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EMPLOYMENT CREATING PUBLIC WORKS PROGRAMS:
OBSERVATIONS ON POLITICAL AND SOCIAL DIMENSIONS

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EMPLOYMENT CREATING PUBLIC WORKS PROGRAMS:
OBSERVATIONS ON POLITICAL AND SOCIAL DIMENSIONS

The problem of unemployment in developing nations resembles the Mafia; everybody knows it exists and that it is a serious problem, but there is little agreement about its precise dimensions or the effectiveness of various policies and programs designed to eliminate it. While the economist's admonition to policy makers to "get prices right" is a sound prescription, there are serious institutional obstacles to correcting economic distortions by policy fiat, particularly in the short run. Influential groups have important interests in subsidies to capital and neither government construction agencies nor productive enterprises change their operating procedures willingly. Yet unemployment is a pressing economic and political problem that in many cases demands rapid alleviation. In such situations, special employment creating public works programs, which enable the government to quickly organize unemployed labor to construct needed public facilities, appear to offer a welcome policy option. Such programs are drawing increasing interest from both developing nations and aid donors.

The concept underlying labor-intensive public works is not new. Moghul princes constructed tombs and mosques in northern India and Christian kings carved churches out of rock in the Ethiopian highlands at a time when factor

*Public works are discussed in this paper in a rural context since in practice, they have been preponderantly rural. Many of the ideas in this paper have evolved from discussions with Carl H. Gotsch, Shahid Javed Burki, Richard M. Hook and Barbara P. Thomas. Their contribution is gratefully acknowledged.

The World Bank is supporting a study of public works programs at Harvard University. This paper was prepared under the auspices of that study.

prices were not a concern. British colonial administrators established "test" work relief programs in times of famine and the United States utilized public works during its most serious economic depression. Depending on the definition, there have been between 10 and 20 employment creating public works programs established in low income nations in the past two decades.

Despite this recurrence, relatively little is known about the real effects of public works. There have been no comparative studies published. Country studies have tended to emphasize economic issues.^{1/} However, uncertainty exists about the efficacy of public works programs for dealing with unemployment and the factors which are crucial in determining their outcomes. This paper attempts to broaden the focus of analysis with comparative observations of the political and social environment in which public works programs operate. These are based on the available literature

^{1/} Daniel Kie-Hong Lee's National Construction Service - A Case Study of Korea's Experience in Utilization of Underemployed Manpower Resources (Bangkok, Thailand: Asian Institute for Economic Development and Planning, United Nations, March 1969) is primarily a description of the NCS program which concentrates on the economic need and administrative arrangements for the program.

Rehman Soohan's Basic Democracies, Works Programme and Rural Development in East Pakistan, (East Pakistan: Bureau of Economic Research, University of Dacca, Oxford University Press, 1968) concludes the Ayub regimes's Works Program was an "elaborate welfare measure ... along with the slightly more sordid motive of winning the allegiance of the narrow class of Basic Democrats". p. 238.

Both Rajaona Andriamananjara's Labor Mobilization: The Moroccan Experience, (Michigan: University of Michigan, April 1971) and John Woodward Thomas's "The Rural Public Works Program in East Pakistan". (W. P. Falcon, G. F. Papanek, eds., Development Policy II - The Pakistan Experience, (Cambridge, Mass: Harvard University Press, 1971) examine economic issues and utilize benefit-cost analysis as a criterion for judging the programs.

S. J. Burki's "Interest Group Involvement in West Pakistan's Rural Works Program," Public Policy, (Vol. XIX, No. 1, 1971) pps. 167-206 examines the coalition of interest groups at the national level participating in the decision to launch the Rural Works Program.

and data and first-hand knowledge of four public works type programs.^{2/}

THE OBJECTIVES OF PUBLIC WORKS PROGRAMS

Regimes initiating special public works programs to utilize underemployed labor can be divided into four broad categories. They are arranged according to relative importance placed on broadly conceived social and economic reform, frequently ideologically defined, and on the degree of effective centralized political power available to carry out these national aims. The nature of the regime undertaking the program is significant because it has an important relationship to the ultimate outcome of the program. First are strong, revolutionary change regimes, which are both sufficiently determined and powerful to enforce a policy of full employment and a relatively equitable distribution of income. Such governments are capable of overpowering political forces and organized interests in the process of structuring society at all levels. When such countries utilize labor intensive public works to broaden employment opportunities, the political responses do not significantly affect their operation. Obvious examples of such countries are China, Russia, Cuba and some Eastern European countries.

Second are structural reform regimes. These put primary emphasis on political and distributional objectives and on their enforcement but where the ensuing conflicts between central governments and other interests have not been definitely settled. In North Vietnam, Yugoslavia, Burma or Tanzania, the outcome of conflicts over divergent political interests is

^{2/} The emphasis in this paper on political and social dimensions of public works is not intended to diminish the importance of economic factors. Detailed economic analysis plays a central role in the Harvard study of public works programs. This paper attempts to examine previously neglected political aspects and to suggest that there is an important interrelationship between these and economic factors.

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either unknown or still in doubt.

Third, moderate change regimes are concerned about inequities and have declared their intention to carry out social reforms. These countries, like India, Pakistan, or Chile (under the Frei regime) are committed to democratic methods. When undertaking programs like public works with a reform dimension, the emergence of political opposition and well articulated economic interest groups is inevitable in these countries. The sponsoring regime usually responds in an ad hoc manner, sometimes through political accommodation, sometimes by seeking methods to enforce its reform objectives.

Fourth, structural maintenance regimes take action to deal with unemployment only when it reaches proportions where it threatens the regime's objectives. Overall social and economic reforms are not the primary goal and public works are viewed as a palliative that helps alleviate a pressing domestic problem. These governments do not want to confront distributional issues directly; their objective is to maintain a balance among internal political forces. Morocco or Ethiopia can be classified in this category.

