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POSSIBILITIES OF BENEFIT CHARGES FOR  
PUBLIC WORKS IN BANGLADESH

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**FOREWORD**

This paper was the eleventh in the series of Interim Reports issued from the Zilla Roads/Local Finance Project. Originally released in February 1984 the current version is only slightly revised from the original. The paper focuses on the use of benefit charges as a revenue source for local governments in Bangladesh. Both direct user charges and payments made by land owners who are beneficiaries of specific projects are considered. Miller shows that such revenue instruments are not extensively utilized within the country even though land prices do reflect the benefits of such projects. She then goes on to indicate how benefit charges associated with localized projects could be incorporated within a revised holdings tax structure.

Barbara Miller is a Senior Research Associate in the Metropolitan Studies Program. She wishes to acknowledge the assistance of Mrs. Roushan Qadir, faculty member of the National Institute of Local Government, who participated in many of the interviews, and other staff of the NILG who helped arrange interviews. At AID/Bangladesh, Dr. H.S. Plunkett was helpful in suggesting persons that should be interviewed, and Mr. Maniruzzaman was a pleasure to have as an accompaniment at several meetings. Dr. Miller is most grateful to the many people whom she interviewed; they gave generously of their time and thoughts.

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**POSSIBILITIES OF BENEFIT CHARGES FOR  
PUBLIC WORKS IN BANGLADESH**

by Barbara D. Miller

There are some clear advantages, at least in theory, of certain forms of benefit financing to support the construction and maintenance of rural public works by local governments in Bangladesh. Currently, charges related to the benefits from rural public works projects are an under-utilized source of project maintenance funds in rural Bangladesh.

This paper describes a cluster of benefit financing mechanisms: betterment levies, special assessments, valorization charges, and user charges and fees.<sup>1</sup> All these terms, except for user charges and fees, generally refer to assessments made on the increased value of property. User charges are, instead, use-specific, and are based on the costs of providing a particular good or service. User charges are not generally considered to be a tax, but are said to be in a domain of their own. The betterment levy is a compulsory assessment, thus more closely resembling a tax. Its compulsory nature distinguishes it from fees or rates for public services which are voluntarily consumed and for which payment is voluntarily given.

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<sup>1</sup>Davey terms valorization charges a form of betterment tax due to their compulsory nature. See Kenneth Davey, Financing Regional Government: International Practices and Their Relevance to the Third World (New York: John Wiley and Sons, 1983), pp. 48-49. For additional discussion of the concepts, see Jorge Macon and Jose Merino Manon, Financing Urban and Rural Development Through Betterment Levies: The Latin American Experience (New York: Praeger Publishers, 1977), pp. 6-7.

In this paper I take a broad conceptual approach to benefit charges for public works, including forms that extend from what some would call taxes to fees, from the compulsory to the voluntary, from annual payments to occasional charges.<sup>1</sup> All, however, are incurred as the result of the consumption of a government-provided service by particular sub-sets of the population rather than the population as a whole.

I first review a range of types of benefit charges and discuss the forms currently used in rural Bangladesh local governments. I then present what is known about the nature of benefits from rural public works in Bangladesh and what is known about who benefits. Subsequently there is a discussion of who should pay for the benefits and how. In conclusion the strengths and weaknesses of a betterment levy placed on the union parishad's holdings tax (union rate plus chaukidary rate) are considered and suggestions for its design are offered.

#### Forms of Benefit Charges

There is a surprising amount of terminological variation in the scant literature on benefit charges.<sup>2</sup> Some authors consider special levies on

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<sup>1</sup>This breadth echoes that found in Selma J. Mushkin and Richard M. Bird, "Public Prices: An Overview," in Selma Mushkin, ed., Public Prices for Public Products (Washington, D.C.: The Urban Institute, 1972), pp. 3-24, which was inspired by the earlier work of Edwin R.A. Seligman, Essays in Taxation (New York: Kelley, 1969) [1895] Macmillan.

