. Thus this tax is a tax on the introduction of new technology. (So is for that matter the recent State tax on tractors, though in this case, given a lot of unused labour, and a shortage of capital in India it is somewhat more justifiable). The Indian apologists for the tax would say that it is the rich farmers that use a lot of fertilizers and pay most of the tax, but it should be clear that this tax may be a deterrent for small farmers switching to the new seeds, or a deterrent to the use of a required optimal fertilizer input, and thus, they would create both a higher psychological barrier, and a financial one as well, against the best known agricultural practice.

### III. CHANGING THE FARM VERSUS MANUFACTURING TERMS OF TRADE IN INDIA

Indian planners in the early days were under the then-current obsession with promoting instant industrialisation at all costs, and the method putting least strain on the limited intellectual resources of the politicians was import-replacement strategy. All the government seemingly needed to do was to clamp down import tariffs and import controls on manufactured products, and perhaps price control on agricultural products. Import restrictions, of course, would allow the domestic manufacturers of import-competing products to increase their prices as high as the traffic would bear. That development alone would improve the terms of trade of manufacturing at the expense of the farming sector. This would then produce a compulsory shift of resources out of agriculture to industrial development. Price control on agricultural products would strengthen the effect.

Price control of foodstuffs was introduced in India on ideological grounds: to give cheap food to the urban masses, and to prevent "excessive" profit. However, the fear of the consequences of food price controls in respect to: marketable food surplus, farmers' saving volume, and black market, induced the Indian Government to choose a half-way system. Under that

system the Agricultural Prices Commission fixes the price of all essential foodstuffs. Then the Food Corporation buys these products at the fixed price, subsidises most of them (but rice is not subsidised) and sells them in the Fair-Price Shops, subject to rationing. Farmers can (and of course would) sell the produce in the free, commercial market, the price to the consumer there is twice as high as in the Fair-Price Shops. There is no doubt that as this system tended to keep down the prices of agricultural products, it would have some negative effects on the supply of foodstuffs in general, and on the amount of the marketable surplus. The fact that the "miracle seeds" have had almost no effect on the rice output in India may be not unconnected with the lack of subsidy on rice, though, of course, directly the reason is mainly technological: lack of water, water logging and pests. With different prices better technology and better practices might have come.

The import-replacement policy apart from its intrinsic emotional appeal (self-sufficiency, "industrial maturity") has had, as a by-product, another effect greatly desired by planners - squeezing out the "surplus" from the farmers.

It is also possible that agriculture was squeezed out of resources in other ways. In the Indian Press there appeared recently a criticism that the nationalised banks used much of rural saving for development in urban areas. One would expect that even private enterprise banks in perhaps any country prefer to invest in manufacturing where the bank can more easily handle and overview the few big customer borrowers. The nationalised banks of India may have favoured the industrial investment as a matter of policy.

When the planners decided to squeeze agriculture out of resources, it was not that they did not wish agriculture to increase its output, but their strategy had three tenets:

- a) Industrialisation at all costs was the best policy - they equated industrialisation with development.
- b) Even for the growth of output of agriculture it was - they believed - absolutely vital to give priority to heavy industry, or to chemical industry.

In particular it was the influence of Dr. Mahalanobis (an Indian statistician) that (in an already favourable climate of opinion) shifted the emphasis from agriculture to heavy industries. Mahalanobis, perhaps more than anyone else, was convinced of the need to produce more food. After all, India has had a long history of famines, which occurred whenever some region of the sub-continent experienced some climatic irregularity.

(The last monstrous famine occurred in 1943 in Bengal where 3 million people died.) But Mahalanobis thought that the best way to produce more food was to produce more steel to produce more chemicals to produce more fertilizers to produce more food! In his reasoning the bottleneck in the Indian agriculture was fertilisers. Make more fertilisers available, make them Indian and more food will come! With the planned ambitious industrial investments, and also irrigation projects, he quite correctly expected that foreign exchange would be very scarce, so he decided on the very roundabout route to produce more food. In this he ignored:

- a) the opportunity cost of investing in heavy industry, and in the large irrigation projects;
- b) the time lags which in his plan were far too big to be tolerable for a poor country;
- c) the fact that mere availability of fertilisers and of irrigations is not enough;
- d) the fact that squeezing agriculture so much would have an unfavourable impact on marketable food supply.

In all this, Mahalanobis had a somewhat grandiose vision of a great mutual interdependence of Indian manufacturing and agriculture. There was also a sort of obsession about "self-sufficiency" (considered even now, by some, as an objective higher than economic growth). Many Indian economists would argue, that the objective of the import-substitution program was to gain "... independence from foreign monopoly, and monopolistic concerns ..."6. (As if domestic monopolies were more virtuous, or less harmful, as if modern manufacturing could exist outside imperfect competition.) Many planners felt that the Indian manufacturing could develop very strong linkages with the Indian agriculture in a self-sufficiency system.