In the first two categories, regimes stand ready to reinforce change and income redistribution as political forces in the society arise to challenge these objectives. If the regime is sufficiently strong and if the social groups with political power outside the regime cannot effectively challenge these objectives, structural change will take place. In the third category, regimes publically committed to change are dependent upon a diverse coalition of internal groups for support. If the changes initiated threaten

^{3/} Noam Chomsky, "In North Vietnam," The New York Review of Books August 13, 1970, pps. 20-21, contains an illuminating discussion of the difficulties in resolving the conflict between democratic participation, central planning and Party direction of the economy.

Recent newspaper reports from Yugoslavia indicate that conflict between the central government and the provinces over the nature and extent of central control increased sharply in 1972 and 1973.

the interests of these groups, and the regime is not able to strengthen its supporting coalition by obtaining the support of the target beneficiaries of the proposed changes, the program may be expected to mutate. (This process is described in more detail later in the paper.) The fourth category of regimes may be expected to initiate programs which are consistent with the interests of and supportive of the local power structure. Such programs will probably perform in a relatively predictable way but will not bring about any basic income redistribution or alteration of the existing structure of society.

This paper limits its observations to public works in countries of the latter two categories. In these nations, there are multiple attractions to initiating public works programs to alleviate unemployment. Such programs can be implemented rapidly; they are flexible as to location; and they are highly divisible, and can frequently be phased to coincide with peak and slack employment seasons. The impact of such programs is highly visible.

Labor groups constructing roads, reforesting hills or digging irrigation channels heighten the impression that the government is acting to create employment and promote development. They can employ the poorest unskilled laborers on projects that directly affect the entire populace of their locality, and they have a rapid payoff without diminishing the benefits of any other group. This is particularly true when, as is often the case, foreign aid is available to support the program. They are also perceived in some cases as a means of mobilizing resources through local matching grants. This self help approach appears to provide a low cost approach to rural development.

Government construction agencies, with a pool of engineering talent, capital equipment and beneficial relationships with private con-

tractors, will resist conversion to labor intensive technologies.^{4/}

Public and private industrial units may shift technologies in response to relative changes in factor prices but such changes are slow and imperfect.^{5/} With conflict and delay inherent in changing existing technologies, public works programs offer concerned governments an apparently easier and more rapid means of creating new jobs.

In the countries with which this paper is concerned, public works programs are perceived as one means of reducing unemployment and redistributing income without prior structural reform. However, if successful, they will alter the structure in significant though not fundamental ways. This raises an important political question. In a system where the governing regime is maintained by a coalition of interests, as in most of these countries, can a public works program generate enough new support to offset the political losses incurred through the program? Can an existing equilibrium of political interests be upset and a new more equitable one established without substantial changes of basic power relationships or economic structures? This is an issue that makes an investigation of the political and social effects of public works intrinsically interesting. These programs represent a mid-range of government initiative, more reformist than production oriented efforts, such as irrigation projects or agricultural extension, but less

^{4/}John Woodward Thomas's Development Institutions, Projects and Aid in the Water Development Program of East Pakistan, (mimeo, March 1972) gives a fuller analysis of one such established system.

^{5/}Louis T. Wells's Economic Man and Engineering Man: A Field Study of Choice of Technology for Light Manufacturing in Indonesia, (mimeo, September 1972) explores the reason why, despite factor prices that reflect relative scarcities in Indonesia, technologies are less labor intensive than economic considerations would suggest.

extreme than those which reallocate scarce resources, such as land or control over production capital. Only as we begin to gain some understanding of the factors that determine the performance of such programs is it possible to judge the feasibility of this approach to reform.

THE PERFORMANCE OF PUBLIC WORKS PROGRAMS

Governments' statements of objectives of reform programs are rarely matched by the actual accomplishments. Public works are no exception. Consequently, in the absence of comparative studies or comparable data, it is difficult to determine exactly what various programs have accomplished. About all that can be done at this stage is to compare four different public works programs on the basis of first-hand observation. The four chosen are: the East Pakistan (Bangladesh) Works Program, Pakistan's Rural Works Program, the Travail pour Tous program in Mauritius and the Food for Work program of Tigre Province, Ethiopia. The first two make a particularly interesting comparison because they were initiated under the same national political regime, they were similar in concept, objectives and to a lesser extent in administrative design, but implemented in strikingly different environments and with noticeably different results. The programs in Mauritius and Ethiopia are much newer but offer a basis for comparison from first-hand observations.

Four anticipated results of public works programs are compared in Table 1. First, the creation of employment for unskilled or semi-skilled workers at the low end of the income scale. Comparisons are based on proportion of total expenditure utilized for wage payment. Second, projects which are socially productive and not simply make work. For the productivity comparisons, an attempt was made to estimate the approx-

Table 1

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COMPARISON OF PERFORMANCE OF FOUR PUBLIC WORKS PROGRAMS

	<u>E. PAKISTAN/ BANGLADESH (1962-1969)</u>	<u>ETHIOPIA TIGRE PROVINCE (1970-1972)</u>	<u>MAURITIUS (1970-1972)</u>	<u>PAKISTAN (1964-1968)</u>
Employment	1	5	1	4
Project Productivity	3	3	4	4
Distribution of Benefits ²	2	5	3	4
Nature of Political Effects	Electoral support for regime	Enhanced regional governor status	Uncertain	Strengthened control by local elites
	-	-	-	-
	Activation of local interest in development	Alienation of low income groups	Strongly criticized by political opposition	Alienation of low income groups
	-			
	Creation of hostility toward local officials and regime when program objectives thwarted			

¹Range, from 1 - excellent performance to 5 - unsatisfactory performance. See detailed basis for rating below.

²All four programs have the important distributional benefit of increasing public investment in low income rural communities.

Employment Ratings

1. An average of over 60% of program expenditure (including food commodities) spent on labor.
2. 50-60% of expenditures on labor.
3. 40-50% of expenditures on labor.
4. 30-40% of expenditures on labor.
5. Less than 30% of expenditures on labor.

