CHAPTER - 5

ROLE OF GRANTS IN LOCAL FINANCE

The role of grant in local finance can be analysed from two perspectives - grant as an indispensable element and probable limits to exclusive or over-dependence on grants. These we discuss below.

A) Indispensability of Local Grants

Intergovernmental transfers in the form of grants is an integral part of local finance. Schroeder (1987) finds that local grants play important roles in many developed and developing countries. Break (1980) views grant as the best possible means of attaining various fiscal and economic goals. Historically, grant has always been playing a crucial role in local finance. Now-a-days there is hardly any country in the world where local governments work independently of grants. An international comparison in Auld (1986) shows that in all the countries examined, the share of intergovernmental grants in total local government revenues approximately ranged between 20 to 50 percent. Schroeder (1985) demonstrates a table showing that in 22 developing countries out of 23 compared, the share of grants in local revenues varies between 4.8% to 90.1%. In case of Bangladesh, our study shows that the shares of grants in total revenue are respectively 52.78% and 68.63% for Manikganj Pourashava and Kaultia Union Parishad (Annexure 4). In fact, for one reason or other, grants are either essential tor local government to get or desirable for national government to give. Now we try to substantiate this role of local grants from several stand points.

i) Bridging the Local Resource Gap

One plausible argument in favour of local grants is linked up with the need for bridging the local resource gap (i.e. between expenditure needs and own-source revenue). Local government everywhere has to carry out some statutory functions

for which they are also invested with some revenue raising powers. But the expenditure needed to finance these functions is likely to follow an upward trend under effect of both demand based factor i.e. population-induced growth in the demand for local services and supply side factor i.e. public expenditure rising in response to national income growth as hypothesised by Wagner (quoted in Sharpe, 1981). The growth in local revenue, is, however, relatively sluggish since that is largely conditioned by the level of tax devolution, capacity to pay tax and ability to collect it. For explaining the basic constraint to local revenue growth, we also may refer to the theory of public budget which draws a line of demarcation between national and local government budget on the basis of (former's) original power to create money and legislate revenue determining statutes. The ultimate result is that the spending responsibilities of lower levels of government usually exceed their ability to earn revenues (Ashwe, 1986). This income - expenditure gap is often not only wide, but it also burgeons over the years. This resource gap is particularly prominent in the developing world characterised with poor and undeveloped resource base. To bridge this gap, grant is widely accepted as an essential means.

Though the existence of local 'resource gap' (also known as fiscal gap, fiscal imbalance or as budget deficit) particularly in the Third World is a self-evident truth, an estimation of such gap for local public sector is not always an easy affair for want of necessary data. This concept is, nevertheless, significant as a criterion for sizing up grants for individual units. Pressed upon by such requirement, the Indian Eighth Finance Commission Report, (1984) projected revenue deficits of eleven states for the years from 1984-85 through 1988-89 and recommended, inter alia, the revenue gap filling grants to the states. It must be recalled that these estimated deficits survived even after making allo-wances for possible devolution of taxes. This indicates that despite maximum exploitation of local tax bases, some gap may still remain to be dealt with grant.

Similarly, Municipal Finance Commission Report, (1976) for the Indian State of Kerala, calculated the municipal resource gap at about Rs. 98.10 millions per annum. To fill up this gap, which is indeed a large one, several measures inclusive of grant transfers were suggested. This means that non-grant measures are not enough and, therefore, these must be supplemented by grant for covering the gap.

In our study, the scope of resource gap quantification is delimited to only micro level i.e. two sampled units selected for our study. Table 5 shows that in two local units, local revenues fall short of expenditure to the extent of resource gap which is 46.85% for Manikganj Pourashava and 61.70% for Kaultia Union Parishad. Apparently such gaps look quite big. Still, in order to prove if this gap is significant or not, we resorted to statistical technique of testing the difference between sample means of own income and expenditure data. The results of T-Statistics for the same, as set down in Table 6, reflect that the resource gap is significant for both the local units. This gap is to be covered, in part or full, by grants-in-aid from the national government.

