The Absorptive Capacity of the Bangla-Desh Economy

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The pressing need for Bangla-Desh, a newly born nation in East Pakistan, is to formulate an economic policy which will enable the suffering nation to get out of the nadir caused by the devastating Indo-Pakistan war, which took place during two weeks in December, 1971 and by the preceding disturbances which had occured since late March of the same year.

After the period of recovery is passed, the new born state will require a more or less normal pattern of development, based primarily on the absorptive capacity of the economy in a normal period.

The purpose of this brief paper is to estimate the resource requirement and absorptive capacity of the state on the basis of the economic pattern of the region before the commencement of the civil war on March 26, 1971.

The discussion will consist of the following six sections:
I. Desirability of the programs, II. Capacity for project preparation, III. Implementation capacity, IV. Availability to cope with release procedures, V. A feasible programs based on resource expectation, VI. Some policy recommendations for improvement.

I. Desirability of programs.

The constraints on Bangla-Desh's development projects are many

and they are closely inter-related. The treatment designed for the removal of a few of them has in most cases proved to be fruitless. The delay in one project has constituted a serious bottleneck to the development of the other. The experience in the past strongly points to the need for a program of simultaneous expansion of mutually-related projects. Preparation and implementation of a set of projects which strengthen one another is required and aid agreements should be prepared on the basis of these sets of projects.

I will examine this inter-relatedness of constraints broadly in two aspects: intersectoral and intrasectoral. First, intersectoral interrelatedness of constraints are frequently observed between infrastructure and other sectors. The development of electricity generation, transmission and distribution is closely dependent upon the final consumption which grows together with the rural electrification and industrialization. Bangla-Desh's demand for electricity is likely to be suppressed while other electricity consuming projects are under-developed. The reasoning is vice versa as is shown by the Canadian managed Khulna Paper Mill project where the shortage of electricity supply had constituted a serious bottleneck for the expansion of industrial activity. Similarly the successful development of the on-going and new projects for fertilizer, steel mills and saw mills are heavily dependent on the expansion of the power sector. Transportation on roads and waterways is another infrastructure on which activities of industries and agriculture are heavily dependent. The maximum utilization of waterway systems, for which an optimistic estimation of IWTA (Inland Waterway and Transportation Authority) assumes the absorption in the ne-

ighborhood of 40 million rupees in the fiscal 1971, and 60 million rupees in the fiscal 1972. Justification for the emphasis of the waterway transport lies in the abundance of water in East Pakistan: some 1/3 of total land area lies on average six feet under water. This is the reason for the desirability of the mechanization of small boats already in use and the dredging of the canal deep enough to admit ocean-going ships. The sites of factories, storage places and connecting joints of waterways with roads should be best located under the integrated program preparation. Waterway transport is very slow, as is often pointed out. Nonetheless, this seems to be an appropriate method until production in East Pakistan expands to such an extent that full utilization of more expensive roads and bridges is guaranteed. At the moment, the delay in shipment arrivals is often caused by a mal-cynchronization of inland water-way transport with ocean transport and the timing required by seasonal changes in the amount of water.

There is similar interrelatedness between the sectors as well as between infrastratures and sectors. The improvement in the agricultural sector by introduction of improved seeds cannot be effective without the simultaneous supply of fertilizer, applicators, and the supply of parts and repair services. Approximately sixty per cent of cultivators in East Pakistan are said to have been condemned due to the unavailabilities of parts and repair services and thirty percent of pesticides are unutilized even though it is available free of charge.

Second, intrasectoral relatedness of constraints. A case in point is a seed improvement project which is closely interrelated with the development of the insecticide, pesticide, fertilizer supply

and irrigation. Separate projects are less fruitful and often not viable. Mere matching of a few on-going projects can lead to a marked improvement in the present situation.

In the power sector, each stage of generation, transmission and distribution is an inseparable part of a whole which is constrained by final demand. In view of the fact that the monumental attractiveness of power generation to the aid givers has tended to create over capacity, the present scheme of EPWAPDA which plans sharp decrease of the relative proportions of the generation capacity and slightly less but rapid reduction of transmission for the expansion of the distribution reflect the intention to recover a proper balance between these projects. This trend therefore is desirable.