Estimated Productivity Ratings

1. Benefits exceed cost
2. Benefits \geq costs
3. Benefits and costs approximately equal
4. Benefits \leq costs
5. Costs exceed benefits

Distribution of Benefits Ratings

Employment	<u>EP/Bangla.</u>	<u>Ethiopia</u>	<u>Mauritius</u>	<u>Pakistan</u>
	1	5	1	4
Public participation in project choice	2	5	4	4
Relative equality of land holding in vic. of projects	2	5	4	4
Percent of expenditure on social services	<u>4</u>	<u>5</u>	<u>2</u>	<u>2</u>
Average	2	5	3	4

Sources:

- East Pakistan - Thomas, John Woodward, The Rural Public Works Program and East Pakistan's Development, Unpublished Ph. D. Thesis, 1968.
- Notes and data collected by author, 1969-70.
- Ethiopia - Notes and data collected by author in June and July 1972.
- Bruce, Colin, Cost-Benefit Analysis of a Tigre Agricultural Development Unit, (mimeo 1972).
- Kowalczyk, Gary, Economic Feasibility Study of Small Scale Irrigation in Tigre Province, (mimeo 1972).
- Mauritius - 4-Year Plan for Social and Economic Development, Vol. II, pps. 90-97
- Author's calculation of benefits while participating in IBRD evaluation mission.
- Labor productivity calculation by Emile Costa of ILO, manpower economist in IBRD economic mission to Mauritius, November 1971.
- West Pakistan - Thomas, John Woodward, The Rural Public Works Program and East Pakistan's Development, Unpublished Ph. D. Thesis, 1968.
- Pickering, A. K. Report of the Rural Works Programme in West Pakistan 1963 - 1969, Lahore, Pakistan: Development Advisory Service, Harvard University, July 1969.
- Unpublished statistics on Rural Works Programme - West Pakistan Statistical Office, Lahore.
- Unpublished data collected by S. J. Burki

imate ratio of benefits to costs from data available or ^{from} existing studies. Third, an equitable distribution of program benefits. Four indicators of distributive justice are utilized: a) employment created (same as item 1); b) public participation in project selection to indicate how broadly community interest was served; c) relative equality of land holding in vicinity of projects providing returns to land owners (irrigation, roads, reforestation); and d) the percentage of project expenditure on social services (schools, clinics). Fourth, responses which affect political behavior. These cannot be defined similarly in all four countries and cannot be measured, so only a description is attempted in Table 1.

Subsequent sections will amplify the comparisons. However, several salient points emerge which should be noted here. 1. The performance in creating employment is either very good or very bad. This suggests that only when unemployment is acute and nations determine that employment creation is the top priority, do they really achieve this objective. Otherwise, the labor intensity of work is quickly diluted. 2. The social productivity of projects in these countries is similar. The labor-capital mix does not seem to affect productivity. A negative correlation between productivity and the development of infrastructure appears to exist. Both East Pakistan and Ethiopia where infrastructure was relatively less developed, productivity was slightly higher. 3. The detailed distribution of benefits ranking for relative equality of landholding and extent of public participation in project choice are identical and these correlate closely with the total distribution rankings. Since equality of land holding affects participation more than the reverse, this must be a factor of considerable importance. 4. In those countries in which there are few distributive benefits from public works, the alienation of the lower income groups is a consistent political effect, un-

doubtedly because they see public works as one more way of extracting work from them. 5. Perhaps most important, is that the gap in anticipated results and actual performance of public works programs is substantial. If public works are to be an effective means of employment creation, development and redistribution, it is necessary to examine the factors affecting performance to see why this gap exists. Understanding of the reasons might lead to new alternatives for improving the performance of public works programs.

PUBLIC WORKS: THE POLITICAL ECONOMY OF REFORM

To analyze the reasons for the gap between anticipated and actual performance, it is necessary to understand the objectives of those responsible for public works programs. The economic objectives of governments are usually fully articulated in plan documents, official requests for foreign aid and reports of program performance. Political objectives and criteria are frequently as important but generally remain unarticulated.

When resources are combined in an economic system in such a way that the demand for labor is low in relation to the supply, the result is that labor is underutilized and poorly paid. If the numbers of low income underemployed becomes large enough, their potential political power becomes meaningful. This power may be exercised through organized bargaining, voting power, or the threat of direct action. When this potential becomes sufficiently great that the regime perceives a threat to its interests, it is stimulated to attempt an adjustment in the prevailing demand for labor. Alternatively, the desire may be to mobilize the low income groups in support of the regime. Whatever the motivation, the response is an increase in the payments to labor or a redistribution of income. In so doing, the regime is motivated to act by political as well as economic considerations.

The Travail pour Tous program in Mauritius was motivated in part by a clear cut political challenge. The 4 Year Development Plan for 1971-1975 stated:

The immediate task on which the success of the entire long-term development programme depends is a constructive programme for dealing with the present unemployment situation. The Travail pour Tous programme is therefore, the number one priority in the country's development plan. (emphasis in original)^{6/}

This priority is quite consistent with the serious economic problem of unemployment which confronts the nation. The Labor Government draws most of its support from the rural Indo-Mauritians who represent a slight majority of the nation's population. The only strong opposition party, the Mouvement Militant Mauritian (MMM) draws support from the "general population" of mixed French, African or Chinese descent who are primarily urban. In 1970-71, the MMM effectively mobilized urban workers and unemployed in its support, organized a major dock strike which threatened the nation's sugar exports, and won large concessions for workers. The MMM then announced a new effort to organize rural sugar estate workers and declared its intention to call a strike on sugar estates if workers' conditions were not improved. Simultaneously, the MMM scored unanticipated wins in the local council elections in rural constituencies which were considered Labor strongholds. These, in addition to the MMM's urban support put it in a strong electoral position and inspired the Labor controlled Assembly to postpone the next election until 1976. In this environment, the initiation of a major new effort to alleviate rural unemployment must be interpreted as having strong political motivations.