A recent Indian study by Rayachaudhur<sup>7</sup> shows that in fact the interdependence of the Indian agriculture and the Indian manufacturing (incl. food processing and textiles) is only slight. In 1960/61 agricultural input to manufacturing and mining was only 7.2 per cent of all agricultural output, and manufacturing input to agriculture represented only 6.6 per cent of all inputs to agriculture.

Indian agriculture represents in terms of man-power the bulk of the economy, but being mostly poor and in addition having been squeezed for "surplus", could not provide much of a market for manufacturers' output. As a result the strongly fostered manufacturing has much excess capacity. In any case, as the domestic terms of trade deteriorate for agriculture, farmers will inevitably react (given even only a little elasticity)

in respect of their preferences in consumption between food (made cheaper) and manufactures (made dearer) and their preferences in production. This means that:

- a) they will consume more of their own produce and less city products;
- b) they will buy more leisure (which has become cheaper) and less of all goods (which have become dearer).

(Both of these effects can easily be demonstrated with a simple diagram of consumption indifference curves and a changing price line. Indeed Dharm Narain<sup>8</sup> demonstrated this in the case of the first effect.)

Dr. M. Thamarajakashi, the Secretary of the Agricultural Prices Commission, Ministry of Agriculture, calculated an index series of the terms of trade between Indian agriculture and Indian manufacturing<sup>9</sup>. Here are a few data:

#### Domestic Terms of Trade

1951-2	117 (beginning of Five-Year Plans)
1952-3	96
1953-4	103
1954-5	95
1955-6	89
1956-7	98
1957-8	96
1958-9	98
1959-60	99
1960-1	<u>100</u>
1961-2	98
1962-3	95
1963-4	97
1964-5	108
1965-6	110
1966-7	118
1967-8	124
1968-9	122
1969-70	127
1970-1	124
1971-2	119
1972-3	119
1973-4	134
1974-5	128

She also calculated the index series for the volume of agricultural production in the period. Even a casual look at the two time series quickly

suggests a correlation, however there would not be much point in calculating the correlation coefficient for the two series, because the moderate growth of agricultural output in that period could have been caused by many other factors (such as changed climatic conditions, increased labour input etc.).

Thmarajakashi seems inclined to think on a priori grounds, that the volume of "agricultural output is dependent on technology", and not on the terms of trade for agriculture. It is, of course, difficult to be sure whether as the Secretary of the Agricultural Prices Commission she could argue differently. In any case, her statement that growth of agricultural output would depend on technology is a very sensible proposition in itself. What is wrong is the omission to state that the adoption of new technology must be highly dependent on:

- a) incentives, in the form of cash yields high enough to reward adequately the risks (even if imagined only) in the adoption of a new technique;
- b) sizable bash surplus (created by good prices) to make it possible for the farmer to switch to new technology, be it a switch to double-cropping (which would require in this case a change of crops, possibly construction of a hot-house, sheds etc.), or be it a switch to new "miracle seeds" (which would necessitate large expenditures on fertilizer).

#### IV. SOME CONCLUSIONS

Writing at a time when the Indian rupee has become a fairly strong currency, that is India's monetary reserves are high, it seems somewhat churlish to be critical of the Indian development record. Further, India seems to have avoided in the independence period any major famine, and in any case, India cannot be singled out as a case of bad economic management among the countries of the world. There are very many countries whose performance is no better (and some of which pay a high political price too), and some countries whose performance is worse.

The facts are that in the post-war period, when import-replacement policies became very popular, none of the countries that have adopted them has performed well. On the other hand the few countries that went against the trendy stream have done well. In that respect, Singapore stands out as a quite remarkable case. The Singapore Government supported many industries (with finance, tax concessions, service, staffing, and moral support) without distinction whether the firm was

import-competing, exporting or for that matter, in the services sector, as long as the particular case of a firm looked promising. No doubt such policy is difficult for politicians and public servants to operate. Import-replacement strategy is much easier for them, but then in life, easy options very often prove to be hard in the long-run.

In the case of India, the planners started with the "easy" (and the trendy) solution of import-replacement and growth of manufacturing at any cost, and the grandiose river dams and river valley projects. That was so in the case of the First and the Second Five-Year Plans (1951-56, 1956-61). The disappointment with those plans and the serious food shortages and a serious shortage of foreign currency led to a switch of emphasis. Unlike in the case of many other countries, Indian politicians had some flexibility. In the Third Five-Year Plan, in the sixties, agriculture started to receive more consideration. In the Draft Sixth Five-Year Plan 1978-83, agriculture is even seen as an industry that would absorb its own unemployed, in view of the fact that manufacturing is unable to absorb the urban unemployed alone. In the periods of the First and the Second Five-Year Plans the neglect of the traditional industries, and of the traditional exports, together with the obsessive emphasis on capital-hungry and foreign-exchange-hungry manufacturing, and on large river water projects, did indeed produce the foreign exchange scarcity that was the basis of the policy of import saving. Imports, in fact, rose but exports volume dropped below the pre-war level<sup>10</sup>. The stress on those grandiose and dramatic projects may have had something to do with the strong influence of Mahalanobis, or perhaps it was just that those ideas were in the mainstream of the public opinion of the time.

