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ROAD RESOURCES MANAGEMENT PROJECT

PAKISTAN

LOCAL CESS TAXATION

JUNE 12, 1990

ONSTRUCTION CONTROL SERVICES CORPORATION

AID CONSULTANTS FOR ROAD RESOURCES MANAGEMENT PROJECT

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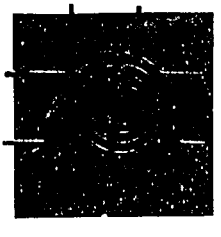

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1 Executive Summary

Efficient revenue generation is a major concern of local governments the world over. Pakistan is no exception. The financial management component of the Road Resources Managment Project seeks to address this and other issues in local government finance.

In this report the second largest source of district council revenues, LOCAL CESS TAX, is examined. This is a tax on land brought into cultivation. While local cess revenues constitute the second largest source of funds, they accounted for only 5% of combined revenues or 12.1 million rupees in fiscal year 1987-88. After five years of growth, local cess revenues are projected to drop to about 10.5 million rupees during fiscal year 1989-90.

Currently all matters concerning this revenue item are the domain of the Provincial Board of Revenue. Assessment and collection take place in each district by provincial employees and rates are set by the BOR. The tax is assessed and collect concurrently with other land based taxes such as land revenue and water rate.

There are problems with the present system which are addressed in this study. Evasion takes place during assessment. The system motivates employees to allocate less than a "fair" share of the taxes collected to local cess and political pressure often postpones collection of arrears or payment of the tax. Rates are static and there is no sound methodology for the current rate structure. On the basis of a thorough analysis of available data, the Consultant has developed the following recommendations:

(1) <u>No consideration should be given to raising rates prior to exploring the possibilities of curtailing evasion.</u>

(2) <u>The district councils should be given a more active role in assessment, collection and rate determination.</u>

(3) <u>Partial payment of taxes should be allocated on the basis of the relative share of local cess in total tax assessment.</u>

(4) <u>Tax data must be cross checked against other data sources.</u>

(5) There should be a three tiered rate system which is uniform throughout the province. The recommended rates are 6 rupees per acre on perennial land. 3 rupees per acre on nonperennial land and no change in unirrigated rates.

(6) Rates should be indexed to the rate of inflation to maintain the long-term purchasing power of cess revenues.

(7) Government officials should be encouraged to cooperate to a greater degree in furnishing additional data needed to extend this and other tax analyses. Further data collection will permit deeper analysis and would probably generate more beneficial recommendations.

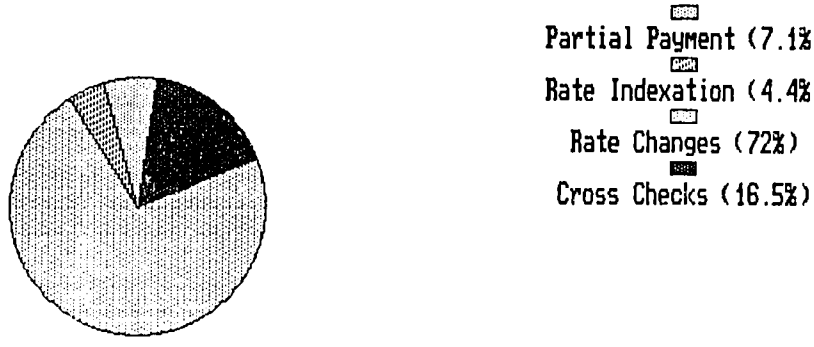
It is not possible to quantify the impact of each recommendation of cess revenues since sufficient data was not forthcoming. After careful analysis, it was determined that the implementation of four changes to the current system (recommendations #3, #4, #5, and #6) would result in additional revenues of 28 million rupees. The data is not available to quantify the additional revenues which would be generated by the implementation of the other recommendations.

The table below presents the amounts of funds which will be available if any one of the four recommendations is adopted. These estimates are drawn from the latest available actual data - 1987-88.

Recommendation	Amount FY1987-88
Partial Payment	1,629,547
Rate Indexation	1,107,281
Rate Changes	16,348,195
Cross Checks	3,812,523
Total if all recommendations are adopted	Rs. 28,137,198

CCSC is recommending that if the government takes a serious stance on controlling leakages and evasion that rates should be increased to Rs. 11.6 and Rs. 7 per acre on perennial and non-perennial land respectivelly. This, along with the other recommendations, would result in an annual increase of over Rs. 77 million for the Sindh district councils.

Figure E.1



Composition of Revenue Increases

2 Glossary

ACS - Assistant Commissioner.

ADC - Assistant Deputy Commissioner.

BOR - Sindh Board of Revenue - Provincial agency charged with land based taxes.

CPI - Consumer Price Index.

DepCom - Deputy Commissioner.

DG - Director General.

DR - Drainage Rate - a tax on land which has been provided drainage facilities.

DSS - Director Settlement Survey.

FY - Fiscal year beginning July 1 and ending June 30.

Kharif - Agricultural season from April through September.

LC - Local Cess tax.

LGRD - Sindh Local Government and Rural Development Department.

LG - Local Government section of the Sindh LGRD.

LR - Land Revenue - a tax on the agricultural production of non-muslim land owners.

Mukhtiarkar - Revenue officer in charge of field staff.

N.W.F.P. - Northwest Frontier Province.

Rabi - Agricultural season from October through March.

RC - Revenue Commission.

RD - Rural Development section of the Sindh LGRD.

Rupee (RS) - Unit of Pakistani currency. Official exchange rate as of June 1990 US$1.00 = Rs. 21.9

SLGO - Sindh Local Government Ordinances.

Tapedar - Field level revenue assessor and collector; under the supervision of the mukhtiarkar.

Ushr - Tax collected on agricultural production from

Muslim land owners.

WPI - Wholesale Price Index.

WR - Water rate.

3 Introduction

3.1 Background

USAID and the Government of Pakistan (GOP) entered into an agreement (PC-I Proforma) to undertake the Road Resources Management Project (RRM). The project, currently limited to the Sindh Province, concentrates on:

- building and strengthening the necessary agencies and procedures to institutionalize the maintenance of public capital assets and road investments;

- assisting local governments (district councils) and private sector contractors with training and guidance designed to ultimately stengthen both sectors by taking maximum advantage of the private sector efficiencies where and when possible;

- improving and expanding the network of rural roads in an effort to stimulate the local economy.

The district councils' current behavior results in a significant long term drain on scarce capital resources and retards the long term growth and development prospects. Several factors account for the lack of awareness and lack of emphasis of local governments on the maintenance of infrastructure. They are:

- failure to evaluate alternative policies that affect efficient allocation ofpublic resources;

- no understanding of the economic impact of maintenance management decisions ;

- no institutional framework to encourage and promote maintenance;

- poor contract supervision;

- outdated, inadequate accounting and budgeting systems;

- obsolete revenue instruments.

The RRM project contains a financial management component (FM) which is designed to address those problems which are of a financial nature and which impinge on the districts ability to mount and sustain a program of efficient resource

allocation, i.e., revenue generation and enhancement, accounting and budgeting, financial planning, and cost containment.

This report is part of the FM component series of studies to analyze district council revenues using generally accepted economic and financial principles.

3.2 Overview

The local cess is one of several major revenue sources which are assessed and collected on the behalf of the district councils. Although it is collected and distributed by the provincial authorities for the benefit of the DCs, there are operating, administrative, and economic costs which must be addressed to optimize the efficiency of this revenue mechanism.

This report:

- **analyzes** local cess taxes;
- **quantifies** the potential for further enhancement of district council revenues; and,
- **evaluates** the desirability of the cess tax.

Moreover, recommendations for changes in collection and assessment are presented to provide the district councils with greater control over their own revenues and consequently their own financial future.

"All land assessable to rent, land revenue or ushr shall be subject to the payment of a cess to be known as the local cess." (SLGO page 40, March 1988) Legally this should represent all privately owned agricultural land and all agricultural land leased from the government. However, when assessment and collection are put into practice many eligible acres "disappear".

The local cess is a form of indirect taxation which was first instituted in 1980. At that time it was fixed at 2 percent of land revenue. This was followed by the introduction of specific rates in 1984. Local cess is not a charge for any specific service or services which the district councils provide. It is a source of general revenues.

The basis of the local cess is cultivated land. The differences in rates are determined by the form in which the land receives water, i.e., non-irrigated, perennially irrigated, and non-perennially irrigated. Perennially irrigated land has access to irrigation water year round while non-perennially irrigated land has irrigation access 6 or less months per year.