<sup>2</sup>A key source is Seligman, Essays. Other major analyses include: Macon and Manon, Financing Urban and Rural Development; C. Lowell Harriss, "Land Value Increment Taxation: Demise of the British Betterment Levy," National Tax Journal, Vol. 25, No. 4 (1972): 567-72; William A. Doebele, "'Land Adjustment' as an Alternative to Taxation for the Recovery of Betterment: The Case of South Korea," in Roy Bahl, ed., The Taxation of Urban Property in Less Developed Countries (Madison, WI: University of

levies on improvements that affect property value to be a form of benefit taxation.<sup>1</sup> Others explicitly define such levies as non-tax sources of revenue which serve as alternatives to taxes.<sup>2</sup> Generally, benefit taxation, according to textbook descriptions of the "benefit approach," refers to the situation when the public at large is required to pay for a service. Non-tax benefit financing refers to payment only by the consumers of a particular service, under a variety of forms; I shall refer to this pattern as "benefit charges".

Typical functions with high potential for benefit charges worldwide are: utilities; health and hospitals; sewerage; recreation; transportation facilities and services, including harbors and airports; education; and public housing.<sup>3</sup> One obvious difference among all of these is whether the service involved enhances the value of property; if it does, then the better choice would be toward property-related charges such as

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(cont.) Wisconsin Press, 1979), pp. 163-190; Johannes Linn, Valorization as a Method of Recovering Betterment in Colombia, Washington, D.C., IBRD, forthcoming; various essays in Mushkin, Public Prices; William A. Doebele, Orville F. Grimes, Jr., and Johannes F. Linn, "Participation of Beneficiaries in Financing Urban Services: Valorization Charges in Bogota, Colombia," Land Economics, Vol. 55 (1979): 73-91.

<sup>1</sup>Roy Bahl and Larry Schroeder, "The Real Property Tax," in Roy Bahl and Barbara D. Miller (eds.), Local Government Finances in the Third World: A Case Study of the Philippines (New York: Praeger Publishers, 1983), pp. 59-60.

<sup>2</sup>Macon and Manon, Financing Urban and Rural Development, pp. 6-7; Mushkin, Public Prices, p. 4.

<sup>3</sup>Mushkin, Public Prices, pp. 7-8.

special assessments or valorization charges, if not, then user charges or other types of fees would be more appropriate.<sup>1</sup>

#### Betterment Levy

As explained in a study of the potential use of betterment levies in Latin America, a betterment levy is, most simply, a "method for the public sector to recover the 'differential' benefits generated by public works projects."<sup>2</sup> The betterment levy is closely related to taxes traditionally applied to property. The levy base is the value increase created by the public works project, and, usually, is evidenced in the increased value of land. Most of the material considered in the Latin American study relates to cost recovery of a project through a one-time levy. Such a levy would be useful in rural Bangladesh, but more important would be a recurrent levy, assessed yearly, that would be based on project benefits and used for recurrent costs related to project maintenance.

#### Valorization Charge

Like a betterment levy, the valorization charge is a lump-sum levy, though it may be paid in installments, to raise the costs of a particular project. This form is commonly used for roads, river channels, and parks. The cost of the project (including administration) is calculated and divided among property owners in proportion to the supposed increment created in property values. Such charges work best when benefits are

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<sup>1</sup> Depending on the particular service and its administrative context, the choice of a betterment levy versus a fee may be a difficult one to make.

<sup>2</sup> Macon and Manon, Financing Urban and Rural Development, p. 5.

highly visible. Political pressures against levying such charges are often mentioned as a constraint against their greater use in developing countries. A valorization charge is similar to cost-sharing for a specific project, but it has a higher level of compulsion involved. In much of the literature, the term valorization charge is used synonymously with "betterment levy." The major difference between a betterment levy and a valorization charge is that the former is based on the increased value of the property while the latter is based on the cost of the specific project to be financed.

#### Special Assessment

Differentiating a special assessment from a valorization charge or betterment levy is again a somewhat arbitrary task. Perhaps the most definitive difference is that a special assessment attempts to capture only a proportion of the total cost of the project involved.<sup>1</sup> Like a valorization charge or betterment levy, the special assessment is levied on a supposed increase in value of property due to the project. Similarly, it may be paid by property-owners as a lump sum or over a period of years.

#### User Charges and Fees

Unlike valorization charges and special assessments, user charges and fees for public services are not related to changes in property value; instead they are a function of use of a service and are based on the total costs of providing the service. Examples of user charges are road tolls

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<sup>1</sup>Davey, Financing Regional Government, p. 49.

and irrigation charges. It is difficult to draw a clear conceptual line between user charges and fees.