II. Capacity for project preparation.

Successful preparation for projects then depends on the selection of broad categories in which each project provides best mutual inter-dependence with other projects. Project planning thus may be boiled down to the problem of preparing a set of projects which constitute a program which a recipient country can sell to the donors. In the way, leading to the formation of a program of this sort, there often stand obstacles in the form of the bureaucratic structure of government and corporations. The intersectoral feedback of information on technological and managerial requirements is totally lacking because of the absence of horizontal channels. There is only a vertical channel through which information goes up from the field to the top of the agency directly responsible, these people are seldom engineers. Replies come down through the same channel with many delays. There is no way the engineers

of the related projects, who have the best knowledge of the technical situation can make decisions on joint agreements.

It is impossible therefore, to expect under the preseat circumstances, a set of programs in which projects of geographical survey for location study intended to secure the most convenient supply of transport power, accomodation for engineers and workers, and maintainance-service of foreign engineers and managements are all conbined in a way to strengthen each other. It often happens that even if good project design is prepared with the help of foreign consultants they are too frequently submerged in the hideous process of red tape caused by the excessive discentralisation and poor coordination between departments sections of the government and corporations.

Against this general background of interrelated constraints which make it hard to prepare viable projects, the attainment of the estimated target level obtained based on the interviews with each government and corporation—362, 386, 441 crores rupees for fiscal 1971, 1972 and 1973 respectively—seems much too ambitious to implement. These figures were compiled from information obtained from the related government offices corporations and consultants. They are based on the assumption that there is no constraints of a financial nature. (See Table 1) A better order of goals based on the realistic assessment of the present constraints of organizational as well as physical nature, including those caused by the rupee shortages and bad timing of disbursements will be 265, 315 and 380 crores respectively.

III. Implimentation capacity.

There are organizational and physical constraints. First with respect to the organizational constraint, a consultant for the road construction pointed out that in the former East Pakistan Governmental setup, designs of roads and bridges once sent from the design department to the construction department went through the vertical channel up to the directorate but were never sent back to the engineering department for consultation or for the cross-check with the design engineers.

Decision making is monopolized by the high ranking CSP (Civil Service of Pakistan). The result often involves technical difficulties because of the reduction of budgets without considering technical requirements of the interdependent factors. In the construction, the problem is not so much the shortage of skilled engineers as the absence of an organizational setup by which the engineers can fully utilize their engineering skills.

Another organizational constraint lies in the absence of a central agency which arranges the timely supply of materials, parts and repair services. Organization of this central supply scheme is expected to lead to a considerable improvement in the present under-utilization of sprayers, tractors, cultivators etc., especially under present circumstances where six or seven countries are providing different type of machines.

Acquisition of extensive land for the enterprising purposes under present civil law is very restrictive. Many responsible people in various corporations {IWTA, EPFIDC (East Pakistan Forest Industry Development Corporation), EPIDC (East Pakistan Industrial Development Corporatin), EPFDC (East Pakistan Fishery Development Corporation).} and some consultants have pointed

this out, for the apparent cases of public benefit, some enforcement should be made on private rights in exchange for proper compensation. The rising trends in rent in urban areas are causing an increase in the cost of land purchase coupled with the inflationary tendency which increases the total cost of projects particularly when they are delayed beyond the plan period.

The Shortage of rupee currency and frequent delay in the release from the Centre is often accused as a serious cause of poor achievement of projects. The release is often made, if it is ever made at all, shortly before monsoon season, therefore the work is practically held up until the following dry season.

Finally with regard to the organizational constraints, many industrial projects get into difficulty after plants are established, handed over to East Pakistan managers and foregn engineer and managers go home. Some arrangements should be made so that this type of hand-over-problem could be solved by aid donors by including the required after-cares for the hand over period as an integral part of a plant aid.

Second, with respect to the physical constraints, there are broadly two kinds of problems: one the lack of natural resources and the other an increase in the costs caused by inflationary trends.