4 Economics of Local Cess Taxes

4.1 Introduction

Local cess taxes represent a cost to individuals and a transfer of resources from one segment of society to another. In examining the impact of taxation on economic activity three major issues are dealt with - how resources are used, how resources are redistributed as a result of the tax and resource generation. These major issues can be summarized as:

(1) - Efficiency
(2) - Distribution
(3) - Resource Generation

The first two of these issues, in the context of the local cess tax, are discussed in detail below. Resource generation is discussed at length in the section entitled Revenue Potential.

This tax is a revenue generating mechanism which is not associated with the provision of any specific good or service. Being fixed, not varying with production, it does not enter into output decisions. It is an attempt to extract the economic rent or surplus from land. Rent or surplus is the return in excess of that which is required to keep the producer in that particular business.

Since land varies in its productive capability, this rent should differentiate between types of land. Additionally, even on the same land, different crops have different returns. Hence, it seems logical that rates should differentiate among crops. This concern is valid but cannot be practically applied. The data does not currently exist and the costs of gathering and tabulating the necessary statistics are prohibitive.

4.2 Efficiency

The optimal design of most taxes should minimize their interference with economic decisions. Decisions regarding resource usage should not be based primarily on tax considerations. For example, the decision to farm or not farm a plot of land should not be based primarily on tax considerations. Decisions which are based on the opportunity cost of resources are termed efficient decisions.

Economic efficiency is concerned with the efficient use or allocation of resources among competing alternatives. The production of a commodoity is termed efficient when the cost of producing a given quantity of that commodity is minimized. Consumption is said to be efficient when consumption decisions allocate resources so that a consumer's satisfaction from consumption is maximized for any given distribution of income. The underlying criteria are that the prices of commodities must reflect their opportunity costs to society.

Taxes are a financial cost but they are not an economic cost. Taxes represent only a transfer of resources from one segment of society to another. Thus, any tax which alters the price of a product will produce a less than optimal (efficient) allocation of resources.

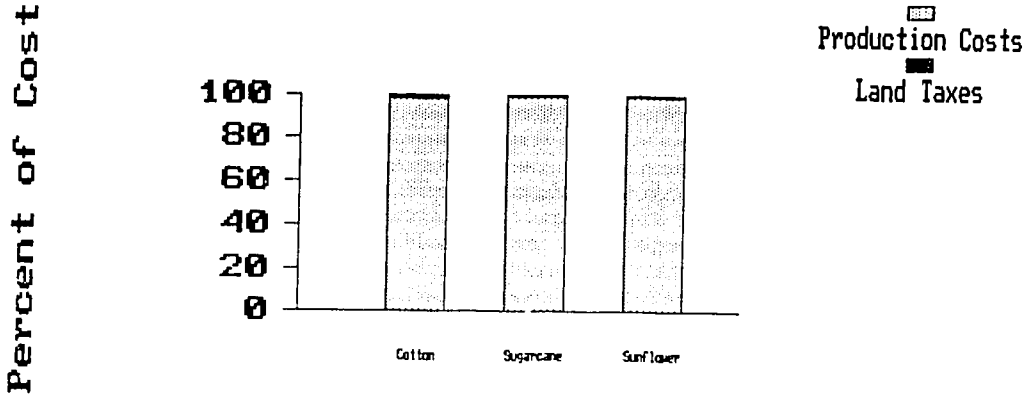
Local Cess rates vary from district to district and by water supply characteristics. On average, current cess collections amounted to slightly more than Rs. 2 per acre. To accurately measure the impact on farmers the demand and supply functions by crop are required. These are not available. Another, cruder measure is the relation of the tax to the cost and return of farming. Cess taxes accounted for 0.09% and 0.04% of per acre costs for cotton and sugarcane respectively (the Sindh's major crops). They accounted for 0.12% and 0.04% of the net return on these crops as well. It can safely be concluded that local cess taxes are not a major cost component to Sindh farmers.

If the assumption is made that in the rural Sindh the opportunity cost of farmland is zero (a very reasonable assumption), then this tax by itself causes little or no impact on the use of land. It is in essence a lump sum tax which can only be avoided by not cultivating land. Since it is reasonable to assume that there is little alternative use of rural farmland, no switching to non-farm uses, and hence tax avoidance, will take place. Moreover, given the cost of the tax in relation to the cost of cultivation per acre or per acre revenues, it would make little difference except at the margin where farmers were deciding whether to stay or leave the business. Additionally, given the low rate of this tax alone, it is likely that a manifold increase in the tax would not alter economic activity.

Economic decisions are not made in a vacuum. They are based upon all costs. Thus it is important to consider the overall burden of all similar taxes and their impact on economic decision making.

Similar taxes are levied on the same base - land under cultivation. These include Land Revenue, Water Rate, Drainage Rate and Ushr. The cost of the first three of these taxes including local cess amounts to about 28 rupees per acre on average. The inclusion of these other land taxes does not significantly increase the per acre production costs. Figure 1 below presents the percent of total cost of land taxes if the local cess rate is raised to Rs 11.6 per acre. It is evident that even this manifold increase in the local cess tax rate brings the total of all land taxes to less than 2% of cotton production costs, and less than 1% of production costs of the other two crops.

Figure 1



Land Taxes and Production Costs

4.3 Distribution

The distribution of the tax burden concerns two issues - how the tax burden is distributed across income classes and how the burden distributed is among different crops.

Land tenure data was not available at the time of this report. Thus it was not possible to quantify the burden distribution across income groups. Intuitively, it can be stated that land ownership is highly skewed towards the affluent in such a manner that the overall incidence of the tax <u>should</u> be highly progressive. Given the districts' spending patterns (which are predominantly on development schemes), increases in the tax and subsequent expenditures would tend to reinforce the progressive nature of the system (assuming the application of assessment and collection is uniform across income groups).

The data was not available to allow the consultant to test the assumption of uniform assessment and collection. However, common sense and interviews would suggest that the assessment and collection of taxes is greater on the poor than on the affluent. The rewards for evasion both to collector and evader are greater in the case of major land owners.

The incentive to evade the tax and the possibility of political pressure to reduce or remove the responsibility favor large wealthy land owners with the result that it is not possible at this point to determine the incidence of this tax. This topic is covered in more detail below.

5 General Trend

District council local cess revenues approached Rs. 12.1 million in FY1987-88, accounting for slightly less than 5 percent of aggregate district council revenues. Since agricultural land is not evenly distributed among the districts, it is not reasonable to assume that the revenue should be evenly distributed. This is confirmed by Table 1. Four districts, Hyderabad, Nawabshah, Sanghar, and Tharparkar account for the bulk of aggregate cess revenues, 79% in FY87-88. Their share of aggregate cess revenues has grown from 67% in FY84-85. due to large rate increases relative to the other districts.

Table 1

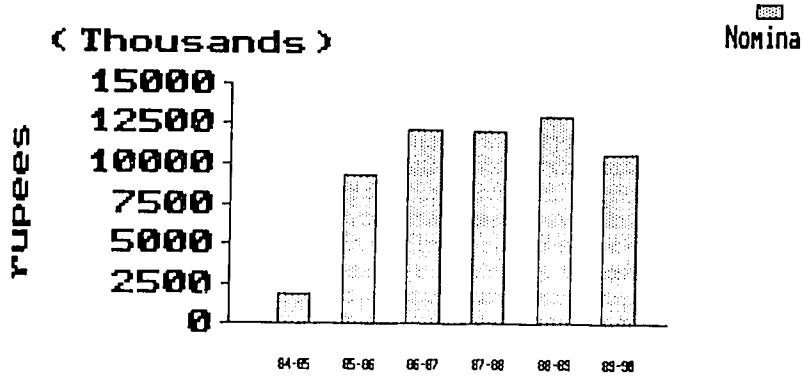
Local Cess Revenues

District Council	FISCAL YEAR 87-88	87-88 % of Total	86-87	85-86	84-85
Badin	103,226	.86%	242,732	52,132	33,727
Dadu	315,108	2.61%	110,540	197,355	47,634
Hyderabad	1,347,298	11.17%	313,913	880,657	77,418
Jacobabad	447,334	3.71%	322,079	344,099	73,740
Karachi	7,437	.06%	96,684	7,344	8,320
Khairpur	927,085	7.68%	637,325	480,500	300,000
Larkana	197,773	1.64%	128,593	168,107	35,395
Nawabshah	3,345,186	27.73%	4,083,114	2,139,056	284,840
Sanghar	2,978,681	24.69%	2,836,197	3,146,543	208,823
Shikarpur	406,238	3.37%	225,014	169,308	68,936
Sukkur	101,300	.84%	728,444	250,638	18,880
Tharparkar	1,823,295	15.11%	2,282,400	1,364,700	693,700
Thatta	64,688	.01	95,677	40,318	41,069
Total	12,064,649	100.00%	12,102,712	9,240,757	1,892,482

Figure 2 presents the historical growth of Sindh local cess revenues which grew approximately 560% in the four year period from 84-85 to 87-88. The overwhelming preponderance of this growth occurred between FY84-85 and FY85-86 when rates and collection procedures were revised. While the total rupees amount of local cess collections has been growing, its share of total revenues has remained relatively constant at about 5% of aggregate revenues.