Political considerations may play a dominant role in determining

^{6/}Government of Mauritius, 4-Year Plan for Social and Economic Development, 1971-1975, Vol. I. (Port Louis 1971) p. 29

the character of a program. In Korea, after the student revolution removed Syngman Rhee from power in April 1960, the Democratic Government decided that the new political activism could best be utilized by channeling it into national development through a National Construction Service (NCS). This public works type program was to combine the talents of college graduates and rural under-employed in an attack on rural poverty. The expectancy and enthusiasm with which the program was launched in 1961 is captured in this description of its origins:

The NCS program was born in urgent response to the call of the nation newly established after the bloody Student Revolution in April 1960. There was a bustling energy and willingness to work hard among the people. The masses were spearheaded by intellectuals and students ready to be guided by the nation's new leaders. The NCS strongly appealed to the growing tide of the rapidly-awakening people, especially the young people, through stressing the patriotic aspect of working on the nation's natural resource development, challenging nature's vagaries, and eliminating centuries-old rural poverty.^{7/}

On March 1, 1961, the day of the inauguration of the NCS, "college graduates who completed training as NCS participants marched along the main boulevards of Seoul with shovels on their shoulders, symbolizing the dignity of labor and their taking up the spiritual revolution to challenge the nation's poverty".^{8/}

Despite the widespread expectations created, and enthusiasm for the NCS, the military dominated regime of General Park which replaced the Democratic Government in 1962 terminated the program after one year of operation. While the Program had encountered some administrative problems and its termination is sometimes credited to these, it is clear that these were not as

^{7/} Daniel Kie-Hong Lee, op. cit. p. 68.

^{8/} Ibid., p. 33

important as fundamental political considerations. The emphasis on mobilization of the populace for participation in the NCS was a political style and concept more appropriate to a government born of a popular uprising than to its successor which emphasized stability and "disciplined" development efforts. The Park regime did not wish to terminate public works entirely, however, probably because of the expectations created. Instead, it decided to replace the NCS with its strong political overtones, with a low profile works program to finance individual village projects on a matching grant basis. This approach was more consistent with the style of the new government. With both regimes, political objectives were paramount in determining the structure and objectives of the public works type programs.

It is perfectly logical for regimes to insure that public works programs be consistent with their broad political objectives and approaches. Beyond that, however, more narrow political considerations also seem to intrude regularly.

The experience of Harry Hopkins, administrator of the U.S. Works Progress Administration is typical. In 1935 he could declare, "politics has no business in relief and whenever it gets in, we intend to get rid of it damned fast".^{9/} Yet, only a little more than a year later, he ruefully admitted, "I thought at first I could be completely non-political, then they told me I had to be part non-political and part political. I found that was impossible, at least for me. I finally realized that there was nothing for it

^{9/} Arthur M. Schlesinger, Jr., The Politics of Upheaval, Cambridge, Mass: The Riverside Press, 1960, p. 354.

but to be all political," but as historian Schlesinger comments, "he still was not political enough to satisfy the Democratic National Committee".^{10/}

Hopkins' experience would certainly have enabled him to predict the problems that would confront his counterparts administering public works elsewhere.

In East Pakistan, the Works Program was, from its inception in 1962 until 1966, under the firm direction of the Secretary of Basic Democracies and Local Government. A cardinal rule of the Program was that the size of the annual allocation of funds to local councils for implementation of the program was based solely on population, and that effective performance in the previous year was a prerequisite for the release of funds. The Secretary's unwillingness to let political considerations alter the standard for the allocation of funds brought him into increasing conflict with the Governor of the Province and political leaders of President Ayub's Muslim League. The conflicts resulted in the Secretary's dismissal in 1966. From 1967 on, as political loyalty to the regime, rather than population or past performance in carrying out public works, became the basis for allocating funds, the economic benefits of the program declined sharply.^{11/}

Mauritius represents a variation of the theme. There, the Development Works Corporation which administers the Travail pour Tous program hires the unemployed on a permanent basis. This places the Program's director in a position where he can be perceived to be commanding a large political following. If he does not behave with extreme discretion, he may become vulnerable to overt or covert accusations of self aggrandizement. Such factors have already contributed to the dismissal of one man of generally acknowledged administrative

^{10/} Ibid. p. 355.

^{11/} John Woodward Thomas, "The Rural Public Works Program in East Pakistan," in W. P. Falcon & G. F. Papanek, eds., Development Policy II - The Pakistan Experience, Cambridge, Mass: Harvard University Press, 1971, p. 225.

capability.

From these observations of several public works programs, it becomes quite clear that although political objectives are rarely articulated, they play a major role in both the initiation, operation and therefore the results of these programs. Economic issues pertinent to public works programs must be evaluated in relation to a range of political factors for it is clear that economic objectives are altered by political considerations.

POLITICAL RESPONSE AND PROGRAM MUTATION*

It has been observed that a gap exists between public works objectives and performance and that political factors are interwoven with economic in influencing results. In this section, an attempt is made to analyze the mechanism by which program mutations occur, resulting in performance at variance with expectations. Gunnar Myrdal claims, with considerable supporting evidence, that these changes are intentional.

When policy measures have been instituted (in what he classifies as the soft states) specifically aimed at ameliorating conditions for the lower strata, they have either not been implemented and enforced or have been distorted so as to favor the not-so-poor and to discriminate against the masses.^{12/}

The question is who alters programs and how?

In the countries with mixed public and private economic systems considered here, control of scarce resources is closely related to political power. Public works channel resources into the rural sector with the low income, underemployed as the principal target group. However, groups other than the target beneficiaries, such as landowners, traders or contractors,

* The term "mutation" as well as several other points in this section were suggested by S. J. Burki in the course of our discussions.

^{12/} Gunnar Myrdal, The Challenge of World Poverty, New York: Vintage Books, 1970, p. 220.

may perceive that the government's initiatives and the accompanying resources provide a threat to the group's interests or an opportunity to improve their situation. Either perception will probably be sufficient to cause these local elites to act to further their own interest. Since the economic position of these groups usually provides them political power at both local and national levels, they are in a good position to alter the nature of public works programs to serve their own interests. Most national governments are dependent to some degree on these local elites and will find it difficult to bypass or sustain a challenge to these interests over an extended period of time. Therefore, the employment and distributive objectives of public works may be seriously eroded by the efforts of local elites to divert more program benefits to themselves.