Pakistan lacks important natural resources such as oil, rocks and stones, iron ore, coking coal, good port sites, and has seasonal limitations on the availability of inland water ways. These point to the need for substantial efforts for offseting these shortcomings. Poor development of the infrastructure depicted above makes these shortcomings even more serious.

There is also a problem caused by inflation. The chairman of

EPFIDC told me that at least a hundred million rupees more cost can be expected solely because of delays in the project which had initially been scheduled to be completed by the end of the third plan. The cumulative increase caused by the increase in the price level alone requires quick start-up to avoid an inflationary spiral. Strong pressures of recent labor movements have tended to increase the labor cost, these are likely to continue to underline the otherwise adventurous labor intensive projects. Due care is required that the wage rise be strictly confined within the rise in the productivity.

How are the quantitative aspects of East Pakistan's implementing capacity on the demand side? In the sectors of water and power, not much more than what is shown in the summary table 2 is likely to be absorbed. In industry, where a sizable difference between figures from different sources is observed, the most optimistic set of figures of a high official in EPIDC stand at 420, 760, and 930 million for the three years. These are based on the assumption that there is no shortage in the supply of rupee currency or foreign exchange (See Table 1). The figures in table 2, on the other hand, are based on the assumption of possible delays in the new schemes especially in petrochemicals and the shortfall, judged from the past level of accomplishment.

As for Agriculture, the most optimistic figures prepared by the EPADC (East Pakistan Agriculture Development Corporation) exceeds those in the Table 2 by nearly 100 per cent. These are rather imaginary figures which are larger than the ADP (Annual Development Plan) figures by 30 per cent. If we compare the amounts required by EPADC for such large items as pesticides,

mechanised cultivation, seed modernization and distribution, supplementary schemes for construction of fertilizer godowns with the ADP figures, we can clearly see that the former are approximately twice as large as those in ADP. It is of interest to see that this sizable upward gap in EPADC's expectation of absorptive capacity is substantially based on the assumption that there is no shortage of rupees. Of course these differences are also due to subjective factors, where no objective measure is available. Nonetheless, the fact that this large gap in expectation was mainly caused by the assumption in the question "suppose there is no rupee constraint whatsoever", parly explains how strongly the present rupee shortage is felt. With respect to the transportation sector, reference was previously made in connection with the inland waterway, the optimistic expectation of a responsible planning officer in the IWTA is revealed by the figures for the whole transportation sector of 470, 550, and 630 million rupees for the three years. These are higher than ADP and the Table 2 by 22 per cent and 120 per cent respectively.

The WASA (Water and Sewage Authority) Project in Dacca is estimated to absorb 42 million rather than 67 million rupees of ADP, showing some 22 per cent lower figures according to the Parsons Corporation in fiscal 1971. Because of these low figures, the total physical planning and housing now stands at 170, 200, 230, million for the coming three years. Still it is to be reduced to reflect the likely actual achievement capacity as is shown in the Table 2.

For the sectors of Education and training, health and manpower, there are not much difference between figures from different

sources. The most reticent estimates among them are given in Table 2. Unless considerable changes are made in Government's policy on these lines of expenditure, the picture for the coming three years would not be significantly altered.

As for the work programs of TIP and other normal types, Table 2 shows the total size of the project increases from Rs. 280 million of fiscal 1971 to 420, 630 million in fiscal 1972 and '73 at an assumed growth rate of 50 per cent per annum.

IV. Availability to "Cope" with release procedures.

Before the civil war occured, the developmental administration in the provincial government of East Pakistan suffered from the absence of the flexible taxable items. Most of the flexible items such as income tax and tariffs on imports and exports belonged to the central government, leaving the provincial government with property tax and water rates which were far from being satisfactory in producing a surplus in normal budgets. Therefore the provincial government did not have its own resources to finance the developmental expenditures from the normal budget surplus. This situation made it unavoidable for the provincial government to rely heavily on the release from the Central Government. A delay or reduction of the release, therefore, caused inevitable shortfalls in the achievement of the ongoing projects to say nothing of the new schemes.

An increase in the provincial revenue from the property tax and water rates is a measure left with the provincial government. However, as these are limited in magnitude, we can not expect much increase in these lines.