If rates remain constant, this should be a stable source of revenues changing only as land under cultivation changes. Over the three year period 85-86 to 87-88 rates remained constant but revenues fluctuated. Part of the instability is explained by the BOR's policy of tax abatement during periods of hardship or calamity. Much of it can be explained by the fact that revenue collections are not necessarily related to revenue assessment. Revenue assessments are much more stable over this period. This will be explained in greater detail later in the report.

Figure 2



Local Cess Revenues

6 Assessment and Collection

The Local Cess tax is assessed and collected by the Deputy Commissioner's office in each district through a system of tapedars and their supervisors, mukhtiarkars. The district council has little more to do with this tax than simply recording the receipt of revenues in its books.

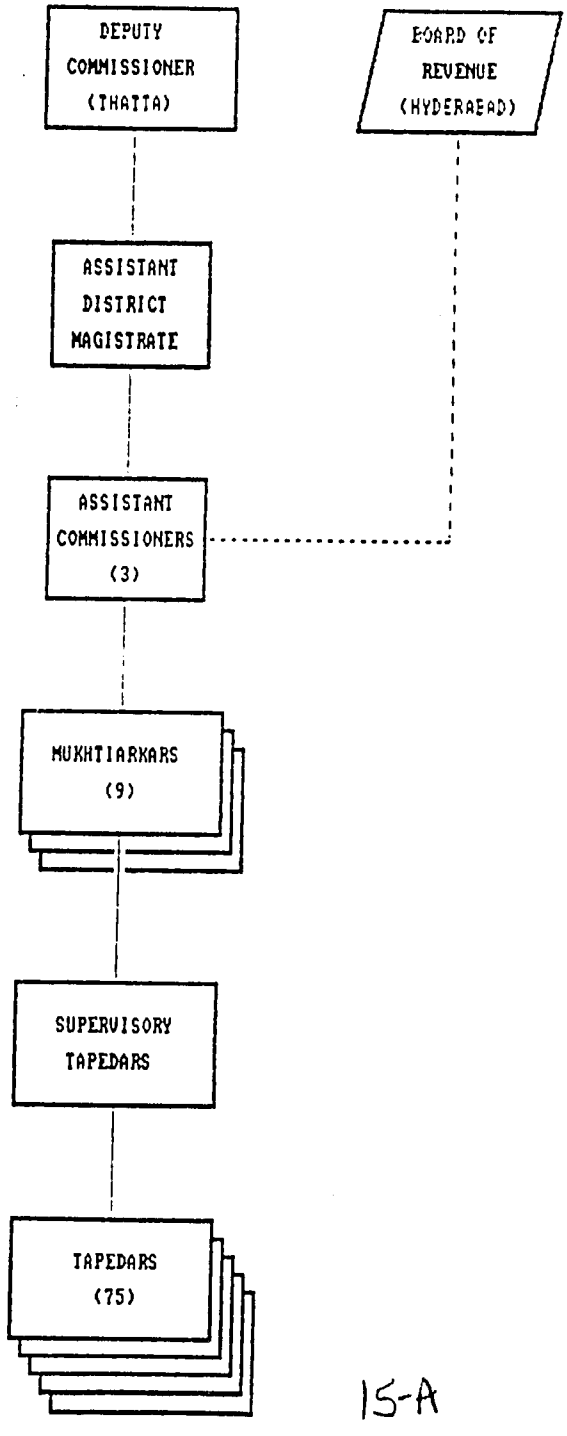
Each district is divided in "tapas", the basic unit for land revenue. There is one tapedar for each tapa. These units are then aggregated into "talukas" with one mukhtiarkar per taluka. Talukas are further aggregated into subdivisions which are overseen by the Assistant Commissioners (AC). In district council Thatta, for example, there are 75 tapedars who are overseen by 9 mukhtiarkars who are in turn supervised by 3 ACs. Chart 1 presents the organizational structure for cess tax assessment and collection.

The Board of Revenue in Hyderabad is the administrative agency responsible for formulating policy, training mukhtiarkars and tapedars, and providing overall goals and plans. The day-to-day operation of these employees is controlled by the Deputy Commissioner's office in each district through the AC. Each AC has responsibility for one or mores Taluka and therefore must supervise one or more mukhtiarkars. Tapedars report to the mukhtiarkars through a supervising tapedar. Assessment starts at the level of the tapa and is conducted by the tapedar.

Each tapedar goes to the field for assessment of land twice a year, once during May and the other during October/November. He begins by consulting a map prepared by the BOR/Director of Survey Settlements (DSS). This map is divided into survey units with the acreage determined by the DSS. The tapedar inspects the survey unit to determine the percentage under cultivation by type of crop and the irrigation status. If he encounters a geographic configuration different from his map, he notes this in his daily field book. He notifies the DSS to resurvey the land.

LOCAL CESS ORGANIZATIONAL CHART

E.G. THATTA DISTRICT



15-A

Having verified that the survey unit under investigation is the survey unit on the map, the tapedar enters the relevant data into the field book. For example, if the survey unit contains 10 acres of which 2 are under cultivation with perennial water supply, the tapedar would note 2 acres of sugar cane under cultivation with perennial water supply. The remaining acres would also be categorized. They could be fallow, waste, or other. The amount of acreage in other uses would also be noted by the tapedar. (See Exhibit 1 for a photocopy of a typical field book entry.) The field book is the basic source document for the tapedar. Two copies are made. One copy is provided to the mukhtiarkar and the other to the AC. The original remains with the tapedar.

The tapedar transcribes the field book data into the village form "A" book. This information determines the Land Revenue, Water Rate, and Local Cess which is assessable to that particular plot of land.

Figure 3

Schematic of a Hypothetical Survey unit

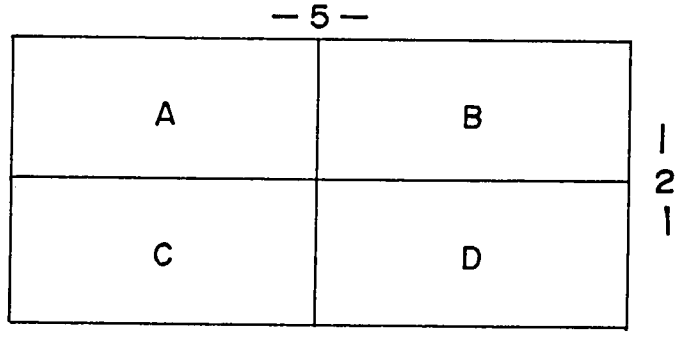


Figure 3 presents the schematic of a survey unit used in illustrating local cess calculations. It represents a 10 acre plot with four equal sized subsections. The water is supplied on a non-perennial basis. Assume that section A is under cultivation during Kharif (first assessment period). Sections B, C, and D are lying fallow. The tapedar notes 2.5 acres under non-perennial Kharif cultivation. Next, the tapedar resurveys the land in Rabi. He notes that Section A is being cultivated again. He also notes that the previously fallow section D is under cultivation, 2.5 acres. The total bill will show only 5

acres under cultivation at nonperennial rates. If any section is cultivated during both seasons it is counted only once for local cess purposes.

The tapedar then returns to the field to present the land owner with the assessment or bill. The typical bill will contain four rupee amounts as shown below. These are representative only and do not reflect actual rate differentials.

Land Revenue	Rs. 6,000
Water Rate	Rs. 3,000
Local Cess	Rs. 1,000
Total Payable	Rs. 10,000

The tapedar then delivers the bill to the owner. This is repeated for each landowner in the tapedar's area. When money is collected, the tapedar summarizes these daily in a collection statement. This statement indicates the name, amount and allocation of the payment. If the ownership has changed, the tapedar will note it in the field book and receive confirmation from both buyer and seller.

Land ownership changes are recorded in two different manners. The seller registers the sale with the Subregistrar, an employee of the BOR, in the first manner. He then pays all associated taxes and fees. The second manner is the popular method. The land owner records the sale of the land with the tapedar and pays most but not all taxes and fees. The most important consideration for the purpose of this investigation is the transfer tax on immovable property.

This tax is completely avoided by using the second manner of registering the sale. The tapedar and the subregistrar work for the same body, BOR, yet there is no sharing of information between the two. This will be discussed in greater length in the report on the transfer tax on immovable property.

