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# TARGETING EFFICIENCY OF CASH TRANSFERS PROGRAMMES IN PAKISTAN: A COMPARISON OF THE PUBLIC AND PRIVATE SECTOR INITIATIVES IN DISTRICT CHAKWAL

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Abstract. The paper aims to assess the targeting efficiency of Dandot Bait-ul-Mal (DBM), Official Zakat System (OZS) and Benazir Income Support Programme (BISP). To address the objective, primary data is collected from 486 households through a survey conducted in Dandot town; district Chakwal, by employing convenience sampling technique. The methodology of targeting ratio, target count-gap based on Type-I and Type-II errors is applied. The findings of the paper reveal that BISP is the most efficient programme. The findings also reveal that beneficiary households are marginalized than nonbeneficiary households. The results also show that all programmes are successful to some extent in targeting the poor, however, the evidence of type-I and type-II errors is also observed. No leakage of funds is found in Dandot Bait-ul-Mal. About one-fourth of the Zakat funds are not received by 3<sup>rd</sup> quintile of its beneficiaries while one-fifth of BISP funds are not received by the first two quintiles of the beneficiaries. The DBM and BISP pay financial assistance as per their schedule while irregularity is the feature of OZS. The paper implies that these programmes can play a vital role in improving the lives of the

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poverty-ridden segments of the society but it needs sincere efforts on the part of the stake-holders.

**Keywords**: Targeting efficiency, Targeting ratio and count gap, Type-I and Type-II error, BISP, Dandot Bait-ul-Mal and Zakat

# I. INTRODUCTION

Two approaches to social benefits are available in the literature. One of them is a universalistic approach and the other one is targeting approach. The universalistic approach is unattractive because of high leakage to non-poor and fiscal burden however, undercoverage is impossible under this approach. It is more likely that undercoverage occurs in targeted intervention and also zero leakage to non-poor is impossible [Weiss (2004)]. The leakage of benefits to non-poor is caused by targeting errors, which take place owing to poorly designed schemes, erroneous identification of the poor and bad governance. To assess the performance of a targeting programme, the literature contains several measures such as type-I and type-II errors; contribution to poverty reduction, the effect on the household behaviour and budgetary costs. Type-I and type-II errors have got popularity because of their direct budgetary implications. The type-I error is the number of poor excluded from the benefits of the programme while type-II error measures the number of non-poor people who are included in the programme [Bigman and Fofack (2000)].

The targeting is the worst when no poor gets the benefits and the best targeting occurs when both errors are zero but no programme has two errors zero [Lavallee (2010)]. The error of exclusion has received the attention of researchers [Bigman and Fofack (2000)]. The targeting can be broad and narrow and hence the poverty reduction strategy of a programme (public or private) can be evaluated in terms of broad and narrow targeting [Weiss (2004)]. In broader targeting, the poor indirectly benefit from the schemes such as expenditure on roads and highways, education, health and rural development etc. The narrow targeting approach directly benefits to the poorest of the poor.

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This paper is a comparative study of targeting efficiency<sup>1</sup> of three programmes namely Dandot Bait-ul-Mal, Official Zakat System and Benazir Income Support Programme. The distribution of Zakat, Benazir Income Support Programme, food subsidies and food support programmes are some of the examples of narrow target interventions at the government level, which assist the vulnerable segments of the society. Dandot Bait-ul-Mal is one of the narrow interventions run successfully at private initiative over the last 45 years by locally administered social welfare organization, Dandot Development Institute, which has its own administrative set up comprising of a chairman and other members [Khan (1989)].

Dandot town is part of the Northern Punjab, situated in Chakwal district. Its population is 10,718 individuals with 1,910 households<sup>2</sup>. The system is still in operation in one or the other form and contributing to the welfare of the indigent, disabled, poor, students, orphans, and widows etc. The main sources of revenue are Fitrana<sup>3</sup>, Sadqaat<sup>4</sup> including Zakat, animal hides at the time Eid-ul-Adha and earnings from catering services run under Dandot Development Institute. Rs. 700 per month were being paid to seventy-nine households in 2012-13<sup>5</sup>. Financial assistance is regularly paid in the first week of every month. The official Zakat System and Benazir Income Support Programme (BISP) have also been working in the town. In Pakistan, the System of Zakat and Ushr was officially introduced through a Presidential Ordinance on June 20, 1980. Benazir Income Support Programme was launched in 2008 under which an eligible family was granted Rs. 3,000<sup>6</sup> per quarter. The comparative

<sup>&</sup>lt;sup>1</sup> Targeting efficiency of a programme is what fraction of the programme benefits received by poor [Sumarto et al (2001)] while Lavallée et al (2010) is of the view that efficiency is the ability of the targeting to minimize both exclusion and inclusion errors.