In this respect, there is hardly any better alternative to grant. For example, theoretically, such a resource gap is not likely to be wiped out by increased generation of local revenues, because exploitation of potential revenues is constrained by limited revenue authorisation and the scope for further revenue devolution is also bounded by the given local resource base or taxable capacity. Similarly, tax sharing (assigning to the local government a share of tax levied and collected by national government) or 'piggy backing' (local discretionary surcharge on a national revenue) is seldom a perfect substitute for grant towards filling up the local resource gap. Because these fiscal instruments are not suitable for all types of taxes and even if they make some contributions to the local fund, still there may remain some resource gap to be redressed by grant.

Table - 5

EXTENT OF RESOURCE GAP IN TWO LOCAL BODIES

Year	Manikganj Pourashava (%)	Kaultia Union Parishad (%)
1973-74	53.61	-
1974-75	17.97	-
1975-76	- 3.69	-
1976-77	29.10	-
1977-78	25.95	72.28
1978-79	50.84	56.20
1979-80	29.58	6.90
1980-81	73.33	57.41
1981-82	39.68	62.42
1982-83	31.50	56.18
1983-84	73.93	86.90
1984-85	65.07	82.44
1985-86	62.57	83.74
1986-87	75.11	33.75
1987-88	78.25	80.48
Mean	46.85%	61.70%

N.B.: i) Resource Gap $= \dfrac{\text{Expenditure} - \text{Own Revenue}}{\text{Expenditure}} \times 100$

ii) Own revenue and expenditure data in Annexure 1 & 3.

Table - 6

RESULTS OF T-STATISTICS FOR TESTING THE DIFFERENCE BETWEEN SAMPLE MEANS OF LOCAL EXPENDITURE AND REVENUE DATA

a. Statistics T =

$$T = \frac{\overline{X}_1 - \overline{X}_2}{S \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Where S^2 =

$$S^2 = \frac{\sum(X_1 - \overline{X}_1)^2 + \sum(X_2 - \overline{X}_2)^2}{n_1 + n_2 - 2}$$

$\overline{X}_1$ =   The mean of first sample

n_1 =   The size of first sample

$\overline{X}_2$ =   The mean of second sample

n_2 =   The size of second sample

b. **Calculation :** T for Manikganj Pourashava : Observed value 2.51 is greater than the theoretical value 2.16 (at 5% level of significance for $n_1 + n_2 - 2$ degrees of freedom). The observed difference between the two means is, therefore, significant, with the value of expenditure being higher than that of own revenues.

c. **Calculation :** T for Kauitia U.P. : observed value 3.63 is greater than the theoretical value 2.262 (at 5% level of significance for $n_1 + n_2 - 2$ degrees of freedom). The observed difference between the two means is therefore significant, with the value of expenditure being higher than that of own revenues.

ii)   Encouraging Specific Local Expenditure

Even if the extra-ordinary revenue performance of any local jurisdiction or statutory diminution in their functional liabilities substantially shrinks the local revenue-expenditure gap, still there will be need for grants for encouraging specific local expenditure in line with national priorities. Since local government is a part of over-all public sector, its programmes and role should have acceptable degree of complementarity with the national government objectives and policies. In case financial constraints compel a local government to under-allocate resources in nationally-preferred areas (like education, health etc.), then grants may be allowed to it for spending locally on behalf of national government. This is what Mieszkowski and Stein (1983) term as federal government "subcontracts" with the state and local governments to implement its programmes in pursuing national interests.

One dominant purpose for which grants are mostly needed is to finance local projects with spill-over effects. There are some local government program-mes which not only address the needs of concerned locality, but also as a by-product, these deliver benefits which extend beyond the geographical boundary and thereby promote national interests. By way of example, implementation of a local road project will allow the national government officials a passage to their working destinations. This also helps market integration at the national level. Similarly, a garbage disposal plant of a locality may help keeping up the sanitary standard of its surrounding area. Such spill-over effects of local projects play a prominent part in the justification of grants-in-aid (Frenkel, 1986).

An early theoretical interpretation of essentiality for grant along spill-over or externality argument was made by Pigou (1932). He envisaged that an individual economic unit that generates spill-over effects should receive a unit subsidy

equal to the value at the margin of the external benefit created. This can be explained by Figure 5.