### Efficiency Versus Redistribution

A very important question that should be raised when one considers financing through benefit-based charges is the potential gain of efficiency and concomitant loss of redistributive effects. When only those who benefit from a project pay for a project, by logical implication, those who do not pay do not receive the benefit. User charges perhaps most clearly exemplify this trade-off: some people who "choose" not to pay for the service may "choose" so because they cannot afford to pay. This situation will be desirable only if the government feels that poorer elements of the population do not need the service.

### Benefit Charges for Public Works by Local Governments in Bangladesh

In rural Bangladesh, the major local government responsibilities in providing and maintaining public works fall in the following domains: roads and waterways; off-farm irrigation and drainage systems; flood control primarily through earthwork embankments, bridges and culverts; and public ponds (tanks). This section reviews the current practice of rural local governments in attempting to recoup costs of providing and maintaining such works through the benefit financing mechanisms reviewed in the previous section.

Table 1 demonstrates the narrow range of use of benefit charges by local governments in Bangladesh. Two taxes on property, the immovable property transfer tax (IPTT) at the zilla parishad level, and the holdings

tax at the union parishad level, are not currently conscientiously administered to capture revenues from rising land values.<sup>1</sup> Weak property evaluation at the zilla level hampers effectiveness there, and the IPTT as a way of capturing betterment is limited because it taps only property that is transferred, and its 1 percent rate (even if fully reported) will capture only 1 percent of value increment regardless of the cost of the project. Political forces at the union level curtail application of betterment levies because roughly the same persons who benefit most from public works projects are responsible for levying and paying the charges (see section below on "Who Benefits").

TABLE 1

LOCAL GOVERNMENT USE OF BENEFIT CHARGES FOR  
PUBLIC WORKS: TAX AND NON-TAX

Zilla parishad	<p>IPTT: may directly recoup benefits from public works through increased property value, only on property that is transferred.</p> <p>Tolls: Road tolls: rarely imposed Ferry <u>ghat</u> tolls: common Bridge tolls: rarely imposed</p>
Upazila	Fees: for ferries, licenses for rickshaws.
Union parishad	Holdings tax: in theory, could respond to improvements in property.

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<sup>1</sup>See James Alm, "The Immovable Property Transfer Tax in Bangladesh," Interim Report No. 3, Local Revenue Administration Project, Metropolitan Studies Program, The Maxwell School (Syracuse, NY: Syracuse University, 1983); and Showkat Hayat Khan, "Aspects of Public Finance in a Union Parishad: A Sociopolitical Case Study," Interim Report No. 12, Local Revenue Administration Project, Metropolitan Studies Program, The Maxwell

Local governments (zilla and union-levels) have gained revenues from user charges to a limited extent. Road tolls are rare, and are levied only on some major roads in Sylhet district at the present.<sup>1</sup> To our knowledge, no upazila or union roads have ever required the payment of tolls. Zillas gain revenue from the leasing of ferry ghats (landings), and some unions, before 1983, also gained revenues from leasing out ferry ghats. There seems to be no charge of any kind to boats using intra-district waterways as a means of transport.<sup>2</sup> Other local government public works such as irrigation and drainage also are not subject to either property-related charges or user fees.

#### What are the Benefits?

The extent of primary (direct) economic benefits of the rural public works provided by local governments in Bangladesh is a basic question that must be explored before appropriate financing mechanisms can be devised. Table 2 presents the major benefits. This synopsis shows that the primary benefits are either attached to property nearby the specific public work, or related to income generated from increased farm production. Logically, these latter benefits also go first to those who own land, and only secondarily to non-landowning individuals through employment derived thereof.

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(cont.) School (Syracuse, NY: Syracuse University, 1984). These reports provide information on the IPTT and the holdings tax, respectively.

<sup>1</sup>For information on zilla toll roads, see Larry Schroeder, "Toll Roads as a Zilla Parishad Revenue Source," Interim Report No. 2, Local Revenue Administration Project, Metropolitan Studies Program, The Maxwell School (Syracuse, NY: Syracuse University, 1982).

<sup>2</sup>There may be registration fees on individually-owned boats.