The owner does not pay the Cess in the current fiscal year. If the assessment is made in FY1988-89, the owner has until July 31, 1989. Payment is made directly to the tapedar. Assume that the owner pays only Rs. 7,000 of the Rs. 10,000 bill. There are no formal instructions for allocation. The tapedar normally appropriates payment to the water rate first, second to the land revenue, and finally to the local

cess. In this example, this allocation would mean that the water rate is paid completely, land revenue is paid Rs. 4,000 and no local cess is collected.

The mukhtiarkar prepares a monthly recovery report containing the total demand and recovery for the month. If arrears arise, as in our example, the tapedar attempts to collect the arrears of Rs. 3,000. If not successful, the charge is handed over to the mukhtiarkar and finally remanded to the court. The mukhtiarkar is empowered to seize the assets of the land owner for non-payment. There are no late fees and often the payment is made late.It has been reported that in numerous cases the payment is never made and the matter does not go to court. This is due to the indefinite postponement of the tax by the provincial government.

All receipts are transferred to the Provincial Treasury. From this office the local cess tax is transferred to the district councils. By the time the DCs receive funds, they are not the current fiscal year's collections but rather the demand due from the previous fiscal year. If the assessment takes place in FY1988-89, payment is due in July 1989. Transfer to the DCs begins in August of FY1989-90. All tax is not normally received by then. Arrears may take many months to collect, so that the amount disbursed to the districts may represent the taxes assessed over several years.

7 Rates

This tax is not based upon any specific service or services which the district provides its constituents, as mentioned earlier. Thus, economic theory provides no guidance about the exact formation of rates. The rationale for the current rate structure is that the BOR thought land owners would pay the rate.

The current rates for non-irrigated, non-perennial irrigated, and perennial irrigated land were adopted in November 1984 and published in the Sindh Government Gazette on November 8 of that year. These rates are presented in the Table below.

LOCAL CESS RATES

District	Perennial	Non-perennial	Non-irrigated
Badin	2.90	1.75	0.5
Dadu	2.30	1.40	0.5
Hyderabad	4.15	2.50	0.5
Jacobabad	4.40	2.60	0.5
Karachi	--	--	0.5
Khairpur	1.95	--	0.5
Larkana	1.35	0.80	0.5
Nawabshah	3.55	--	0.5
Sanghar	5.25	--	0.5
Shikarpur	2.60	1.55	0.5
Sukkur	1.70	1.00	0.5
Tharparkar	5.80	3.50	0.5
Thatta	2.50	1.50	0.5

Source: Sindh Government Gazette November 1984.

Prior to 1984 there was a flat rate for all land of two (2) paisa per Rs. 100 of Land Revenue. The change in 1984 accounts for the substantial increase in revenues in subsequent years.

Ideally, the district councils themselves should set the rates since this would give them more control over their own finances. However, the rates were set in 1984 by the BOR with cooperation with the Local Government Department and have not been revised since then.

8 Problems with the Current System

8.1 Introduction

The current system is a remnant of the old British system of tax collection which received alterations during periods of martial law. It has not been updated to reflect the needs of locally elected democratic governments. Problems with the current system include:

o District councils do not participate in the tax process.

The district councils have no role whatsoever in any aspect of this tax. Rates are determined by the BOR. The assessment and collection is made by the BOR and Deputy Commissioner's office through the Mukhtiarkars and Tapedars. Transfer of funds takes place indirectly from the DepCom to the Treasury and finally to the district council.

o Cess revenues are disproportionately low when partial payments are made.

As was mentioned above partial payment is credited first to the water rate, second to land revenue, and finally to local cess. Thus, the province keeps a disproportionate share of revenues than might otherwise be pased on to the district councils.

o Supervision is inadequate.

Under the current system supervisory staff are to check the work of the tapedars. This rarely happens to the extent which is necessary to adequately monitor collection and assessment.

o Provincial Government authorizes tax abatement.

The BOR abates taxes due to a calamity such as a flocd or heavy rains from time-to-time on the recommendation of the DepCom or ADC. For example on 26th of August 1989, the BOR sanctioned remission in Hyderabad district of Rs. 410,905. The LGRD was not notified of this decision. This action may result in an indefinite postponement of the tax.

o There is no justification for the current rate structure and tax rates are not indexed to inflation.

The object of a good tax system is to choose the tax and rates which raise a given level of income with a minimum harm to the economy. In choosing tax rates some sound basis should be used in determining both the level and the differences in rates. The revenue needs can be a basis for the level of rates and the differential returns on different classes of land can be the basis for differential rates.

Local cess rates are on the basis of a fixed unit - land. The ultimate end in collecting local cess taxes is to allow the district council to meet expenses in serving the needs of its inhabitants. Inflation increases the cost of providing products and services and at the sametime it reduces the purchasing power of revenues from fixed sources.

o Lack of cooperation data gathering.

There has been a lack of cooperation from government officials in gathering data. Less data means greater variability in making revenue estimates. It also reduces the possible areas of investigation.

8.2 District Council Participation

District councils are fully excluded from any activities associated with this tax. Experience indicates that the greater the stake an individual has in any given event, the greater the level and degree of attention he will pay to that event, in general. The more the district council participates in tax process the more effort it will expend in its collection and assessment. This can only result in better assessment and collection procedures. True, the current system was designed evolved because 30% of the tax collected is credited to the Province for education. A spill over of provincial collection was to reduce the administrative and compliance costs for collection of land based taxes.

The district councils do not know the names or liabilities of individual taxpayers. They are not furnished records of non-payment and they are powerless to collect arrears. Without the ability to actively participate in this tax the district councils do not take interest in what could and should be an important source of revenue. Moreover, another important part of the system of checks and balances is missing. District councils should have the right to influence the rates themselves so as to accurately reflect local conditions, needs and the desires of their constituents. (This is a view which is strongly supported by the district councils themselves.)

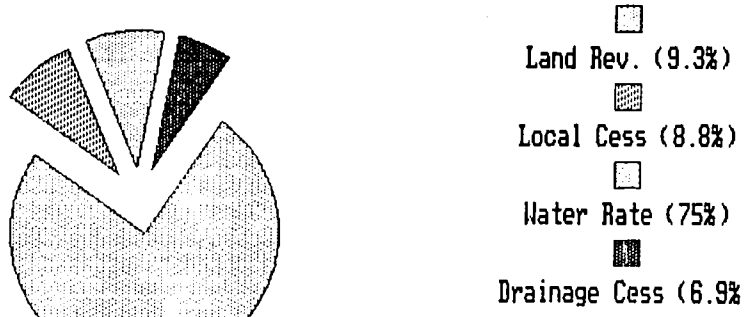
Accountability is a required feature of any successful fiscal system. If an organization is to be successful, workers must be accountable to management and management to owners. The assessors and collectors (workers) of a tax should be accountable to the district council (management). The district council needs to be accountable to the tax paying public (owners). This fundamental concept in democratic government is missing from local government in Pakistan because most of the rules and regulations under which local governments operate were developed during matial law regimes.

8.3 Prejudicial Payment Allocation

Local cess is assessed and collected along with two other taxes, land revenue and water rate. As a result of this linkage, the taxpayer receives a single bill for the total of these three taxes. If payment is made in full, each tax is apportioned its full amount. If less than the full amount is paid, water rate is recovered first, land revenue second and then local cess. The result of this policy is a loss of district council revenues. This is shown graphically in figures 4 and 5 below. As can be seen by comparison of these figures the share of local cess in total tax assessments is greater than its share of recovery.

Since 30% of this tax is provided to fund Provincial education spending, the current allocation system also reduces the funds available for education. The marginal cost of collecting the district council local cess is close to zero since the tax would be collected in any event and since the other taxes require greater effort which easily yields the local cess component.

Figure 4



Composition of Total Demand

Figure 5

Composition of Total Recovery

8.4 Inadequate Supervision

Under the current system, the mukhtiarkar is to check 50 percent of the tapedars' work in his taluka. The ADC and AC are to check 10 percent and 25 percent respectively. In theory this is a good system. In reality these officials rarely have the time from their other activities to fulfill these responsibilities.

One mukhtiarkar may have as many as 9 tapedars under his supervision. Fifty percent of their work could represent as much as 270 man days. Assuming that it takes the tapedar 2 months of field work per year (Rabi and Kharif), this represents 540 man days per year (2 months X 9 tapedars X 30 days per month). Even if the tapedars average field work was only one month, this would require 135 man days of the Mukhtiarkars work.

The mukhtiarkar has many other responsibilities which preclude effective monitoring of the tapedar's assessment of taxes. The same can be said of the other officials charged with monitoring the tapedars work. These findings were confirmed verbally by supervisory officials and concur with the findings by the Sindh Revenue Commission (RC) study of the BOR tax system which was prepared in 1988.