There are several important decision points at which pressure for mutation can be applied: the choice of projects, the choice of technology, the choice of project implementation agent, the establishment of wage rates, or selection of employees. Over some period of time, these pressures may succeed in altering programs, since the rural poor usually provide an inadequate political counterforce to defend their own interests.

The changing standard for allocation of Works Program funds to local councils in East Pakistan illustrates the operation of these forces. From the time of partition in 1947, when the Hindu landowners fled Pakistan leaving their land to the Muslim peasants, the rural areas have been characterized by broadly distributed small holdings and a moderately egalitarian social structure. Bertocci's view that rural East Pakistan can best be defined in microregions, as "a territory encompassing a complex of social groupings with varying memberships" provides the best description of rural

social and political relationships in the area.^{13/} When the public works program was applied to this social system, a relatively broad distribution of benefits was possible, as was extended participation on project decisions. Yet, as Bertocci also points out, "local economic and political power brokers have had a way of always showing up in the official organs serving the extension of state power to the rural areas of East Bengal".^{14/}

In the first years of the public works program, the diffuse nature of the social structure meant that "brokers" were slow to emerge. During the election of 1965, the ruling Muslim League showered its attentions on the local councillors who as Basic Democrats, served as Presidential and National Assembly electors. The result was a growing sense of political power among local councillors who increasingly demanded that their political loyalty should be the basis for public works allocations, rather than project performance. In 1965, when the Ayub regime scored an unexpected electoral victory in rural East Pakistan, the credit was widely attributed to the impact of the Works Program.^{15/} Paradoxically, the political impact of the equity and performance oriented program caused the regime to begin seeing it as a means of obtaining political support and this made them more willing to manipulate the standards for political purposes. By the end of 1966, this view and the pressures of local interests prevailed. The program director was dismissed for not responding to local political demands and the standard

^{13/} Peter J. Bertocci, Microregion, Market Area and Muslim Community in Rural Bangladesh, (mimeo, February 1973) p. 4.

^{14/} Ibid. p. 3.

^{15/} The New York Times (January 3, 1965) p. 2 reported, "the failure of any real anti-Ayub vote to emerge in East Pakistan is viewed as a triumph for the three year old Rural Works Program, which has pumped much needed funds into farm communities and brought many improvements in rural life".

for allocating funds to local councils changed. From 1967 on, the leakage of funds out of the program increased, and performance declined. By 1969, the same levels of funding were producing far fewer projects. These were carried out primarily by contractors and the project mix had shifted toward construction of bridges and buildings with a much lower labor component.^{16/} The principal beneficiaries were no longer the rural poor but the local contractors, the larger farmers, and the money-lenders, the groups from which the Basic Democrats were drawn.

In East Pakistan, the more egalitarian structure helped make the process of mutation more difficult. Those attempting to keep the program operating in a manner consistent with its original objectives could utilize political competition, and enforce broad participation in project decisions at the local level to help insure the realization of these goals.^{17/}

The emergence of power brokers and the reversal of this pattern of benefit distribution took considerable time. Once popular participation had been invoked, the process of reversal was costly in terms of rural frustration, both in the sense of loss of support for local leadership and of alienation of the rural populace from the regime.^{18/}

^{16/}A survey conducted by the author in 1969 of four thanas, in which intensive research on the impact of the Works Program had been carried out in 1967, provided plentiful evidence for these statements.

^{17/}See John Woodward Thomas, The Rural Public Works Program and East Pakistan's Development, Unpublished Ph. D. Thesis, 1968, pps. 150-159 for a description of the politicization of the program at the local level.

^{18/}See issues of the Dacca Observer or Morning News of March 1969 when the anti-Ayub turmoil was at its height, and law enforcement in the rural areas was non-existent, for a description of killing by local mobs of those Basic Democrats who had been most flagrant in their corruption and misuses of funds.

In Pakistan, the distribution of economic assets, particularly land and political power are highly skewed and program mutation was much more rapid.^{19/} Large landowners, rural contractors, and small town tradesmen quickly shaped the program to serve their own interests. Table 2 illustrates the rapid shift in the level of decision making and implementation of projects from the lowest level, the Union Council, to the much larger district council controlled by large landowners and civil servants and the concurrent shift of implementation, from the work carried out by councils, to contractors, with a resulting rapid reduction of labor intensity and employment creation.

This rapid shift took place because these elites of rural Pakistan had a well developed sense of group interest and proven means of acting upon it, including powerful representation at the top levels of Government. Given this capacity to wield their power, the leadership of the regime was either reluctant to impose or incapable of enforcing its distributive objectives on the rural system. The result was a public works program that within two to three years, served the interests of the landlords, contractors and merchants more than it served those of the target groups of rural unemployed.

In West Pakistan the program had few political effects. For the rural elites who already supported the regime, their influence over the Rural Works Program only reconfirmed their ability to control the rural environment. The political status of the regime was little enhanced or diminished. For the tenants, landless and other unemployed, the program probably only deepened their cynicism about government programs which benefit only the elite, and increased their alienation.

^{19/} Charles M. Elkington, Land Reform in Pakistan, Agency for International Development, Spring Review, (mimeo June 1970).

Table 2

Changes in the Pakistan Rural Works Program

<u>Funds</u>	<u>1963-64</u>	<u>1964-65</u> percents	<u>1965-66</u>
Spent by -			
District Councils	28.4	41.2	55.2
Tehsil Councils	-	7.7	5.7
Union Councils	71.6	50.7	35.7
Other uses	-	0.4	3.4
Paid to ..			
Contractors for implementation of projects	45.4	59.0	75.2
Spent by local councils on -			
Skilled labor	11.7	n.a.	2.5
Unskilled labor	<u>17.0</u>	<u>n.a.</u>	<u>3.5</u>
Total	28.7	12.5	6.0

Source: John Woodward Thomas, "The Rural Public Works Program in East Pakistan," in W. P. Falcon & G. F. Papanek, eds., Development Policy II - The Pakistan Experience, Cambridge, Mass: Harvard University Press, 1971, p. 223.