TABLE 2  
PRIMARY ECONOMIC BENEFITS FROM RURAL PUBLIC  
WORKS PROVIDED BY LOCAL GOVERNMENTS

<u>Public Works</u>	<u>Benefit</u>
<u>Transport</u>	
Roads and Waterways	Improved access to markets
Bridges, Culverts	Improved net farm income
	Improved land values in periphery
	Improved access to services
	Employment opportunities
<u>Off-Farm Irrigation</u>	
From Waterways and Tanks	Increased net farm income
	Increased land value
<u>Drainage and Flood Control</u>	
	Increased net farm income
	Increased land value

SOURCES: AID Office of Evaluation, Socio-Economic and Environmental Impacts of Low Volume Rural Roads: A Review of the Literature (Washington, D.C.: Bureau for Program and Policy Coordination, AID Program Evaluation Discussion Paper No. 7, 1980); USAID/Dhaka, "Water Management Systems" (Dhaka: Project Paper, 1981).

These gross generalizations, of course, mask more subtle realities. There is, no doubt, variation in incidence of primary benefits depending on the particular features of a given project, whether it is a new paved road, the repair of an existing road, or the re-excavation of an existing canal. Learning about such variation would contribute to the ability to levy sensible benefit charges. Another critical knowledge input is some idea of the nature of the differential flow of benefits to specific groups of people; i.e., do more benefits go to wealthier farmers, or farmers

nearest a road or canal? We can group these two subject areas into "project differentials" in benefits and "social differentials" in benefits.

### Who Benefits?

This section reports on a review of the literature on public works projects in Bangladesh,<sup>1</sup> and also employs information gathered in numerous interviews with donor agencies and indigenous development organizations in Dhaka, both governmental and non-governmental.<sup>2</sup>

### Project Differentials

Among the various project types that concern us here, there is more information on benefits for canal-digging projects than for other categories.<sup>3</sup> This attention to canal projects in Bangladesh stems from the fact that most mass mobilization programs have been directed toward canal building (that is, canal/cum embankment projects), and attempts have been made to assess beneficiaries in order to determine people's contributions to the project. Basically, those who benefit most are those

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<sup>1</sup>The studies consulted are listed in Annex 1.

<sup>2</sup>The interviews were conducted during several weeks in November 1981, September 1982, and May 1983. A list of interviews held is provided in Annex 2.

<sup>3</sup>Muhiuddin Khan Alamgir, Developing Strategy for Bangladesh (Dhaka: Dhaka University, Centre for Social Studies, 1980); and Mohammad Faizullah, "A Report on Masulia-Rampur-Khowai Project (MRKP)," unpublished mimeo, Dhaka, 1980.

with land that will either receive irrigation water from the canal, or that will be protected from excessive flooding by the embankment. Primary benefits are, in large part, a function of land ownership.

One would assume that increases in the value of land resulting from a canal/embankment project would be reflected in land prices. While doing field interviews, we routinely asked about land prices in the area, and the difference in price between irrigated and unirrigated land. Our question was most easily answered in Rangpur. In Sylhet and Faridpur districts, the most salient factors in determining the price of land were reportedly different. In Faridpur, people redefined the question to mean fertile versus infertile land, stating that in general irrigation was not a critical factor. In Sylhet, a recurrent answer involved the number of crops that could be grown on a piece of land in a year (one, two or three, which may be a function of natural fertility and flooding rather than public works-related), whether the land was "wayside" land, i.e., near a road, whether the land was near a town, and whether the land was being bought by "Londoners".<sup>1</sup> Agricultural land near a town in all three areas is often worth nearly ten times similar land in the countryside.

Our concern here is with how public works projects raise the price/value of land. Data in Table 3 for the sites in Rangpur district clearly

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<sup>1</sup>Sylhet district is the one district in Bangladesh with a particularly strong pattern of outmigration to London, England. Returning migrants are infamous for buying up property in their natal district, and it seems that prices are often inflated for them.