In Figure 5, consumption of X unit is shown by horizontal axis and unit price (Taka) by vertical one. Given marginal private benefit curve (MPB), an individual will consume upto OA amount at which private benefit from marginal unit equals with price (P_1) he must pay for X. OA amount related to MPB curve obviously represents a less than efficient level of consumption of X. On the other hand, marginal social benefit (MSB) includes both private and social benefit and therefore it stands higher above MPB. Consumption of X upto OB corresponding to MSB is an efficient level of consumption. To induce purchase upto the additional quantity of X, Pigou suggested that the individual should receive unit subsidy of CD. This subsidy will reduce effective price of X from P_1 to P_2 and thus will induce purchase upto OB assuming an individual maximising behaviour. This Pigovian theory of unit subsity in individual case, as Oates (1972) argued, may be extended in principle to the case of local grants where grant based expenditure has spill-over effects.

An elaboration of Pigovian spill-over theory of grant may be found in the writing of Break (1980). He argues that local government programmes equally benefit the insiders who pay for them and also the outsiders who do not, as the 'non-excludability' principle of public goods theory suggests. This will cause interpersonal inequity and economic inefficiency if those who pay for the programme expand it to the point where their own marginal benefits equal their marginal tax costs, rather than to the socially optimal point where total marginal benefits equal total marginal costs. To avoid these distortions, a well-designed grant appears to be a preferred policy instrument. The goal of such grant should be to reduce the costs to the insiders until they come into line with the benefits enjoyed by those groups. This goal can be achieved by grant, with grantor's share of total cost set equal to outsider's share of total programme benefits.

Figure - 5

GRANTS FOR SPILL-OVER BENEFITS
OF LOCAL PROJECTS
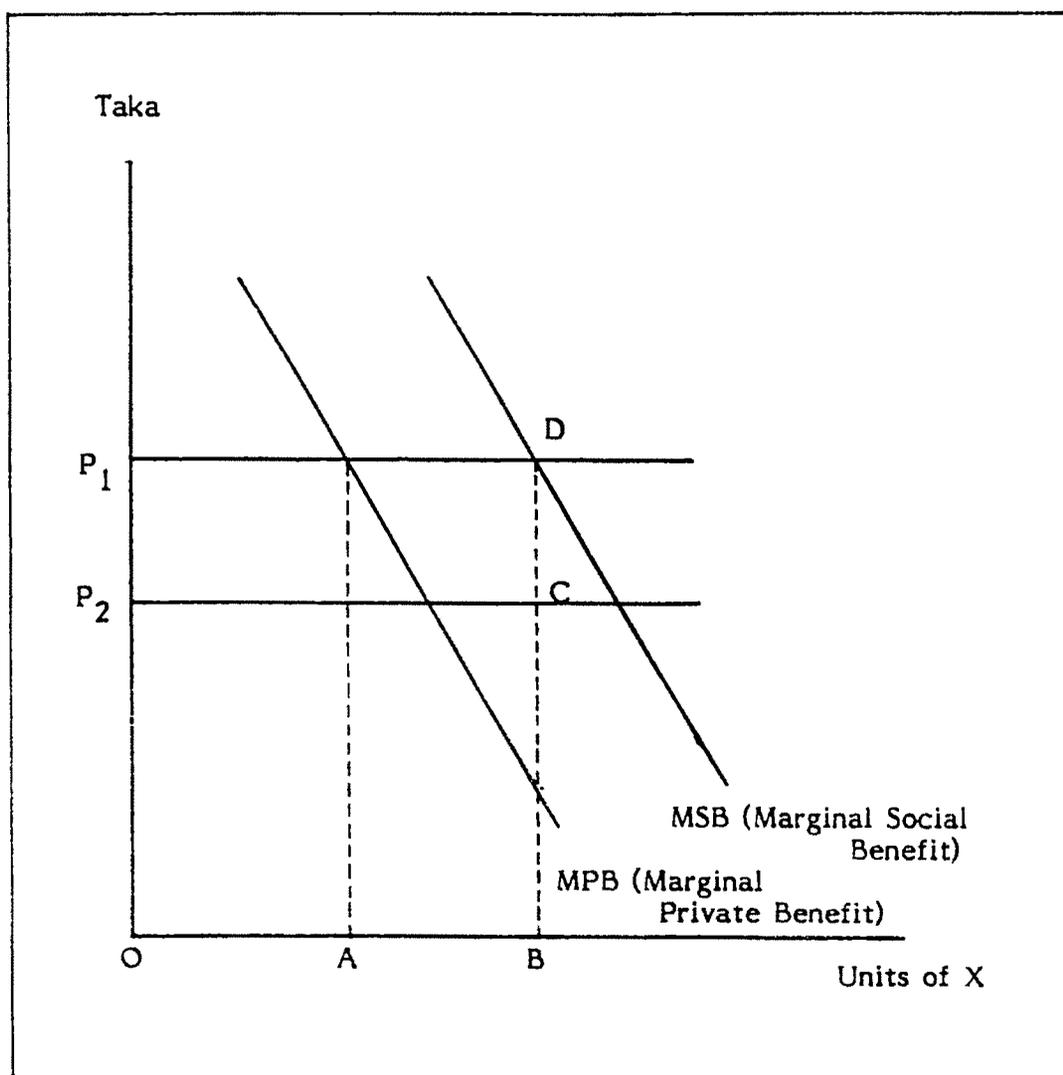
In economic terms, such grant would lower price to a level at which insiders could purchase the total of programme benefits. If this price can be set correctly, local sector would choose to operate the programme at socially optimal level and there would not be free-rider groups. In such instance, grant provides a first-best solution to a fiscal problem.