In Ethiopia, political response took place but fell short of mutation because the program was not aimed at redistributing income but at increasing returns to the holders of scarce resources, land and water. The Provincial program in Tigre Province was undertaken with support from the U.S. Food for Peace program. The program is relatively new and results from the initiative of the powerful, influential Provincial Governor, member of the royal family and a possible successor to the Emperor. The Governor gives the road construction program his personal supervision and takes ultimate decision and administrative responsibility himself. He is interested in action and results, and though short of funds, gets both through "voluntary" contributions of capital, supplies, equipment, and labor. The program is a clear product of the Governor's drive and ambition, and does serve the development of this Province, which is one of the most densely populated

and arid in Ethiopia, and has the lowest per capita income. The focus is on asset creation not employment or distribution, and the results reflect this emphasis.

In this case, low income groups are neither the target nor real beneficiaries of the program. The real beneficiaries are the owners of land served by the road and those on whose land conservation and water management projects are carried out, and the distribution of land ownership is highly skewed. The small farmers, tenants and landless laborers are expected by local leaders and authorities to work on road and reforestation projects, and have been paid only in grain, an amount about 25% lower than the current wage rate. In several reforestation projects where laborers were terracing and planting trees on land that was not their own, trees were planted upside down. This phenomenon occurred with enough frequency that it can only be assumed to be a deliberate attempt to subvert the program's goals by those being forced to work at wages lower than a minimum acceptable standard on projects from which they gained no benefits.^{20/} This action forced authorities on some projects to pay a cash wage in addition to grain payments, a precedent which will undoubtedly have to become standard practice if projects are to continue. As a result of this process, returns to labor will be increased but the primary beneficiaries will remain the local elite who control scarce resources.

The phenomenon of political response and program mutation is common to employment creating public works programs initiated by moderate change regimes and is central to an understanding of a program's effectiveness. These changes by groups whose interests are affected, more than anything else,

^{20/} Reported to the writer by Todd Crawford, co-author of Habteab Dagnebrand and Crawford's Summary of Findings Concerning the Food for Work Reforestation Program in Tigre and Welo Provinces (mimeo Sept. 1972), this paper contains a good discussion of factors affecting performance of projects in Tigre Province.

shapes the nature of programs. They are not, however, a homogenous phenomenon. They vary in terms of groups responding, the character and effectiveness of the response, and the time necessary to make the response effective. If these responses can be anticipated and programs planned in ways that will counter, accommodate, or otherwise deal with them, the prospects of public works programs achieving the desired objectives may be increased.

FACTORS INFLUENCING THE RESULTS OF PUBLIC WORKS PROGRAMS

Seeking indicators to anticipate potential responses to public works programs is a difficult and hazardous task. An initial attempt is made here with the qualification that these indicators require considerably more testing before their relative importance can be assessed with accuracy. The following represent an initial step in the direction of identifying the crucial determinants of response.

1. The first major determinant of the outcome of a public works program is the level and strength of commitment to enforcing the objectives of public works. In the earlier categorization, the strong revolutionary change regimes and structural change regimes are most apt to accomplish the employment and distribution goals, and perhaps the social productivity goals through a special labor-intensive public works program. Under moderate change regimes, reform objectives generally motivate the initiation of public works programs. However, over some period of time, these run counter to the existing distribution of economic and political power at the local level. When local forces react and attempt to mutate the program in their own interest, the response of the regime is crucial. If it is too dependent on local support to reinforce its original objective and risk alienating a significant portion of its supporting coalition, mutation will take place.

If however, the regime acts to reinforce the public works program and the reform objectives, and face the opposition this incurs, some change in the distribution of economic and political resources may occur. Structural maintenance regimes do not begin with reform objectives, but establish programs consistent with the existing distribution of power and the result is neither mutation nor reform. There is no discernible substitute for the government's full commitment, and determination to achieve the objectives is emphasized in a survey article of the literature on agrarian reform which states: "the effects of agrarian reform, their extent and intensity, stem from the forces that create the reform in the first place more than the reform itself".^{21/} Therefore, the nature and degree of government's support for each of the objectives of public works provide a useful indicator of potential success.

Pakistan's experience illustrates this process well. The reform objectives of the Ayub Khan regime in implementing a public works program in East and West Pakistan were vitiated by political forces that opposed these objectives. The result was the mutation of the programs, and the regime decided in the face of this opposition to abandon the reformist objectives. Now President Bhutto's regime with clearly articulated objectives of change has made a commitment to undertake a People's Works Program. It is perfectly predictable, given the size and objectives of the program proposed, that it will bring responses from a variety of non-target groups and that the responses will come quickly and carry considerable force. If, however, Bhutto is determined that the program will have the full range of benefits, understands the ways in which they may be altered, and establishes an administrative structure that will enforce the reform requirement with his full sanction,

^{21/}Robert La Porte, Jr., James F. Petras, Jeffrey C. Rinehart, "The Concept of Agrarian Reform and its Role in Development: Some Notes on Societal Cause and Effect," Comparative Studies in Society and History, October 1971, p. 485.

there is some chance of success. The question remains, however, if his regime can withstand the pressures that will inevitably grow over time to alter the program, and can counteract local action to frustrate the programs intentions. Without high level, strong political support, there is no chance that public works programs will have the reform-type benefits which are usually considered part of their purpose.