TABLE 3  
ESTIMATED PRICES FOR VARIOUS TYPES OF LAND,  
TAKA PER BIGHA, 1982<sup>a</sup>

	<u>Unirrigated Fertile Land, and Single Crop Land</u>	<u>Irrigated Fertile Land</u>	<u>Multi-Crop Land and Fertile Wayside Land</u>
Rangpur district			
Ramchandrapur UP	6,000- 8,000	10,000-12,000	
Kanthalbari UP	5,000- 7,000	10,000	
Holokhana UP	6,000- 7,000	10,000-12,000	
Kholahati UP	10,000-12,000	15,000	
Malibari UP	13,000	15,000	
Boali UP	10,000-12,000	14,000-15,000	
Kuptala UP	10,000	12,000-15,000	
Badiakhali UP	5,000- 6,000	10,000-12,000	
Sylhet district			
Gopaya UP	15,000-20,000		10,000-80,000 <sup>b</sup>
Richi UP	6,500- 8,000		13,000-27,000
Shaistagnanj UP	---		10,000-12,000
Sunangonj UZP	6,000		8,000
Kotwali UZP	15,000	25,000-30,000	20,000
Beani Bazaar UZP	---	---	30,000-50,000

<sup>a</sup>Unless otherwise noted, bigha refers to the standard bigha, that is, .33 of an acre.

<sup>b</sup>Location near a roadside, or near upazila headquarters, and the number of crops per year were mentioned as positively affecting the value of the land in Sylhet district. "Wayside" land's higher value was consistently mentioned in Sylhet. The Tk. 80,000 figure was for agricultural land near a town with development potential.

<sup>c</sup>Data from Faridpur district are not included because irrigated/unirrigated is rarely a key distinction there; price data were given according to fertile/infertile land categories. Drainage characteristics of a land parcel were mentioned as being an important factor in price level in Rajoir upazila, Faridpur. A pucca drain nearby would increase land value for one local bigha (= 52 decimals or about half an acre) from 10,000-12,000 to 15,000-20,000 taka. Bridges are also important in making nearby property more desirable.

SOURCE: Questionnaire data gathered in mid-1982 by Research Assistants Muin Uddin and Hasan Murshed, and the author's field notes, mid-1982.

district clearly indicate that the presence of irrigation increases the value of land, on the average, by half. In Sylhet district, land that can produce several crops, or is near a road, is again perhaps increased by half, on average. The fact that a given piece of property can produce two or three crops may or may not be the result of a public works project because sometimes natural flooding and drainage are adequate. Nevertheless the data indicate the effect that particular projects, such as canals and embankments, would have on land possessing potential for such development. It was interesting to learn at one interview in Faridpur district that a bridge would enhance the value of nearby property as much as the presence of a drainage system (unfortunately the respondent was unable to provide a price estimate).

Tubewells and pumps, often provided at subsidized rates by the central government through several different programs, have very localized benefits because they are usually situated on an individual's property and the individual controls access to the benefits. Such quasi-public goods are highly visible and could be incorporated into land valuation measures easily. A problem that arises is central government motivation. To a large extent, it seems, such subsidized goods are an element of patronage that the government feels it needs to provide to dominant classes in the rural areas. It might not appeal to the central government to then tax these people, though it would make sense to do so for recovering recurrent costs, and from a social equity perspective.

Within the fairly narrow range of projects considered here, one can perceive a variation in the "spread" of benefits, from the most localized

tubewells and pumps to those of broader impact such as bridges, irrigation/transportation canals, and rural roads. Appropriate charges should, ideally, take these variations in spread into account such that narrow-spread goods should be financed by a more narrowly based charge than broadly-spreading goods which should have their financial burdens supported by a wider population base.

### Social Differentials

There are two contrasting, but complementary, paradigms for viewing how development projects impact on various levels of the social structure. The first is the political model which says that, due to the nature of rural power structures, most benefits are "netted" by dominant factions and families.<sup>1</sup> The second, more recently expostulated and less fully investigated, is the demographic approach that sees differential project benefits as a function of household demography, with household size being a primary determinant.<sup>2</sup>

Each of these approaches could be applied to what little we know about benefit incidence in rural Bangladesh. The political approach would postulate that most benefits go to the local elite. In rural Bangladesh the elite are largely landowners (merchants are also part of the local elite and they may or may not be large landowners). The demographic

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<sup>1</sup> See especially the study by BRAC, The Net: Power Structure in Ten Villages (Dhaka: Bangladesh Rural Advancement Committee, 1980), and John P. Thorp, Power Among the Farmers of Daripalla: A Bangladesh Village Study (Dhaka: Caritas Bangladesh, 1978).