<sup>&</sup>lt;sup>2</sup> Government of Pakistan (2017b)

<sup>&</sup>lt;sup>3</sup>. It is an annual compulsory charity which is required from every Muslim whether male or female, minor or adult as long as he/she has the means to do so at the end of fasting month *Ramzan*or before offering*Eid ul Fitar* prayer.

<sup>&</sup>lt;sup>4</sup> It is plural of *Sadaqah* which is an Arabic word. It is voluntary charity of any amount/value in cash or kind which can be given to poor and needy at any time.

<sup>&</sup>lt;sup>5</sup> Presently Rs. 1000 are being paid per month to eligible households.

<sup>&</sup>lt;sup>6</sup> Presently Rs. 4,834 are being paid quarterly to eligible households [Government of Pakistan (2017a)].

assessment of the targeting efficiency of Dandot Bait-ul-Mal, Official Zakat System and Benazir Income Support Programme is an interesting case since BISP and OSZ are managed by government of Pakistan while DBM is run on private initiative. This research will also help us to examine the claim of Desai and Kharas (2008), "Private aid is less susceptible to "leakage" due to bribery and dishonesty, more cost-efficient and larger share of private aid than official aid reach the poor" because Dandot Bait-ul-Mal is being managed privately whereas the other two are officially governed.

The literature review made in the next section helps us conclude that either no study<sup>7</sup> has been conducted so far on the targeting performance of Official Zakat System, Benazir Income Support Programme and Dandot Bait-ul-Mal or the studies conducted on targeting efficiency did not evaluate the programmes by estimating type-I, type-II errors, total count gap and other ratios available in the literature. This paper is a first ever attempt to evaluate targeting efficiency of these programmes in Pakistan.

The rest of the paper is organized as follow. The second section provides a review of the studies on the issue. Methodology and data source are discussed in section 3. Section 4 provides facts and figures of beneficiaries and non-beneficiaries households. Targeting by expenditure quintile, type-I and type-II errors, total count gap and amount received by different quintiles is discussed in section 5. Targeting by regularity in payment of financial assistance and leakage of financial assistance are also discussed in section 5. The last section concludes the paper.

### **II. REVIEW OF LITERATURE**

Several studies have been carried out on the targeting performance of welfare programmes in Pakistan and other countries of the world. Sumarto et al (2001) concluded that all social safety nets programmes [Jaring Pengaman Social (JPS)] of Indonesia suffered from

<sup>&</sup>lt;sup>7</sup> Khan and Qutab (2010) conducted a study on Benazir Income Support Programme and *Zakat* but their focus was on political economy analysis of gender rather on targeting performance of these two interventions.

undercoverage and leakage. They evidenced that Subsidized Rice Programme had the highest coverage and Upper Secondary School Scholarship had the lowest coverage while Daly and Fane (2002) held that Health Care was the most successful programme in targeting whereas Rice Subsidy and Education Programmes did not qualify as successful programmes. Park et al (2002) demonstrated that type-I error declined from 0.094 to 0.004; and type-II error and total count gap (TCG) increased from 0.05 to 0.218 and 0.144 to 0.222 respectively over a period of ten years from 1986-1995 which means that overtime the accuracy of targeting and impact of the programmes on the income of the rural households declined in China. Park et al (2002) results are supported by Wang (2004). Weiss (2004) appraised poverty targeting programmes of five countries<sup>8</sup>. He concluded that many programmes had the problems of undercoverage and leakage. Srivastava (2004) assessing the Indian Poverty Targeting Programmes concluded that not only a fraction of benefits of these programmes were kept away from the beneficiaries by illegal means but also benefits enjoyed by well off segment of the society.