The troublesome facts of such policies are:

- a) Import-replacement development, behind heavy trade barriers, runs out of import-replacement outlets very quickly. In a poor country (like India) that happens particularly quickly, because there the initial demand for imported products is originally small, and further since those products are "luxuries" there, the elasticity of demand for them is high and as a result when the trade barriers increase the prices, the demand, small as it is, declines. In the relatively rich countries (like Australia and New Zealand) the import-replacement industries have a longer run, especially, and so long as, the general domestic market is fed with purchasing power by the lively export market created by agriculture and/or mining. However, even there the exhaustion of the import-replacement outlets leaves many manufacturers in a blind alley.
- b) In this situation, it is often hoped, that those import-replacement industries (bred for years without regard to costs and market realities outside) would somehow switch to the export markets. Then, however,

the gap between the domestic and the international markets is too wide to be jumped easily. The whole cost-price structure at home is too high. That cost-price structure can be maintained for some time by the maintenance of trade barriers. For an effective switch to the world markets (which for a single country would have almost no limits) it would be necessary to switch from import-replacement industries, to assisting export industries. To assist export industries it would be necessary to reverse the domestic terms of trade, and that means in practice, a removal of trade barriers and a large devaluation. This policy becomes very difficult in practice, because substantial portions of the economy adapted themselves to the old system, and the new system would upset many well-entrenched vested interests. The reason why devaluation alone could not do the job is that devaluation by increasing "the value for duty" would in fact give some added protection to the old protected sector.

To sum up the Indian case, two quotations may serve well:

- a) Writing in 1966 or thereabouts A. M. Khusro<sup>11</sup> said: "There is a very plausible professional view that Indian agricultural development in the past fifteen years, though impressive in absolute terms and in comparison with the pre-1951 stagnation, has been singularly unimpressive in terms of per capita growth ... and that in whatever respects it impresses, it owes very little to governmental policies."
- b) It is remarkable that even the official Draft Five-Year Plan (1978-83) twelve years later, expresses a similar view on agricultural output. After mentioning general modernisation of the economy and "greater self-reliance" it says (p. I): "Agricultural output has risen throughout that period (27 years of planning), though slowly. While the production of food grains has increased to levels which make us virtually self-sufficient at our current low levels of per capita consumption, in two key cash crops, oil seeds and occasionally cotton, we continue to rely to a significant degree on imports. Though the area under irrigation has doubled in the period of planning, we are far short of developing the full potential. Yields have generally grown slowly, despite the dramatic increase in the productivity of wheat in the sixties; per capita agricultural production has remained stagnant."

Footnotes:

- + ) Paper presented at the ANZAAS 49th Congress (Australia and New Zealand Association for the Advancement of Science): Auckland, New Zealand, 22-26 January 1979.
- 1) Among the cases of a generally successful government intervention are:
  - a) Japan, though the nature of that intervention both in the Meiji Period, and in the Post-War period is widely and grossly misunderstood.
  - b) Singapore, since independence.
  - c) Taiwan, since the second half of 1960's (!).
  - d) South Korea.
- 2) Not only now in the world recession, but for years before.
- 3) For evidence of lack of success of import replacement policies see I. Little, T. Scitovsky and M. Scott: "Industry and Trade in Some Developing Countries", O. E. C. D., Paris, 1970.
- 4) J. B. Bhattacharjee: "Underemployment Among Indian Farmers", in A. M. Khusro (Ed.): Readings in Agricultural Economics, Allied Publishers, Bombay 1968.
- 5) See, e. g. Dharm Narain: "Ratio of Interchange Between Agricultural and Manufactured Goods in Relation to Capital Formation in Underdeveloped Countries", Indian Economic Review, August 1957.
- 6) See, e. g. A. Rayachaudhuri: "On Strategies for India's Economic Development: Agriculture - Industry Development", Economic Affairs, March 1978.
- 7) Op. cit.
- 8) See: "Ratio of Interchange Between Agricultural and Manufactured Goods in Relation to Capital Formation in Underdeveloped Economies", in: Khusro, op. cit.
- 9) Published over a period of years in Economic and Political Weekly, and also in: Food Enough or Starvation for Millions, edited by D. Ensminger, Tata-McGraw-Hill, New Delhi, 1977.
- 10) For evidence that export dropped see K. C. Roy: Balance of Payments, Deficit Foreign Capital, Aid Inflow and Export Policy in India 1956-1966, unpublished Master's thesis, University of Queensland, 1978.
- 11) Op. cit.