2. The distribution of economic assets and political power at the level at which the program is implemented is a second major determinant of the responses to the program. The more equal the distribution of resources, particularly of land, the more likely it is that all members of the community will be benefited by the program and will share an interest in assuring the program's success. Conversely, a highly skewed distribution of relevant assets, and well articulated local special interest groups inevitably lead to strong forces to mutate the program to serve the interest of non-target groups. It does not follow, however, that the more economic equality, the less public works are needed. Both Bangladesh and Java which are characterized by a shared poverty, are areas where large public works programs are needed and have been undertaken. Political power frequently parallels the distribution of economic assets, and the more broadly this is shared, the more chance there is that there will be a common interest and desire to see mutually agreed upon goals fulfilled. Under such circumstances, local officials (either locally elected or representatives of national government) will be held responsible for seeing that public works programs are carried out as intended. Broad political participation and competition at the local level are beneficial to the objectives of public works.

The experience of both East and West Pakistan supports the proposition that the more equitable the distribution of political and

economic power, the more successful the program is apt to be in achieving the three objectives of employment, social productivity and redistribution. On the other hand, there is evidence that at the other extreme, where societies are highly stratified and strong class or group identifications exist, even at the lower end of the spectrum of economic and political power, a public works program which supports and organizes low income groups may promote that group's ability and willingness to defend its interests and therefore the distributional objectives of the program. Such an outcome is more likely if the sponsoring regime is willing to reinforce public works investment with considerable organizational effort in order to develop a workable mechanism to insure participation or if the program is combined with a substantial element of ideological activism. In some instances, public works may provide the catalytic outside force that enables the target, low income group to begin acting in defense of its own interest. The public works projects of Puno Province, Peru in the early 1960's, following major drought and flooding, are reported to have helped create and strengthen the partially effective peasant demands to improve their economic status.^{22/}

In summary, the distribution of economic and political power constitutes a vital determinant of the effects of public works. At the two extremes of the range, in relatively egalitarian societies where single groups have difficulty dominating the community, and in highly stratified societies with established group consciousness where low income groups can

^{22/} See Edward Dew, Politics in the Altiplano - The Dynamics of Change in Rural Peru (Austin, Texas: The University of Texas Press, 1969) for a description of the Puno experience.

be encouraged to defend their own interests, public works programs have the greatest chance of success.

3. There are two corollaries to the preceding proposition. The first is that there are some countries where public works have a very low probability of success. Nations with clear social stratification but little group identity among low income groups are poor risks. Where regimes are dependent on local elites, and when powerful rural interests are well established, dominating and controlling low income groups with little fear of challenge, prospects for creating a successful public works program are so low that such an undertaking should probably not be considered. Identifying countries where programs should not be undertaken is just as important as being able to define those where there is some prospect of success.

The second is that it is not necessary to always think in terms of country-wide programs. Most countries are not homogenous in social structure or in location of low income groups. The prospects for a successful public works program may be greatly enhanced if programs are located in carefully chosen areas. Regions where low income groups are partially organized and have shown capacity to wield political power in their own interest, or where local elites have only weak ties to national government, might be propitious. Careful selection of limited areas which offer enhanced possibilities of success may considerably improve the program's chances of achieving its goals.

3. In those cases where the process of program mutation is likely to occur with a resultant shift in benefits away from target groups, programs may still be justified if the time lags can be predicted and if programs can be terminated or reorganized once they have been altered. In both East and West Pakistan, public works programs were ultimately trans-

formed but the time this process took and the resulting benefits differed substantially in the two areas. In West Pakistan, after one year, inroads were being made on the program and after three years, the process was total. In East Pakistan, there were five years of substantial benefits before the program was vitiated. These lags are of importance and much can usually be achieved if they are of sufficient duration. In the U.S. poverty program, the concept of "maximum feasible participation" required target groups to participate in determining their own needs and programs. This directive in the 1964 Economic Opportunity Act provided the basis for organizing low income and minority groups to assert their own interests. The response from established sources of political forces was sufficiently powerful to nullify, in a short period, the organizational initiatives that were being taken and the direct federal funding to low income areas.^{23/} Nevertheless, the period was sufficiently long to organize and activate the local target groups so that they were capable of acting in behalf of their own interest.^{24/} Once that capacity was developed, it continued to be exercised even after its legislative mandate was reversed and support funding reduced.

Therefore, in appraising the potential net impact of a public works program, it is necessary to anticipate the speed and strength with which disruptive forces will move to distort it from its original purposes.

^{23/} Several facets of the experience of the U.S. poverty program are examined in a Symposium on Alienation, Decentralization and Participation contained in the January-February 1969 issue of the Public Administration Review.

^{24/} Peter Bachrach and Morton S. Baratz, Power and Poverty, New York: Oxford University Press, 1970 provides a useful description of this process in Baltimore. This book is highly recommended for its analysis of how political power holders attempt to control the decision-making process, particularly by determining what issues are withheld from the political arena.

Similarly, it is necessary to estimate with reasonable accuracy the minimum time needed to establish irreversible gains or minimum benefits. When these are known, there becomes a possibility of making progress, despite the operation of the process of mutation.

5. In analyzing responses to public works, the concept of threshold of significance seems to have applicability to public works. In terms of size of public works allocations, there may be thresholds of significance that are necessary to activate responses from various social groups. If the program is so small that it does not affect the interest of the more powerful groups in important ways, they may not find it worthwhile to attempt to alter it. Yet, it may still provide important benefits for the target beneficiaries. If public works are not large enough to alter labor supply in a given time period or to affect wage rates, groups which employ rural labor may not find the program of interest. In contrast, in a country like Trinidad-Tobago where the Prime Minister's Special Works Program pays the government minimum wage rate which is almost twice the rate for agricultural labor, substantial rural interests are affected and will undoubtedly respond.

Likewise, there is probably a threshold of significance for activation of public participation. If the number of people employed in the program is not large, community participation in decisions and its ability to enforce standards will probably be reduced. Nor is the program likely to activate group consciousness within the target group because the impact is simply not large enough to be critical.

Therefore, along with the necessity to understand the time lags in responses, it is also important to know what size public works allocations become significant in bringing responses from various groups in areas where the program is being carried out. Understanding of this will provide some indication of the timing and intensity of response.