Another analyst of Pigovian theory of grant is Ashwe (1986). He assumes that a sub-national government, when deciding upon the level of public goods it will provide, will take into account only benefits and costs accruing to its own residents. However, from an overall national view point, the Samuelson efficiency conditions (1954) require that the provision of services should be such that their marginal cost are equal to the sum of their marginal benefits no matter where they occur. A sub-national government ignoring spill-over benefits and costs will, therefore, provide a level of services that is sub-optimal. The Pigovian prescription of unit subsidies and taxes for correcting externalities, as Ashwe argues, can be extended to the case of interjurisdictional spill-overs where the subsidies should take the form of matching grant amounting to spill-over benefits.

Spill-over benefit theory of grant is exposed to several criticisms but these are not strong enough to undermine the potentiality of this theory. The criticisms can be placed as follows. (i) Some critics argue that voluntary cooperation on the part of interested local authorities may be extended to encourage mutual programmes with spill-over benefits and thereby said distortions may be put to order without resorting to grant. It is, however, quite intelligible that such a private venture often involving a good number of parties, cannot always be easily and successfully attained particularly in the typical socio-economic and cultural milieu of the developing countries. (ii) The second charge against the theory is the problem of measuring the spill-over effects, particularly in a situation of "reciprocal externalities" where mutual benefits

are derivable from the projects of different neighbouring local units. But the point is that where the benefit spill-over is a reality, it is clearly better to have some rough idea of that benefit rather than altogether ignoring it while designing a grant programme.

Pigovian model of grant will not only heal the inefficiencies of spill-over benefits of local programmes but will also, through price reduction effect, expand production to a level of efficient local finance where economies of scale will prevail. This aspect is now considered by our study (Figure - 6).

As reflected in Figure 6, in an underdeveloped economy like Bangladesh, lower purchasing power of local people keeps their actual demand (D) for local goods (Q) at a lower level than the market price P_1 at which local goods can be supplied in the absence of grants. Intersection between D and P_1 curves at point R implies that at price P_1 only a few number of well-to-do people (but not the vast majority of locals) can afford to purchase the local goods and quantity demanded by them is naturally smaller i.e. OQ_1. At such lower level of production, application of diseconomies of scale will keep both production cost and price at a higher level. Grant subsidy is, therefore, necessary to enable the local government to lower down the price to P_2 at which local people can purchase more of such goods (OQ_2). By extending the provisions of goods at such higher level the local governments also can reap the economies of scale. Thus Pigovian model of grant has both positive equity and economic effects.

Apart from financing projects with inter-jurisdictional spill-over effects, other specific purposes of grant-supported programmes are to boost up employment generation, maintain certain capital projects, redistribute resources spatially on equity grounds to quell unrest or on growth considerations i.e. favouring greater growth-potential areas etc. (Schroeder, 1987). Thus it may be supposed that one reason or other may always be there to justify local expenditure out of grants.