The increase in the flexible tax items for the provincial government, in spite of the strong demand of some local figures, is after all bogged down to the question of political autonomy.

Another way which looks more feasible is an increase in the commodity assistance with due consideration for co-ordinating those supplies with the developmental needs of sectors. It has the effect of killing two birds with one stone by generating counter rupee funds as well as providing the required goods. It has a less inflationary effect than loans.

V. A feasible Program based on resource expectation.

Here, I will try to work out a tentative priority order according to which, the limited available resources will be utilized among sectors.

The amount which seems feasible for the three years, fiscal 71, 72 and 73 adds up to Rs. 5134 million including water, agriculture, work program and flood control. These are comparative items corresponding to the Action Programs of the World Bank. The total stands at Rs. 5360 million. The Rs. 5134 million based on Table 2 constitutes about half of total for three years of Rs. 9680 million.

The comparison of our estimate with that of Action Program shows that it is very close to the amount shown in the Action Program. About 76 per cent of the total is allocated to quick impact programs which are carried out mainly by the Agricultural Development Corporation. The remainder are to be carried out by the provincial government for long run projects.

In view of the fact that nearly half of the total population of 71 million in East Pakistan is under consuming calories and that the

population is growing at an annual rate of three per cent, needless to say, the level of living of the East Pakistan is crucially dependent upon the activity of agricultural sector which employs about 80 per cent of the work force.

Out of about 30 million acres of cultivated land area, rice has a crop area of 24 million acres, some ten times that of jute. By 1975, 16 million tons of rice procuction should be accomplished. This increase in rice production deserves top priority.

Even if self sufficiency in the sense of no net imports is attained, the above indicated low calorie consumption of a large part of population, if it persists, which is very likely, true self sufficiency will not be attained.

In connection with general nourishment, the development of a high protein food supply will be required. Poultry seems to deserve second priority in primary sector after first phase of quick yield program of rice project is completed. Fishing will perhaps deserve the third priority for this purpose. Successful increase in these lines of production (of rice, poultry and fisheries) will provide better nutrition to the majority of population and serve to improve the general standard of health and thus lead to increases in the productivity of man power. This will have a favorable effect on the development of industrial projects based on the intensive use of labor.

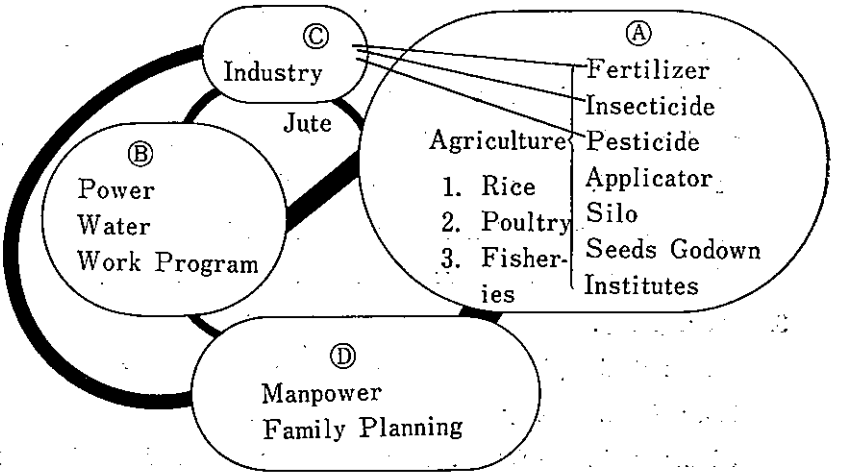
The nucleus of development depicted above will not have a favorable circular causation effect if supplies required by agriculture of such needs as fertilizer, insecticides pesticides, irrigation, cultivator, sprayers, parts, grain storage, seeds godown, and research institute service are not provided. Also, development of water and

work program will be inevitable.