<sup>2</sup> This position is explicated in Michael Lipton, Demography and Poverty (Washington, D.C.: World Bank, World Bank Staff Working Papers, Number 623, 1983).

approach is more difficult to formulate for rural works projects: would large households benefit in a different way from small households? Interestingly, in rural Bangladesh there appears to be a direct and strong correlation between landownership and household size.<sup>1</sup> Since it is not possible to disentangle the two variables, I will continue to use landownership as the key factor in benefit incidence. We can develop a simplified equation for rural Bangladesh: in large part, the rural elite benefits most from rural works projects, and most of the rural elite are characterized by relatively large amounts of land owned per household, and relatively large numbers of persons per household.

To summarize this section on what is known about benefit incidence from public works projects in rural Bangladesh, a comment should be made about the near total disregard by development agencies, both government and donor, for both "project differentials" and "social differentials" in benefit incidence. If, in evaluation reports, the subject is addressed at all, it is done so in a perfunctory and non-empirical manner. Extremely

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<sup>1</sup>Using data from the 1978 Land Occupancy Survey of India gathered by Jannuzi and Peach, we ranked households by amount of land reported owned into ten categories. From least to greatest amount of land owned, household size was: 4.58, 4.42, 5.07, 5.19, 5.45, 5.40, 5.88, 6.21, 7.03, and 8.88 persons. The total number of households was 34,745; the term "household" includes all permanent residents, both kin and non-kin. For further information on the Land Occupancy Survey data see F. Tomasson Januzzi and James T. Peach, The Agrarian Structure of Bangladesh: An Impediment to Development (Boulder, Colorado: Westview Press, 1980), and Barbara D. Miller and James A. Wozny, "The Land Development Tax in Bangladesh: Insights From the 1978 Land Occupancy Survey," Interim Report No. 4, Local Revenue Administration Project, Metropolitan Studies Program, The Maxwell School (Syracuse, NY: Syracuse University, 1983).

little research on benefit incidence from government expenditures has been carried out in developing countries, including Bangladesh. Generalized beliefs that the landed benefit most from rural works projects, and other government programs, inspire action-oriented programs like BRAC to focus on the poor and landless. More fine-grained knowledge on specific benefit incidence patterns from different types of projects and within different social structures, however, does not exist at this time.

#### Who Should Pay and How?

For all the project types considered here, it would be quite difficult to make a case that the poor and landless benefit in any primary way--least of all from localized projects such as tubewells. To a limited extent the poor benefit from labor-intensive projects whereby part-time employment is gained, or from the occasional use of a road for transportation purposes, or of a canal for bathing and washing. It seems logical that a financing mechanism should be found that does not make direct and excessive demands on the poor.

In the absence of data on the subject, we must assume that, in general, persons with more land will tend to benefit more from rural works projects, and that land of greater value will benefit more than land of lesser value. In order to tap the beneficiaries, it would seem most effective to attach a benefit levy to the current land taxes. This option would indeed be quite suitable if current property taxation systems in Bangladesh were adequate.

I focus here on the pros and cons of constructing a benefit levy, as a regular annual payment, at the union level. There is little point in discussing a property-based levy on the IPTT since value should already be incorporated into the price of the land on which its rate is calculated. In order to make the IPTT more responsive to changes in value, however, the present system should be made more effective by plugging loopholes in enforcement.<sup>1</sup>

At the upazila level, no revenue source is based on property. The upazila has recently been assigned a variety of revenue sources that revolve around charging: for markets, roads, ferry landings, and bridges. All of these sources at the upazila level need further research; since they were not in use at the time of our study, we can say little about them. If, as proposed in the Final Report, a portion of the land development tax were transferred to the upazila parishad and were converted to a value-based levy, it could serve as a vehicle for the imposition of benefit charges tied to land values at the upazila level.

In the following section, I review the possibility of a betterment levy on the holdings tax on grounds of adequacy and elasticity, equity, administrative capacity, political acceptability, and whether a benefit surcharge on land is feasibly located at the local level.<sup>2</sup>

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<sup>1</sup>See Alm, "Immovable Property Transfer Tax."