This lack of adequate field verification increases the possibility of evasion. It would be difficult for the tapedar to misestimate the total acreage of a plot since this is provided by the DSS and can be easily checked by his supervisors. The most likely form of evasion is the misestimation of the amount of land under cultivation. This is a judgment call. One and a half acres become one and a quarter acre or some otherwise similar rounding may take place. Another possibility exists if irrigation improvements have changed the land's status to perennial irrigation and the DSS has not been notified of the change. The tapedar can report the land as still nonperennially irrigated. These are apparently the most common form of evasion at the assessment level. The more remote the location the less the probability of checks being made and, of course, the greater is the opportunity of evasion.

The 1988 RC study has summarized the major reasons why the amounts of tapedar generated land is less than those from other sources.

(1) Cultivated areas are shown as uncultivated;

(2) Cultivation on land leased out by the Forestry Department is not recorded;

(3) Cultivation on other Government leased land is not recorded;

(4) Adhawa crops are not usually brought under partal as the period coincides with other important duties of the tapedar.

(5) Pot-kharabo areas under cultivation are reported as uncultivated.

If the underreporting is large, then cross checking with alternative land use data can provide a confirmation of tapedar data. Other data sources include the Census of Agriculture and the Irrigation Department. This provides a check on tapedars and can alert supervisory officials to problem areas. The alternative data cannot be blindly used as there are numerous differences which must be reconciled. For example, the definitions may differ.

8.5 Rates

The current structure of cess rates presents two major problems. First, there is no rationale for the current rate levels. They are linked to irrigation of the land but the do not appear to be based on differential yields or the cost of water supply. Second, the rates are static i.e., they do not change to compensate for inflation.

The fact that the rates are linked to irrigation is not related to the cost of water supply. Irrigation water is not supplied by the districts. While the consultant did not find any BOR official who could adequatly explain the formulation of the rate structure, it appears more of an attempt to provide a progressive tax structure based upon yields; the assumption being that land which has more available water is more productive. This may indeed be so among the three classes of rates. However, within a class productivity rates will vary significantly. Some land will be capable of sustaining different crops while others will support only one crop. Some will be more fertile than others. The current system cannot adequately deal with these differences.

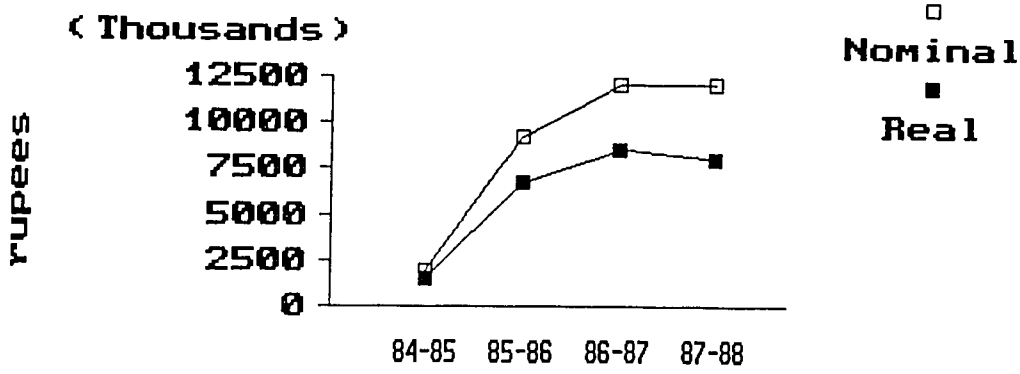
There is one other readily apparent problem with this approach. Land which is cultivated in more than one season is not taxed for being more productive. (See the example in section 4 above.) The tax is therefore not completely progressive in structure.

If the rates are structured according to yields or net return, this would suggest that districts with similar crops and yields would charge similar rates. This is not the case. Jacobabad, Larkana, and Shikarpur have similar crop patterns and yields. Yet, the rates are not at all similar. Jacobabad has the highest rates, 4.4 rupees, and Larkana the lowest, Rs. 1.35. There is no apparent methodology for rate determination. It makes little economic sense that Larkana and Jacobabad, for example, with similar crops and yields should have significantly different rates. The current rate structure is a problem but does not impinge on the district councils' financial operations like static rates.

Inflation increases district council expenses through increasing the cost of providing services and meeting employee expenditure commitments. Most district council taxes are based on a fixed fee per unit such as 2.5 rupees per 40 kg of wheat. Increases in wheat prices or any other prices will not increase the amount of revenue collected by the district council. When there is an increase in the general level of prices, inflation erodes the districts' purchasing power from these fixed income sources.

Local cess taxes are no exception and real revenue, revenue adjusted for inflation, is not increasing as rapidly as nominal collections. In fact while nominal revenues remained relatively constant from FY86-87 to FY87-88, real revenues fell. Reference to figure 6 below provides a comparison of nominal and real cess revenues.

Figure 6



Real vs. Nominal Revenues

8.6 Data Gathering and Reporting

Most of the necessary local cess data was not readily available as with data needed for analysis of other taxes. Very detailed data is collected and available with the individual tapedars. The available aggregated data is not sufficient for analysis of the potential revenues from changes in rates in most districts. Aggregated statistics were available only for perennially and non-perennially irrigated land. Similar information on unirrigated land is unavailable.

Recalling the discussion on assessment, it was shown that the assessment hinges on whether the land is cultivated once or twice during the year. If an acre is cultivated during both seasons, it is assessed only once. Thus, in order to accurately determine the impact of rate changes it is necessary to know if the land is cultivated more than once during the year. The available data for each district is not broken out by water supply status.

This lack of data renders impossible to quantitatively assess potential revenues directly from hypothetical changes in collection and assessment procedures and rate increases in all districts.

Also the lack of cooperation of government personnel, the transfer of key personnel and the law and order situation have reduced the flow of data for analysis of other aspects of the cess tax. The Consultant requested the assistance of provincial authorities at various times in the last year and one-half. Requests for detailed data have largely gone unanswered.

Much of the requisite data is available at the level of the tapedars or with the district councils. Without this data the tax collection authorities are helpless to perform any meaningful analysis. The lack of tax analysis is a major impediment to future generation of district council revenues. It is also an impediment to designing a more efficient tax system.

Given the prominence of the local cess tax in district council revenues and as will be demonstrated below its future importance, additional data must be collected.

Additionally, another data collection problem was the location of the BOR in Hyderabad. Since they are the source of great deal of the needed data, any curfew or disturbance in that area has created a problem in obtaining interviews or data. In the latter stages of the analysis as more had been learned about BOR summary statistics, more detailed data was required. It could not be anticipated at the outset that this data was needed. On more than one occasion CCSC personnel went to the BOR for prearranged meetings only to find that the curfews had prevented BOR personnel from keeping the appointment.

9 Revenue Potential

9.1 Introduction

Potential revenue increases will come from several areas. Most of these increases rely on the adoption of changes to correct assessment, collection and verification systems, three of the problems mentioned above. **Increases in tax revenue through controlling leakages should be investigated and promoted before any increase in tax rates is considered.**

It is difficult to accurately quantify revenue increases which result from changes to the system. This would require in-depth data collection which requires much more cooperation of concerned officials than has taken place. Alternatively, one can impute the impact of changes by judging the performance of similar changes on similar systems. For example, if the BOR has instituted changes in the collection and assessment of Land Revenue (an almost exact procedure as local cess) one can assume that the revenue impact will be analagous for local cess. If these changes resulted in a ten percent increase in collections, it can be assumed that likewise local cess collections will increase ten percent.

Some changes can be easily quantified such as the change in the method in allocation of collections against the demand or in rate changes.

This section presents the Consultant's estimation of additional revenues which will be forthcoming from changes in the system. These changes then form the basis for the recommendations which follow:

9.2 Allocation of Partial Payment

The current system appears to have no sound methodology for allocating tax collections among the competing uses. The table below presents the demand and recovery of those taxes assessed and collected through the Tapedar system. Note that water rate (W.R.) is consistently allocated the greatest percentage of collections. Land revenue follows and then come local cess taxes. Local cess allocations range from a low of 79% in FY88-89 to a high of 91% in FY87-88.

	L.R.	L.C.	W.R.	D.R.	Total
		In Millions of Rupees			
(FY85-86)					
Demand	14,640	24,119	221,875	18,284	278,892
Recovery	12,001	21,080	214,443	8,927	256,434
% Recov.	82%	87%	97%	49%	92%
(FY86-87)					
Demand	19,762	24,909	228,087	18,818	291,576
Recovery	18,296	21,206	224,009	16,514	280,025
% Recov.	93%	85%	98%	88%	96%
(FY87-88)					
Demand	22,733	23,583	218,585	23,293	288,194
Recovery	21,458	21,528	221,425	15,684	280,275
% Recov.	94%	91%	101%	68%	97%
(FY88-89)					
Demand	23,724	22,346	191,229	17,578	254,877
Recovery	21,966	17,623	180,630	13,386	233,204
% Recov.	93%	79%	94%	76%	91%

The amount allocated (recovered) bares no relationship to the amount of assessment or demand. If the assessment and collection of each tax were independent of each other, then there would be no reason to assume that there should be any relationship among the four. However, assessment is not an independent event. Moreover, as mentioned above, when partial payment is made no distinction among taxes is made by the land owner. A lump sum payment is made with no allocation. The allocation is then made by the collection authorities.