For the supply of fertilizer, pesticides and so forth, industrial activities will have to be increased and this then will necessitate increased supply of power. To harvest all this chain of increases in the form of improved real wage in a sustained manner, effective application of birth control will be inevitable. For if we fail in reducing the extremely high rate of population increase, there will not be a hope to improve the per capita standard of living. If the population under 14 years of age continues to be near 40 per cent, it will be beyond any agrarian society to give the proper training or education required for social progress.

Now we summarize the above argument, the general line of

Circular Growth Impact of East Pakistan



Note (1) 1, 2, 3, show descending order of priority whin the primary sector.
(2) The thickness of the lines shows the closeness of interrelations.
(3) The size of the encircled indicates the approximation of relative importance of its impact on the sustained growth.
(4) A B C D show the direction of policy priority.

action program can be drawn in a chart something like the one above.

VI. Some Policy Recommendations for Improvement.

1. Decision making by engineers.

   In the present organizational set-up of East Pakistan, engineers are not given power to make decisions on matters of central importance. Many cases of delays, misjudgement and errors were created by the failure in coming to grips with technical situation. A possible improvement for the time being might be: i) a better comunication with CSP and ii) also between the engineers in the interrelating projects.

2. Centralization of parts supply.

   In view of the fact that more than half of the cultivators and sprayers are not working because of the need for repair, additional supplies of new ones should be suspended and instead, a scheme of centralized supply of parts and repair service should be promoted. It should be borne in mind that the easy access to the new grant of cultivator has often led to condemnation of old ones which are out of order but still potentially usable.

3. Wage policy.

   East Pakistan's comparative advantage lies in its abundant labor force. Policy measures are encouraged to retain this advantage in the future. Such policy as designed for linking wage policy with supply of low price staple food under fringe benefit coupled with accomodation will be worthwhile considering as an integrated part of industrial policy.

4. Hand over period.

Arrangements should be made to solve the difficulties frequently experienced in the industrial sector after the handing over period. The required after-care might as well be included in the aid project as an integral part.

5. Commodity aid.

In connection with the inflationary pressure produced by the increased spending of rupees based on deficit financing and new issues based on foreign loans, a need for commodity must be stressed so that the supply pf these are geared to the needs of sectoral development. The counterpart of the rupee might be accumlated and used for the development requirements.

6. Need for coordination of projects; by Government & donors.

The absence of a program framework for arranging sets of complementary project gives rise to a need for effort by donors as well as recipients for preparing more interrelated projects in combination rather than in isolation.

7. Tax reform.

Measures for increasing flexible tax items for the provincial government are desirable.

8. Family planning.

We cannot stress the importance of this aspect too much. For any developmental policy is ultimately aimed at rising the per capita standard of living, and the goal will be lost sight of unless we can stop the extremely high rate of growth in population.

Table 1

Absorptive Capacity of East Pakistan based on an Interview Survey (Rupees in million)

	1970/71	1971/72	1972/73
Water	200.0	300.0	370.0
Power	607.5	557.7	572.2
Manufacturing	420.0	756.8	931.4
Agriculture and Foods	956.5	1,216.2	1,359.0
Transport and Communications	467.6	546.4	634.5
Physical Planning and Housing	192.4	221.4	254.5
Education and Training	238.4	261.6	289.2
Health	224.1	239.7	256.5
Social Welfare	6.0	6.2	6.8
Manpower and Employment	11.0	12.1	13.3
Works Program	296.8	341.4	392.2
Flood Control	300.0	300.0	300.0
Total	3,620.3	3,859.4	4,409.6

Source: Based on the information obtained by the author from the Government officials in charge and general consultants of East Pakistan.

Table 2

Absorptive Capacity of East Pakistan based on Realistic Assumption concerning Inplementation Capacity (repees in million)

	1970/71	1971/72	1973/73
Water	200	290	350
Power	608	557	573
Manufacturing	260	325	420
Agriculture and Foods	504	670	890
Transport and Communications	212	300	407
Physical Planning and Housing	192	160	140
Education and Training	230	255	280
Health	150	165	180
Social Welfare and Manpower	100	10	10
Work Program	280	420	630
Flood Control	300	300	300
Total	3, 036	3, 452	4, 180

Source: Estimtes made by the author on the basis of Annual Development Plan of East Pakistan.