<sup>2</sup>These criteria are generally accepted as key by public finance economists. For a concise discussion of each see Davey, Financing Regional Government, pp. 27-40.

### Adequacy and Elasticity

Adequacy of a revenue source is generally judged in relation to the cost of the services that are intended to be supported. In this case, we could take total maintenance costs of rural public works for the locale as the target, but estimates of these costs are not available for any level of local government in Bangladesh. Additionally, one might want to take costs of new or improved projects into account, such as connecting roads with a bridge or culvert over a canal. In a disaster-prone country like Bangladesh, one might also want local governments to take some fiscal responsibility for sporadic, large expenditures for reconstruction. Since local government expenditures in rural Bangladesh for all of these categories are woefully inadequate, we cannot look at any "typical" budgets to get an idea of what adequate revenues would be.

Another perspective is to assess the miles of road (of differing types--paved, bricked, unpaved, etc.), canals, embankments, the number of public tanks, etc., and calculate maintenance costs and new project costs. In the absence of data for that task, it is impossible to assess the adequacy of a potential revenue source with any kind of rigor, or to make an adequacy-relevant statement about what the rate ought to be. Yet another approach would be to judge what the revenue base could feasibly produce and then to "measure" that against some imputed level of what would be desired. All of this is mere guesswork.

Another more fruitful possibility is to start by looking at the current benefits and to try to assess the magnitude of benefits reaped. By looking at the scant information on property values in Table 3, we

learn that values of properties with irrigation facilities (where such are important) or near roadways are 50 percent higher. Currently, the holdings tax at the union level in practice does not tax these more valuable properties at much higher rates than others.

Elasticity of a property-based betterment levy in rural Bangladesh is an equally cloudy topic. In general, property taxes are one of the least elastic revenue bases, and therefore, one would assume that a levy on the same base would likewise lack elasticity. Only in the case of a levy based on the transfer of properties would elasticity increase, but the IPPT already taps the transfer of property, eliminating this source for the local union government. Of course, a local betterment levy statute could include regularly rising rates, but reality calls into question the feasibility of this option. The case study in Sylhet district revealed the extreme unwillingness of the union officials to collect the holdings tax at even the low rate mandated in the statutes. A thorough revamping of the holdings tax is the necessary prerequisite for an efficient benefit levy to operate.

### Equity

In theory, the equity of a betterment levy would be significant. It is clear that benefits from rural works projects are gained by property owners in Bangladesh, and it is equally clear that they are not paying for these benefits. In reality, the equity of a betterment levy will not be so significant since local public finance in rural Bangladesh is heavily politicized. Attempts to make the holdings tax more effective will be circumvented by sociopolitical clout. Nevertheless, a property tax with

"bite," and with the criterion that its revenues be put to local use, should increase compliance and therefore increase equity.

#### Administrative Feasibility

The administrative feasibility of a local property tax is a recurrent problem. The recommendations of the Final Report, if implemented, may help improve the administrative feasibility of a betterment levy placed on top of the local property tax.

Of key importance is the interaction between all phases of the property tax: assessment, collection, enforcement and utilization. The assessment of "betterment" in rural Bangladesh, though, is relatively simple (compared to developed countries) because there is a limited number of project types, and their impact is usually quickly seen in rising property values. The problem lies in getting accurate information on property value. If that can be accomplished, then the administration of the betterment levy could be simply "piggy-backed" on top of the regular property tax.

#### Political Feasibility

The vulnerability of a local property-based levy to local political forces is high. Here again, the strength of a local levy to withstand such pressures will be only as good as the strength of the property tax on which it is based. Recommendations in Interim Report 12 were designed to help alleviate the influence of local sociopolitical pressures by placing responsibility for certain phases of the tax in non-local personnel, while relocating the utilization of revenues to the local level in order to increase willingness to pay.

Obviously, in rural Bangladesh as elsewhere, wealthy and powerful people in the locality tend to be the major beneficiaries of rural works projects. It is they, then, who should be the primary bearers of the benefit levy. These same people, however, have the most influence, direct and indirect, on the local government body. Resort to a higher authority is one way to help break through this network at the local level.