Figure – 6

ECONOMY OF SCALE UNDER GRANT PROGRAMME

P (Price in Taka)

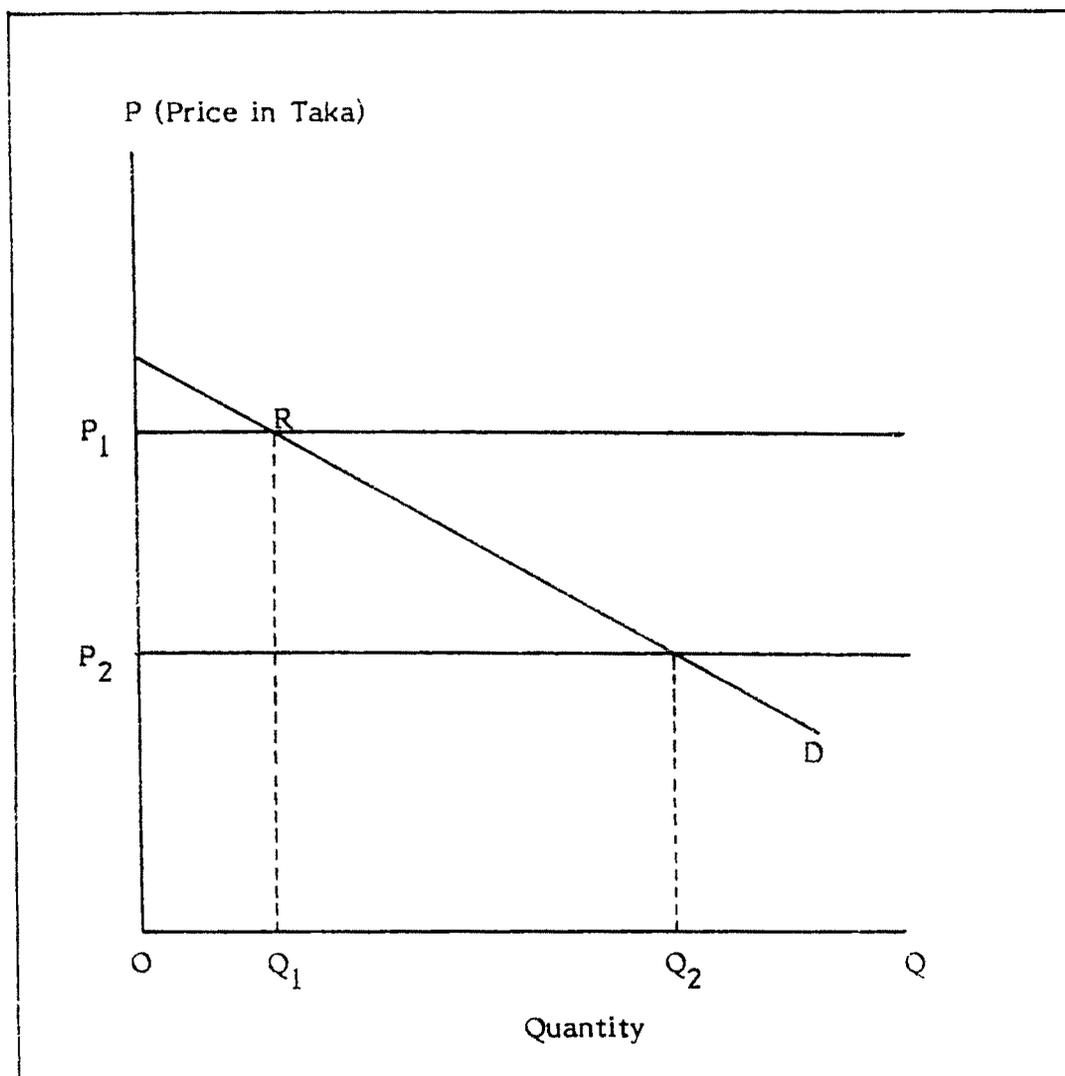P₁ — R

P₂

D

O   Q₁   Q₂   Q

Quantity

Table 7 indicates that Manikganj Pourashava derives a substantial amount of grant (44.38%) to accomplish special projects. Our survey gathered that a great majority of these projects have more or less positive external effects to be spilled over beyond local jurisdiction. Not only that, the non-specific grant based projects have also fair chance to have some spill-over benefits, since there are formal or informal instructions from higher government to under-take projects that maximise public welfare.