BOR officials have been questioned regarding the allocation method, but they have revealed that there is no systematic approach to allocation. Tax authorities are judged on the amount of taxes they collect. The persons collecting these taxes are employees of the Provincial Government and their

performance is judged on the amount of Provincial taxes which are collected, not on the amount of district council taxes they collect.

A more equitable procedure would be to allocate payment on the relative share of the assessment. This method is applied to the previous example in Chapter 6 and the results follow.

Tax	Assessment	Current	Apportionment
Land Revenue	6,000	4,000	4,200
Water Rate	3,000	3,000	2,100
Local Cess	1,000	-0-	700
Total	10,000	7,000	7,000

Under the current system the district council forgoes Rs. 1,000. If this allocation method is used the district council would forgo only Rs. 300 in local cess revenues. An approximation of the potential revenues from this change is presented in the section on revenue potential.

This is a simple procedure which could be applied either on an individual basis or on the aggregate of district collections. The latter would be easier and require less time for the tapedar to process. The tapedar would need to calculate only one statistic in the latter case whereas in the former the ratio would be calculated for each partial payment. In either event, this change would result in a substantial increase in district council revenues, albeit at the expense of the provincial government.

It would not result in a rupee for rupee loss to the provincial government since part of the local cess (30%) is retained by the provincial government for the education cess. Thus for every one hundred rupees increase in allocation to local cess the provincial government losses only Rs. 70.

If this method (allocation proportional to demand) to taxes over the last four years, is applied a significant reallocation of tax receipts would take place in favor of the district councils. The method used to redetermine the local cess allocation is as follows:

- (1) The relative proportion (percentage) of each tax's assessment and demand, to total demand was calculated.

- (2) This was then multiplied by the total recoveries to determine the demand weighted recovery amount.

- (3) The actual recovery amount was deducted from the adjusted recovery amount to determine the loss to the district councils.

This procedure was followed for each year in the table above. The resultant annual figures were then summed to determine the relative underpayments (prejudicial apportionment) to the district councils over the period. Over the four years for which data were available district councils were allocated:

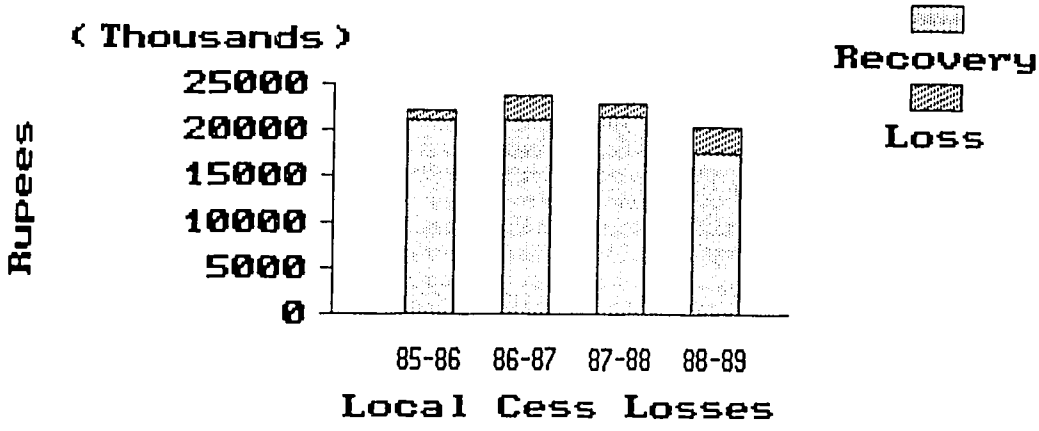
FY1985-86 through FY1988-89

Demand	Rs. 94,956,261
Adjusted Recovery	Rs. 89,564,837
- Recovery	Rs. 81,437,456
=	Rs. 8,127,381
X 60% =	
Loss to Districts	Rs. 4,876,429

The loss to the district is 60% of the total loss since the district council receives only this portion of collections. The remainder is apportioned between education and union councils. In four years the current allocation scheme has reduced district council revenues by a total of approximately Rs. 4.9 million. Recall that total cess revenues over this period were Rs. 35.3 million. Relative to total collections this loss is substantial. Losses in the most current year were estimated to be approximately Rs. 1.8 million.

Application of the proposed allocation scheme would result in a minimum of Rs. 1.4 million per year in new revenues to the district councils over the past five years and would probably result in higher future revenues, given current trends.

Figure 7


(Thousands)
Rupees
25000
20000
15000
10000
5000
0
85-86
86-87
87-88
88-89
Local Cess Losses
Recovery
Loss

9.3 Rates

Two changes in rates would generate new funds for the district councils. The first change is the adoption of a uniform rate for all districts. The second change is to index rates for inflation. The impact of inflation on the purchasing power of district revenues was discussed above.

To calculate the increase in revenues from an increase in rates three land use statistics are required -

(1) Perennial acreage under cultivation;
(2) Non-perennial acreage under cultivation;
(3) Unirrigated acreage under cultivation.

Additionally, data should exist to allow the researcher to determine if the land was under cultivation in both seasons or only one. The appropriate rate increase would be applied to each class of land and then summed to yield the total increase in revenues.

This data is not readily available as the current situation in Hyderabad prevented access to the BOR. As an alternative, the following method was used.

1. the acreage of perennial and non-perennial land was calculated for each district on the basis of BOR data.

2. The new rates were applied to these figures to calculate the tax assessment.

3. The old rates were applied to these figures to determine the amount that would have been assessed.

4. The percentage increase in new revenues was determined from the revenues calculated in steps 2 and 3 and this was applied to the actual demand for local cess in each district.

For example, in Sanghar there is no non-perennial acreage. According to the BOR Sanghar had 870,433 acres under cultivation. The new rate of 6 rupees per acre of perennial land multiplied by the acreage yields revenues of Rs. 5,222,598. This calculation using the existing rate produced revenues of Rs. 4,569,773. The application of new rates results in a 14.29% increase in estimated revenues. This increase of 14.29% was then applied to the actual

demand or Rs. 4,782,564 to produce new local cess revenues of Rs. 5,465,787. That would result in additional revenues of Rs. 683,223 for Sanghar.

This method was applied to each district. The results of these estimations are presented in the table below.

District	Old Cess Revenues	New Cess Revenues (recommended)	Increased Revenues
Badin	1,273,717	2,547,434	1,273,717
Dadu	752,811	1,893,709	1,140,898
Hyderabad	3,478,070	4,861,850	1,383,780
Jacobabad	812,708	1,094,030	281,322
Karachi	*		
Khairpur	1,466,659	4,362,370	2,895,711
Larkana	548,534	2,367,068	1,818,534
Nawabshah	3,949,090	6,452,034	2,502,944
Sanghar	4,782,564	5,283,595	501,031
Shikarpur	445,365	997,673	552,308
Sukkur	1,341,862	4,582,427	3,240,565
Tharparkar	4,163,560	4,163,560	0
Thatta	568,039	1,325,424	757,385
Total	23,582,979	39,931,174	16,348,195

* All acreage in Karachi is unirrigated.

The recommended rates are uniform across districts at the highest current rates (Tharparkar). Note that the increase is smallest for those districts which currently have higher rates. Tharparkar's current rates are Rs. 5.8 and 3.5 for perennial and non-perennial acreage respectively.

Perennial rates were raised to the highest rate rounded to the nearest rupee (Tharparkar's rate). As mentioned earlier differentiated rates are theoretically justifiable but not feasible in practive. The only differentiation which can be supported easily is the difference due to water supply. It is assumed that land with an annual water supply has a greater return than land with non-perennial water supply. If it is assumed that non-perennial acreage was 60% as productive (measured in net financial return) as perennial land, the non-perennial rate would be 60% of the perennial rate or Rs. 3 per acre. For this analysis no change in unirrigated rates was considered.

The adoption of uniform rates on this basis would provide an increase in district revenues on average of 14.3% or Rs. 16.3 million. If this had been instituted in FY 1987-88 it would have resulted in a 5.7% increase in total revenues. Assuming that it costs Rs. 1.25 million per kilometer of new paved road, 13.3 kilometers of new road be constructed each year from the additional funds.