#### Feasibility as a Local Revenue Source

Under this heading fall a number of considerations, some of them echoing the discussion immediately above. First, there is the question of political will at the local level; as Davey puts it, will there be more serious political problems at the local level than at the central government level?<sup>1</sup> Second, there is the question of possible distortions arising from a local revenue source. Third is the issue of local ability to administer the revenue source in terms of assessment, collection, and enforcement.

I take the problem of central versus local appropriateness to be tackled best in terms of the several phases of the proposed levy. Some phases of the tax are better handled by the local government, while others need the "distance" and clout of the central government. Nevertheless, I consider the proposed levy to be, essentially, a local revenue source. Table 4 presents a schematic view of central-local involvement in the proposed benefit levy for the union parishad.

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<sup>1</sup>See Davey, Financing Regional Government, p. 49.

TABLE 4

MAJOR ASPECTS OF A PROPOSED BENEFIT LEVY AND  
LEVEL OF GOVERNMENT INVOLVED

- |                |   |
|----------------|---|
| 1. Assessment  | 1. Assessors would be provided from a central government cadre. Criteria for assessment would be set by national standards and would include: proximity to various types of road, irrigation where appropriate tanks, bridges, drainpipes, and presence of tubewells.   |
| 2. Collection  | 2. There would be no separate collection procedure. Payment would be made annually at the time when the holdings tax is due, paid at the union parishad headquarters to the union secretary.  |
| 3. Enforcement | 3. As with the holdings tax, the initial level of enforcement should be attempted at the union level through refusing licenses and certificates to defaulters. Default beyond one year should meet with a larger penalty with interest on the tax not paid, enforced through an arm of the central government, and involving warnings and ultimate auction of the property. |
| 4. Utilization | 4. Utilization of the revenues should remain at the union level, and should be devoted completely to maintenance of existing projects, perhaps in coordination with a central government or upazila-level matching grant program.   |

## ANNEX A

## SOURCES CONSULTED

NOTE: The sources listed here include both project documents and evaluations of a "quasi-published" nature, and formally published papers and books. The range of literature extends from studies that explicitly address questions of benefit incidence in Bangladesh and some neighboring South Asian nations, to studies consulted to help clarify the conceptual approach followed in the paper. In general, the literature all relates, in one way or another, to the broad question of "who benefits from public works expenditures in rural Bangladesh?"

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ANNEX B  
INTERVIEWS<sup>a</sup>

Bangladesh Rural Advancement Committee

Mr. A.M.R. Chowdhury, Research Demographer/Statistician  
Mr. Shahid Hossain Talukder, Chief Trainer

Ministry of Agriculture Planning Cell

Dr. Florence McCarthy, Head of Women's Section

National Foundation for Research on Human Resource Development

Dr. S.A. Qadir, Director  
Dr. Salehuddin Ahmed, Economist  
Mr. Balaghat Ullah, Agriculturalist

UNICEF

Mr. Wayne Hooks

Swiss Embassy, Special Rural Works Program

Mr. H. Escher

Bangladesh Institute of Development Studies

Dr. Mahabub Hossain

Ford Foundation

Dr. Martin Hanratty, Program Officer, Agriculture and Rural  
Development

Ministry of Finance, External Resources Division

Dr. Mohiuddin Khan Alamgir, Joint Secretary

Bureau of Statistics

Dr. Gulam Rabbani, Director

President's House, Countrywide Canal Digging Programme

Dr. Habib Ur Rahman, Joint Secretary

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<sup>a</sup> Presented in order of occurrence.

CARE/Dhaka

Ms. Lizette Echols, Coordinator, USAID Food-For-Work Program

Bangladesh Institute of Rural Development

Dr. Ghafur, Project Director, World Food Programme Study

Lutheran World Relief Programme

Rev. Charles Flugel, Director

UNDP, Urban Directorate

Dr. Lou Muench, Physical Planning Expert

Bangladesh Agricultural Development Council

Dr. Gerard Gill, Associate

Australian High Commission

Mr. Derek Baldwin, First Secretary, Development Assistance  
Mr. Peter McCall, Third Secretary

International Voluntary Services, Inc.

Dr. Jan Paul Emmert, Field Director

Asian Development Bank

Dr. Peter Brinkman, Project Economist

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Dr. Adrienne Germain, Country Representative