B) Limits to Exclusive Reliance on Grants

Our preceding discussion looks upon grants as an indispensable element of local finance. Such a status of grants, however, does not lends itself to the conclusion that exclusive reliance on grants or progressively increasing role of grants is possible or desirable. In fact, limits to such dependence on local grants are set by a number of factors. We now consider them in the light of empirical evidences.

i) Foreign Aid-based Grants

In the Third World, central/national government depends on foreign aid or grants in the way local government depends on it for local grants. In some cases, dependence of national economy on external finance is quite overwhelming. If, in such a situation, local grants are tied to external sources of finance, local government becomes exposed to uncertainty and instability, if any, of foreign assistance. With the deteriorating trend of foreign aid climate for the Third World in general, the case of local grants does not promise well given the assum-ption that a shrinkage in the volume of foreign assistance will be followed by a downward adjustment in the local grants pool.

The case of Bangladesh represents a situation as enunciated above. Table 8 exhibits that the national economy draws heavily on external finance, with about

Table - 7

PERCENTAGE DISTRIBUTION OF SPECIFIC AND NON-SPECIFIC GRANTS IN MANIKGANJ POURASHAVA

Year	Specific (%)	Non-specific (%) (General)
1978-79	60.02	39.98
1979-80	30.06	69.94
1980-81	87.54	12.46
1981-82	12.87	87.13
1983-84	71.59	28.41
1984-85	4.20	95.80
Mean	44.38%	55.62%

N.B.:   i)   Only the years in which specific grants were available were counted.

ii)   Actual grants data in Annexure 2.

iii)   There was no specific grant for Kaultia Union Parishad.

Table - 8

DEPENDENCE OF NATIONAL DEVELOPMENT BUDGET ON EXTERNAL FINANCING

Year	National Development Budget (ml. Tk.)	Foreign Assistance (ml. Tk.)	Foreign Assistance as % of Development Budget
1973-74	4000.0	2430.8	60.77
1974-75	5090.6	7041.2	138.32
1975-76	7441.9	7360.4	98.90
1976-77	9972.8	8795.7	88.20
1977-78	12196.3	9207.4	75.49
1978-79	15546.0	11242.6	72.32
1979-80	21725.7	15409.2	70.93
1980-81	24683.0	16382.1	66.37
1981-82	25529.4	22418.0	87.81
1982-83	29617.0	24620.2	83.13
1983-84	29738.7	27384.2	92.08
1984-85	34837.1	28580.0	82.04

	average	84.70%

N.B.:   i)   Foreign Assistance includes both foreign aid and grant.

        ii)   Sources of data - **Statistical Year Book of Bangladesh**, various years.

85% of national development budget comprising of foreign assistance, which is one of highest in the world. Since local development grant is a derivative of national development budget, a positive correlation between foreign assistance and such local grant is a likelihood provided there is no major shifts in the national government priority for local development. Compatible with this are the findings of Table 9 showing significant coefficient values of correlation between these two variables.

Though Bangladesh is somehow managing for the present to gain a robust share of international economic assistance, primarily in consideration of it's formidable economic problems further compounded by recurrent natural calamities, this trend may not last long at least in real terms on account of ever-engulfing global economic crises (Sobhan, 1982). Accordingly, should anytime foreign assistance disbursement to the country dwindles in a large measure, there may be a downward adjustment in the scale of local grants, which, in the event of excessive dependence on it, will effect a disastrous shock to the local economy. Another problem of over-dependence upon grant may be related with erratic flow of grants, upsetting planning process of local development programmes. Sometimes, foreign donors extend project tied grants to local bodies via national government. In such cases, the priority of local government expenditure is likely to be affected. All these factors pose a potential threat to overwhelming dependence upon externally-funded local grants and accord local revenues a position of more dependable source of local finance.

ii) Grants and Local Autonomy

Another limit to exclusive reliance upon local grants is set by the cost of local autonomy which is likely to be positively related with local grants, as maintained by Hepworth (1980). The positivity or prejudicial role of grants to local autonomy and democracy is also borne out by the empirical findings

Table - 9

CORRELATION BETWEEN FOREIGN ASSISTANCE AND LOCAL DEVELOPMENT GRANT
(1973-74 to 1983-84)

a. Correlation between Foreign Assistance (X) and Local Development Grants (Y)

r_{xy} = .88

b. Null Hypothesis ; Correlation is zero.

c. Statistics ; $t = \dfrac{r\sqrt{(n - 2)}}{\sqrt{1 - r^2}}$, n - 2 = 9

Calculation : t = 5.5 is greater than the theoretical value 2.262 for 9 degrees of freedom at .05 level of significance. The correlation is significant.