Figure 1 presented the impact on production costs if local cess taxes were made an effective Rs. 11.6 per acre. In this event, total land taxes would comprise only 1.6%, 0.6%, and 0.9% of the net return from cotton, sugarcane, and sunflower production. Even this manifold increase in rates does not materially impact farming. Thus local cess rates can be effectively increased without the danger of disrupting economic activity. The Table below presents the revenue estimates if uniform rates of Rs. 11.6 and Rs. 7 per acre are adopted for perennial and non-perennial land respectivelly. The same calculation steps are used in arriving at these estimates.

District	Old Cess Revenues	Recommended Cess Revenues	Increased Cess Revenues
Badin	1,273,717	5,094,868	3,821,151
Dadu	752,811	3,787,418	3,034,607
Hyderabad	3,478,070	9,723,699	6,245,629
Jacobabad	812,708	2,188,060	1,375,352
Karachi	*		
Khairpur	1,466,659	8,724,741	7,258,082
Larkana	548,534	4,734,135	4,185,601
Nawabshah	3,949,090	12,904,069	8,954,979
Sanghar	4,782,564	10,567,189	5,784,625
Shikarpur	445,365	1,995,347	1,549,982
Sukkur	1,341,862	9,164,853	7,822,991
Tharparkar	4,163,560	8,327,120	4,163,560
Thatta	568,039	2,650,849	2,082,810
Total	23,582,979	79,862,347	56,279,368

* All acreage in Karachi is unirrigated.

Additional revenues would be generated if the district councils were to index the tax rates to the rate of inflation. In this example, a three year average is employed. In practice the district councils would use a three year moving average, adjusting rates annually. Over

the period 1984-85 to 1987-88, the three year moving average was 4.75%. Rates were increased by this amount and then rounded to the nearest tenth of a rupee.

Adopting uniform rates throughout the Province at Rs. 6 for perennial acreage and Rs. 3.5 for non-perennial acreage would result in increased revenues of Rs. 16.3 million. Indexing rates for inflation would increase revenues by 4.78% due to rounding or Rs. 1.1 million. The total increase from these two changes would be equivalent to Rs. 17.4 million. Adoption of rates at Rs. 11.6 and Rs 7 for perennial and non-perennial acreage respectivelly would increase revenues Rs. 56 million or 23% of FY1987-88 revenues.

9.4 Validation of Field Data

It is difficult to estimate the impact on potential revenue from changes in administrative procedures for checking the collection and assessment of the tax. In the current study it is not possible to quantify how much additional revenues will be generated from more thorough checking of the tapedar.

Alternative land use data can provide a cross check on tapedar generated data which can then be used to estimate additional revenues. The RC study used Irrigation Department (ID) data to generate the amount of land under cultivation in several districts. The ID data was corrected for specific errors and resulted in cultivated land figures that were 18.4% higher than the BOR estimates. Reconciliation with other data sources confirmed the general pattern of underestimation. The exception was in Tharparkar district where the ID reconciled land was less than BOR acreage. It is highly unlikely that individuals will pay more taxes than they are obligated to pay. Since the tax bill indicates the amount of land, land owners have a ready check to determine if the land they own is less than the amount for which they are billed. It is possible that in isolated cases, an individual may pay more taxes, indicating greater land ownership, than he actually is required to pay. It is not probable that this would happen frequently. It was decided to exclude Tharparkar from the analysis and assume that the BOR land figures are accurate.

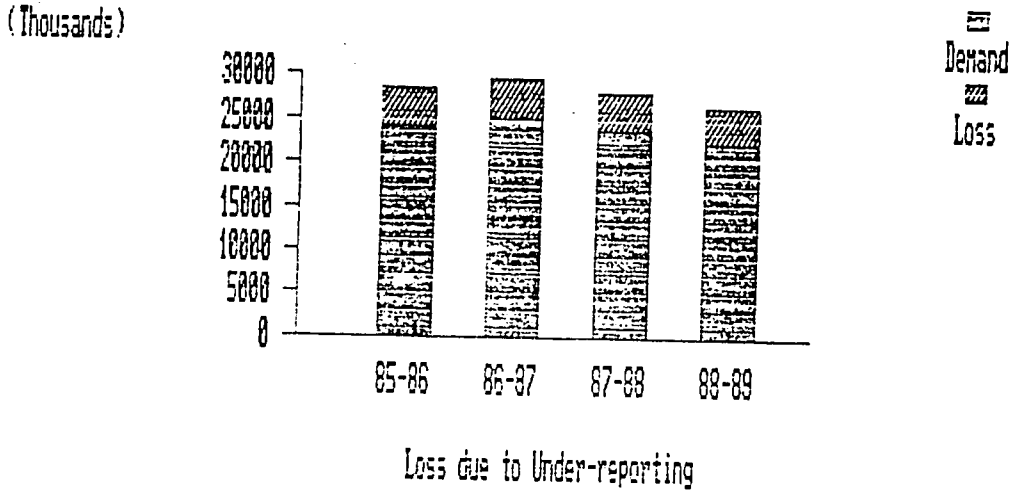
The consultant has reviewed the RC estimates and finds them a good "first" attempt which should be refined and extended to all districts. They are used as the initial data for this analysis. The table below provides estimates of additional revenues which would result if cross checking

resulted in more accurate tapedar assessment. This is presented using the existing rates and for the proposed rate changes. It is assumed that use of this data to check tapedar reports would result in an increase in reportings.

District	Incremental Increase @ old rates	Incremental Increase @ new rates
Badin	233,854	450,822
Dadu	138,216	342,135
Hyderabad	958,144	1,359,064
Jacobabad	149,213	172,169
Karachi	*	
Khairpur	269,279	828,550
Larkana	100,711	430,751
Nawabshah	725,053	1,225,442
Sanghar	878,079	1,003,519
Shikarpur	81,769	178,266
Sukkur	246,366	864,780
Tharparkar	--	--
Thatta	31,840	63,680
Total	3,812,523	6,919,176

*Karachi reports only unirrigated land.

This table indicates that at the old rates the underreporting of land results in the loss of Rs. 3.8 million or 16.2% of the demand for local cess. Correction of land use figures at the proposed rates increases revenues 6.9 million rupees. These are by no means insignificant amounts. While the RC study may not be conclusive for each district, it does adequately demonstrate the loss of revenue due to underreporting. Further refinement of the RC study would be beneficial later in the project.



Loss due to Under-reporting

10 Recommendations

District councils must seek to increase and diversify their revenue base. Local Cess, the second largest single source of district revenues, amounts to only 5% of combined district revenues. It can and should become a more important revenue source for the district councils. This will require changes in the collection and assessment procedures and more involvement at the level of the district councils. On the basis of our analysis, several recommendations are apparent and are presented below.

RECOMMENDATION 1:

Curtail evasion and revenue leakages before raising rates.

It is often convenient to increase rates rather than attempt to stop evasion. This report has highlighted areas in assessment and collection where there is apparent leakage. The district councils are advised to pursue these areas before any new rate increases are considered.

Implementation:

The best method of implementing this recommendation is through education of elected officials on the topic of responsible fiscal management. Training program being developed by CCSC will address this issue. Additionally, as the financial management work unfolds, new insights will be gained and it may be appropriate to consider periodic seminars.

RECOMMENDATION 2:

Give district councils an active role in assessment, collection, collection of the arrears, and rate determination.

Currently DCs are simply the receipents of the funds as they flow from the DepComs' offices. In order to bring about more involvement the following specific steps are recommended:

a - The district councils should be provided the bills indicating the precise amounts (rupee and acres) of assessment for each land owner. This should include copies

of the field books. Currently, the field books are in triplicate copies. One more copy should be provided to the district council taxation officer.

b - When payments are made, district taxation officers should be informed about the payment status of individuals. This will allow the district councils to pursue arrears on their own accord.

c - Rate changes should be determined by the district councils in conjunction with the BOR.

Implementation:

Implementing these changes will require close cooperation between the BOR and LGRD. This will require additional work at the level of the tapedar and the mukhtiarkar. The workload can be limited if the field books are printed to produce four (4) copies. Individual challans should also be printed in this manner. If the taxation officers initiates a program of verifying tapedar work, this could provide a cross check and help to reduce the strain on the mukhtiarkar. District councils may take an active role in validating tapedar work in order to protect their financial interest in this revenue item. The cost of hiring temporary field "auditors" would be more than offset by the additional revenue generated.

RECOMMENDATION 3:

Allocate partial payments on the basis of the relative share of local cess in total demand.

As was discussed the current system partially allocates collections first to the water rate, second to land revenue, and third to local cess. There is no sound methodology for this allocation scheme. The imposition of a demand based allocation system would on average result in Rs. 1.8 million per year for the districts.