Coady et al (2004) appraised 122 anti-poverty programmes implemented in 48 countries during 1985-2003. The median targeting performance was 1.25 which signified that median programme transferred 25% more to the poor households through targeting. Garcia-Jaramilloand and Miranti (2015) selected 25 Child Focus programmes from database of Coady et al (2004). They found that Yemen's Social Welfare Fund Cash Programme had highest targeting performance (2.15) while Bulgaria Child Allowance Programme had the lowest performance (0.95). Yusuf (2010), while examining performance of 30 community targeted programme in developing countries, found that out of 30 programmes; 10, 16 and 4 programmes across 7, 9 and 3 countries were progressive, mildly progressive and regressive in targeting respectively. Zakat programme in Pakistan qualified as mildly progressive and only 21.6% of the benefits of Zakat went to bottom quintile. Kasri (2016) reached the conclusions that Zakat had effective targeting in Indonesia. Talaat (2018), while evaluating targeting efficiency of the Egyptian Food

<sup>&</sup>lt;sup>8</sup> The countries are People Republic of China, India, Indonesia, Thailand and Philippines.

Subsidy Programme (FSP), found that it suffered from 78% and 9% error of inclusion and exclusion respectively. He was of the view that 77% of the population got benefit from FSP while only 26% of the population was poor.

Shirazi (1996) found that Zakat and Ushr programme in Pakistan had excellent targeting since 94.3% of total funds were received by first decile. On account of coverage, 18.1% of the households in the lowest income decile and 2.7% of the total households were covered by Zakat and Ushr at overall level. Arif (2006), while evaluating targeting of Zakat, found that 35% of the Zakat funds were not received by beneficiaries of first two deciles and 42% of beneficiaries were recommended by elite of the community. The Zakat was also received by relatively well-off households. Neither Shirazi (1996) nor Arif (2006) evaluated the programme by type-I error and type-II errors, total count gap and other targeting ratios. A lack of targeting is one of the major problems faced by all social protection programmes in Pakistan [Jama] (2010)]. A World Bank study forecasted that proxy means test (PMT) methodology adopted by BISP to identify poor would produce 52.1% and 37.1% undercoverage and leakage rates respectively [Vishwanath et al (2009)] however, Jalal (2017), using 2011 survey data of BISP, found that BISP had undergone 52.6% and 73.6% undercoverage and overcoverage problems respectively.

The studies referred above confined to targeting efficiency of Zakat or Zakat and other social protection programmes implemented in Pakistan over a number of decades. However, no study has been conducted so far on the targeting performance of Dandot Bait-ul-Mal, Official Zakat System, and Benazir Income Support Programme. The studies conducted on targeting efficiency of programmes in Pakistan did not evaluate the programmes by estimating type-I, type-II errors, total count gap and other ratios available in the literature. This paper attempts to fill this gap in the literature by assessing targeting efficiency of the programmes being run in Dandot town to help the destitute.

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#### **III. METHODOLOGY AND DATA SOURCE**

#### **METHODOLOGY**

The main objective of the paper is to assess the targeting efficiency of Dandot Bait-ul-Mal, Official Zakat System, and Benazir Income Support Programme. To evaluate the efficiency of the cash transfer programmes, the literature suggested many ways such as error of inclusion and exclusion, accomplishment of intended objective, effect on households' behaviour; and cost and benefit of the programme. Error of exclusion (type-I error) and inclusion (type-II error) are considered better than other measures [Bigman and Fofack (2000)]. Programme which has a minimum sum of type-I and type-II errors is considered an efficient programme [Yusuf (2010)]. Sumarto et al (2001) suggested the use of targeting ratio to assess the effectiveness of the programme. Targeting ratio is the share of non-poor (those who belong to three upper quintiles) in total beneficiaries to their share in total population which is 0.60 by definition.

Targeting ratio =  $NPB_{tb}/NP_{ts}$  (1)

Where 'NPB<sub>tb</sub>' is the proportion of non-poor beneficiaries in total beneficiaries and 'NP<sub>ts</sub>' [0.6] is the proportion of non-poor in the total sample.