N.B.: Foreign assistance and local development grants data in Table 8 and Annexure - 10.

of our study. Excessive dependence upon grants, as it appeared, may curtail local autonomy in the following two ways :-

(a) Loss of Autonomy Related with Grants Supply :- In a highly grant-weighted local finance, execution of budgeted programmes is largely contingent upon availability of grants. Quite often, as in the case of Bangladesh, disbursement of funds is so delayed that very little time within current financial year is left over. As a result, projects are accomplished in a hurried manner, naturally at the expense of quality of work and causing some wastage of resources. Likewise, if salary support grant for local government is released behind schedule, payment of wage bills is also accordingly delayed.

Instability in grants flow is also not less irritating to local administration. Specifically, a down-swing from the committed grants is very likely to distort the local budget or even to upset it. Usually, grants are more liable to fluctuations than local revenues, as it looks obvious from the comparative coefficients of variations of grants and own revenues (Table 10). All these are some of the examples showing how local public decisions cannot always be properly translated into action simply for the reason that origin of major revenue sources lies beyond the frontier of local jurisdiction.

(b) Loss of Autonomy Related with Grants Use :- Local autonomy may also be curved due to imposition of various conditions regarding utilisation of grants. Very often, the higher level of government is inclined to see that grants are used for local development in the way it likes best. To ensure compliance with national policy, instructions/guidelines are issued, spelling out various do's and don't's applicable to different stages of 'project cycle'. In Bangladesh also, various instructions, both written and verbal, are served to guide the steps of project managers of different local governments. All these functional restrictions, though not all of them are always unjustified, stand in the way of autonomous local action.

Table - 10

COEFFICIENTS OF VARIATIONS FOR GRANTS AND LOCAL REVENUES

(DURING STUDY PERIOD)

Types of revenues Local Units	Grants	Own Revenues
1. Manikganj Pourashava	107	55
2. Kaultia Union Parishad	80	26

N.B.: i) The formula used for computation of coefficient of

variation is $V = \dfrac{\text{Standard Deviation } (\delta)}{\text{mean } \overline{x}} \times 100$

ii) Total grants and local revenues data in Annexure 1 and 2.

From above we understand that local grant has the potency to jeopardise local autonomy with both political and economic implications. The gravity of such impact will, however, depend on both the size and nature of grants. Quantitatively, Datta (1970) quotes a U.N. Report (1962) that puts the danger line of grants between 50-70% grants ratio to total revenue depending upon the character of local government. He also refers to a study on grants in Calcutta (Datta, 1965) that puts the safe limit of general purpose grant at 20% of total income of localities. In this context, our stance is that desirability of grant's role will not only matter with its quantity or ratio but also with its quality or nature because sometimes higher ratio of unconditional grants may be preferable to lower ratio of conditional grants. Siddiqui (1984), sensible of this reality, makes a decisive remark that local bodies could use grant without much loss of autonomy if grants may be suitably structured, but as the latter is not always likely to come about, these bodies can safeguard their autonomy by resorting to greater local resource mobilisation.

The above findings of this chapter suggest that grant is an indispensable element of local finance and therefore local governments in general can hardly do without it. On the other hand, it is also not desirable to depend on grant exclusively or excessively because of various problems involved and particularly when the question of local government's financial viability assumes importance. So, the real world situation may be better represented by a local fund comprising of both local revenues and grant. Within such possible range between zero grant and zero local revenue extremities, the local government should minimise dependence on grant by maximising reliance on internal revenues. In other words, grant should be used only to make up the genuine deficit between standard revenues (collectible through serious revenue effort) and standard expenditure needs, unless there is otherwise stronger justification for grant i.e. for encouraging specific expenditure.

For improving financial viability of local governments, it is also a necessity to ensure that local grant is administered in a way that does not adversely affect local revenue effort. This aspect is addressed in Chapter 6.