Implementation:

Implementation of this recommendation would take place at the level of the BOR and the DepCom. It would result in a temporary loss of provincial revenues and a slight increase in the work of the tapedar and mukhtiarkar. This work load could be reduced if a district-wide figure was used to allocate the partial payment rather than on an individual basis. After assessment, when the total demand has been calculated, the necessary ratio could be calculated and

then applied as payments are accepted or before the transfer of funds is made. If an individual plot rate is too cumbersome, the tapedar could calculate the ratio from his territory. Application could even come at a later stage or right before payment.

RECOMMENDATION 4:

Verify tapedar data and check against other sources.

It was shown that tapedar data underreports the amount of cultivated land. Checking of the tapedars' work can be accomplished by field surveys but there is a strong possibility that evasion can take place at this level or that the supervisor does not have sufficient time to adequately verify the tapedar's work.

The use of alternative data can provide a system for alerting revenue officials to underreporting and systemic misestimation. If this technique were applied, large areas of land would have been reported as cultivated and the districts would have received much larger local cess payments.

Implementation:

The implementation of this recommendation will require additional work by the consultant in reconciling alternative data sources and developing a procedure which can be carried forward by all concerned parties. This information would then be supplied to the BOR, DepCom, and the DCs. The cross checking should be carried out by the mukhtiarkars and the taxation officer of the DC.

RECOMMENDATION 5:

Implement three uniform rates throughout the Province, applied to the three land classifications, using the current rates which apply in Tharparkar.

Currently the rates vary by water supply and district. There is no sound justification for the current level and differentiation of rates. Uniform rates makes it easier for interdistrict comparisons and this will assist in spotting misestimation and underreporting.

This proposed change in rates by itself will increase total cess revenues by Rs. 16.3 million if the rate of Rs. 11.6 and Rs. 7 per acre for perennial and non-perennial land is used. If the government is serious about controlling evasion and leakages then the Consultant recommends an increase of rates to Rs. 11.6 and Rs. 7 per acre. Without a serious committment to controlling evasion and leakages an increase in taxes results in a significant flow of public funds into private hands.

Implementation:

The mechanics of tax rate changes are presented in the SLGO. Changes in the rates would follow accepted provincial guidelines.

The first step will require a concensus opinion from all district councils. This is non-binding since the councils are not currently involved in the rate making process. The LGRD should issue rate increase instructions to the BOR regarding this issue. The decision to increase rates is not completely vested in the LGRD as 30% of the revenue is dedicated to the provincial government in education funds. Thus, there will need to be cooperation between both departments. It is not anticipated that this change would be met with opposition from either department.

RECOMMENDATION 6:

Index Cess rates to protect the district councils' purchasing power.

Figure 7 accurately portrays the loss in the purchasing power of local cess revenues. It is recommended that the rate be indexed to a three year moving average of the WPI for food and cotton and cotton seed. The example used in this analysis estimated real revenues on the basis of the CPI, which rose less than the WPI - food over the same period. Losses in FY87-88 due to non-indexation ran at Rs. 1.1 million.

Implementation:

Again, standard practices exist to permit rapid implementation of this recommendation.

The consultant could develop an appropriate weighting scheme for WPI-food and cotton and cotton seed. A computer program and appropriate algorithms could be developed for use on the DG RG's RRM project computer which would calculate the average for each district using data drawn from the Pakistan Statistical Yearbook. The consultant would train the DG's staff in the use of this model.

The index would be updated annually and transmitted to the BOR through the LGRD. This index would be constructed for the entire Sindh province. If the recommendation on uniform rates is not adopted the index could be constructed to take account of each district's unique agricultural characteristics.

RECOMMENDATION 7:

Update and revise this analysis utilizing additional data obtained with the cooperation of Provincial and district officials.

The current study has used sample data for many of the analyses. Further analysis could be structured to pinpoint individual districts if more data were collected. It is anticipated that the costs of collecting additional are marginal.

Implementation:

A seminar involving all concerned parties would be a step in the right direction. Increasing the awareness of the need for data and the benefits from this analysis should encourage all parties to extend more cooperation with the consultant. Additionally, a relaxation in the current law and order situation will provide greater access to data.

BY implementing these recommendations district council revenues can be greatly enhanced. Concerted effort will be required of the DCs, LGRD, and the BOR. The table below summarizes the effect of implementing each recommendation individually and cumulatively. The estimation is for FY87-88.

Recommendation	Amount

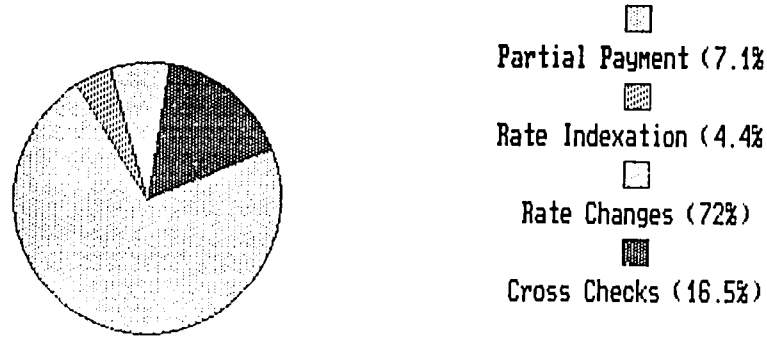
FY1987-88

Partial Payment	1,629,547
Rate Indexation	1,107,281
Rate Changes	16,348,196
Cross Checks	3,812,523
Total if all recommendations are adopted	Rs. 28,137,198

The total one year enhancement of district revenues is estimated to be Rs. 28.1 million or over 10% of total 1987-88 revenues. This increase will come at a relatively minor cost to the economy. Partial payment and cross check increases are simply transfers from one segment of the economy to another. Rate changes and rate indexation are designed to be at a low level which will not interfere with the allocation of resources. In other words, they should not result in a reduction of land under cultivation.

If the government makes a concerted effort at controlling evasion and leakages the consultant recommends that rates be increased to Rs. 11.6 and Rs. 7 on perennial and non-perennial acreage respectivelly. This would result, along with the other recommendations, in an increase of Rs. 77.9 million per year in district revenues.

Figure 9



Composition of Revenue Increases

11.1 Introduction

Several areas of future endeavor have been pointed out in this report; (1) Construction of a rate index; (2) Seminars for district and provincial staff in revenue generation and enhancement; (3) gathering of additional data and further analysis. While this report stands alone and its findings and recommendations are valid, additional effort is warranted and will be forthcoming if the recommendations are implemented. Future actions can be divided into two areas: (1) presentation of this study and discussion of the recommendations in seminars; and, (2) additional data gathering and analysis to sustain future systemic updates and revisions. Each of these is listed below. Manpower requirements and levels of efforts are presented.

11.2 Seminars

Two seminar topics are recommended. The first seminar should be designed to present the findings of this report and to discuss the need and benefits of future data collection and analysis. It will demonstrate to all concerned parties the usefulness of tax analysis.

The seminar would be conducted by the consultant's finance staff and would take place over 2 days. Total preparation would require approximately 3 weeks.

The second seminar would be designed to point out under assessments and leakages and methods of controlling them. The target audience would be the DepCom's revenue staff, BOR staff, and the DC's taxation officers. The consultant would work closely with the Sindh Revenue Commission as our findings include observations confirmed by work they have done and are conducting in this area. Moreover, recommended changes will impact not only local cess collection, but also in Land Revenue, Water Rate, and Drainage Rate collections. Thus it is important to involve this source of information and expertise.

This seminar would last 2 days. It would require 3 weeks of preparation time.

11.3 Indexation of Rates

Indexation of rates requires the development of an easily updated, reasonable and accurate index which accounts for the characteristics of local cess. Additionally, a computer model must be developed to calculate the rate increase and the DG LGRD's staff must be trained on the model. It is anticipated that this would require one additional man month. However, if it is decided that individual district indices should be constructed and maintained, then this will take approximately two man months to put the system in place.

11.4 Further Refinement and Support

This analysis has relied on averages or on small sample statistics. While this is useful in demonstrating the benefits of changes, it is not precise. It would be useful to extend the analysis and data collection effort to other districts. It is not possible to quantify the benefits from closer examination of collection and assessment procedures.

The consultant feels one area that merits special attention is in the survey from which the tapedars work. Large tracts of land are yet to be surveyed and this has obvious implications to revenue raising. Additionally, it is desirable to study how changes are incorporated into surveys.

Finally, cross checking will require identification of alternative data sources. The data will need to be analyzed and compared with BOR data. Finally, reconciliation must take place to account for all systematic differences. This is necessary before alternative data can be used by the DCs', BOR's, or the DepComs' staff.

EXHIBIT 1

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