6. Matching grants for public works usually results in a local contribution in the form of voluntary labor. This is usually counter-productive in terms of distribution and it decreases productivity. This form of local contribution is more common in highly stratified societies. The reasons for this are obvious. Laborers with the least political power usually can be made to "contribute" their time. This, of course, results in a perverse distribution of income with public works making no payments to labor and projects' benefits accruing to holders of other scarcer resources. For precisely this reason, based on a year's experience, East Pakistan eliminated the local contribution requirement from its Works Program procedure. In extreme cases, self-help can be counter-productive as in the Ethiopian reforestation projects where deliberate efforts were made to subvert the project. Almost inevitably, the self-help concept when applied in public works, against the target beneficiary group, will increase their resistance to the program and political alienation.

A related paradox is that low wages usually mean high labor costs. In Mauritius, unskilled laborers are paid wages below market rates on the theory this will encourage them to take the first available job outside the Travail pour Tous program. While it may have this effect, it has also caused labor man hours (and therefore costs) to become about twice that needed, on the average, in developing countries to do a standardized piece of work.^{25/} Similarly, in a labor intensive road construction project from Bako to Jere, in Wellega Province, Ethiopia, supported by Swedish aid, and supervised by Swedish volunteers, it was found that

^{25/} Based on calculation made by Emile Costa, ILO manpower economist who participated in the IBRD mission to Mauritius, November 1971.

by shifting wage rates from a daily basis to a task basis, productivity rose by about 30% and in many cases laborers increased their daily wages.

Therefore, it appears that application of the concepts of matching grants and self-help to public works projects portend serious problems and will tend to negate employment and distributional objectives of a public works program.

7. A closely related factor is that labor productivity will be higher, as will project quality, if there is broad participation or consensus in project selection decisions. If laborers on projects see the projects benefiting them, they will be more interested in the success of the project. The Ethiopia reforestation projects illustrate this point. In Mauritius, the fact that workers were hired and transported to work sites away from their homes, and had little interest in projects and their success, probably contributed to the low labor productivity already mentioned. Therefore, to achieve broad participation in all aspects of public works programs can help in the realization of program objectives.

8. Political benefits are a legitimate aim of public works programs but they rarely result from direct payoffs for political loyalty. Some political scientists have argued that public works as pork barrel can help develop a loyal party structure at the local level, as was the case in the United States in the 19th century and that such a use of public works funds with its attendant corruption is justifiable.^{26/}
Where unemployment is a serious economic condition and action is needed

^{26/} Karl Von Vorys has made this argument both verbally and in private correspondence in 1967, shown to the author by Iqbal Leghar

to alleviate poverty, the fattening of local political representatives of the regime's party is likely to have adverse political effects as it did in East Pakistan in 1968-69. In other words, the pork barrel is a poor model for the political development aims of public works programs. In countries where much of the population does not participate in the political system but where unemployment is sufficiently serious that it poses a threat to political stability, public works cannot promote that stability unless they treat the basic condition. Payoff to local elites for support of the regime may be done in other ways. If accomplished through the medium of a public works program, the result may well be an increased sense of alienation and inefficiency among the target groups of unemployed or underemployed workers.

However, the enforcement of performance standards or economic criteria in the operation of the program may bring substantial regime support. If new employment raises rural incomes, and projects stimulate the rural economy, the short-term effect may be to quiet unrest and mobilize new groups in support of the existing regime. As a result, political benefits may be inversely correlated with attempts to manipulate the program for political support.

The factors suggested in this paper as important variables in determining the results of public works programs, such as levels and intensity of regime political commitment, the distribution of economic and political power among social groups, or the timing and intensity of political response must be tested and refined before they can be applied more widely. This process will require the systematic development of new sources and types of data. This may not be as difficult as it appears. Government statistical offices have put heavier emphasis on economic data than on political and social but in many cases, relevant

data, such as voting records, indices of political participation, internal migration data, and information on distribution of economic assets can be located. There remain considerable reservoirs of data in the rural areas that have not been collected. Revenue records, court proceedings, land holding records, data on individual occupations and localities are frequently available to the diligent researcher. Sometimes, it is necessary to utilize traditional recordkeepers, a potwari in Pakistan or a chickasum in Ethiopia, but such efforts are usually well rewarded. Systematically expanding sources and types of information and data will prove to be a necessity for testing and utilizing the types of factors which this paper suggests are important for understanding the potential for success or failure of reform programs such as public works.

CONCLUSION

This paper suggests that the operation and effects of employment generating public works programs must be understood in an interrelated political, social and economic environment. A gap between objectives and performance has been observed and the question raised as to whether the implicit reform objectives of public works programs: employment creation, productive projects, moderate redistribution of income and positive political effects, can be effectively implemented. No clear cut answer to that question is provided. Instead, an attempt is made to develop a conceptual framework for understanding the process of mutation and change in public works programs. This process is seen as resulting from the perception, by various groups, of potential effects of the program which could affect their welfare, and their response to these. When this process of response and change is understood, it may then be possible

to deal with it. A variety of factors affecting or determining the nature and intensity of response have been suggested.

Implicit in this attempt to identify factors is the expectation that reform will be possible, although it is fully acknowledged that this will be very difficult and may prove impossible. If reform is to be attempted, it is necessary to understand the way in which objectives are thwarted and to seek new ways to accomplish them. This process has been graphically described by one participant in U.S. attempts to improve the status of low income groups as being similar to a game of American football. One side carries out a play which may result in a gain or loss of ground. It will, however, be quickly stopped by the opposition and the team must devise a new strategy or play and try again. The initiative switches back and forth. It is a lengthy and bruising battle which either side may eventually win, but only with repeated efforts and constantly changing strategy is there any chance of success.

This paper has attempted to analyze the strategy of the groups who resist the reforming objectives of public works and to delineate some of the conditions which may affect the nature and strength of that resistance. Whether public works can succeed in dealing with the problems they are designed to solve is uncertain, but if there is to be any progress in this direction, this type of analysis will have to be pursued, refined and strengthened.