If all the beneficiaries are poor households, then 'NPB<sub>tb</sub>' = 0 and targeting ratio is also zero which means perfect targeting. If all beneficiary household are non-poor, then 'NPB<sub>tb</sub>' =1 and targeting ratio will be 1.67 indicating that programme has failed in its targeting. If the fraction of non-poor beneficiaries is the same as the fraction in the total sample, the targeting ratio is 1. It implies that the programme has no targeting and; poor and non-poor are as per their proportion. It is clear from the above explanation that the value of targeting ratio varies from 0 to 1.67. Higher value of ratio shows least targeting and lower value represents better targeting.

The above discussion sheds some light on the under-coverage of poor and leakage of the funds to non-poor of the programmes under study but it does not give exact value of type-1 error and type-II error. We follow the methodology of Park et al (2002), Wang (2004) and Weiss

(2004) to calculate these errors. Park et al (2002) mentioned two targeting gaps namely Target Count Gap (TCG) and Targeting Income Gap (TIG). We concentrated on Target Count Gap (TCG) since the result of these count gaps are the same. TCG can be calculated as

$$TCG = \frac{1}{N} \sum_{i=1}^{N} \{ I_{i1}(B_i = 0, E_i < Z) + I_{i2}(B_i = 1, E_i > Z) \}$$
(2)

In the above relation

- N is the total number of households in the sample
- E<sub>i</sub> stands for adult equivalent expenditure of ith household
- Z is the poverty line

 $I_{i1}$  is an indicator variable of type-1 error or under-coverage of poor and would take a value of 1 if a household is not a beneficiary of a programme (Bi =0) but his adult equivalent expenditure is less than the poverty line.

 $I_{i2}$  is an indicator variable of type-II error or leakage of funds to nonpoor and would take a value of 1 if a household is a beneficiary of a programme (B<sub>i</sub> =1) and his adult equivalent expenditure are greater than poverty line.

TCG can be constructed as a percentage of households that are mistargeted and can easily be decomposed into type-1 and type-II errors. It may be noted that target count gap is sensitive to the selected poverty line. Higher the poverty line, higher the type 1 error and lower the type-II error. The programme which has a minimum sum of type-1 and type-II errors (TCG) is considered as efficient. The coverage of poor and leakage of benefits to non-poor are also used in the literature as criteria to evaluate targeting efficiency of the programmes [Arif (2006)]. The efficiency of the programmes can also be assessed by regularity in payment and leakage of financial assistance.

#### **DATA SOURCE**

The objective of the paper is to evaluate targeting efficiency of Dandot Bait-ul-Mal, Official Zakat System and Benazir Income Programme (BISP) working to help the poor in the town. To achieve the objective, secondary data was not available so primary data was collected in 2013 through face to face survey. A detailed and comprehensive closeended questionnaire was designed and data was collected from 486 households of the town by using convenience sampling technique since it is inexpensive, fast and easy [Etikan et al (2016)]. Irrespective of the type of respondent, the same questionnaire was used for the survey.

# IV. DESCRIPTION OF BENEFICIARY AND NON-BENEFICIAIRY HOUSEHOLDS

### DISTRIBUTION OF HOUSEHOLDS BY TYPE OF CASH TRANSFER PROGRAMMES

This section provides insight about beneficiary households by type of cash transfer programmes and non-beneficiary households which is reported in table 1. The total sample consists of 486 households. Overall about 21% (102) of these households are the beneficiaries of all programmes. The table reveals that out of 102 households, 37%, 36% and about 11% of the beneficiary households benefited from DBM, BISP and OZS respectively. Though the management of DBM and OZS claimed that there was no overlapping of beneficiaries but their claim was not true since about 16% of the total beneficiaries are getting benefits from more than one programmes. The literature has termed it as leakage. It means that either there is no coordination among the managers of these programmes, particularly, Dandot Bait-ul-Mal and Local Zakat committees or they are intentionally favoring some households. The analysis of the data reveals that no one received financial assistance from all three programmes simultaneously. Our estimates of the Zakat beneficiaries (10.8%) are significantly higher than Zakat beneficiaries (2.7% and 4.1%) estimated by Shirazi (1996) and Arif (2006) respectively at the national level. The possible reason for the difference of beneficiaries may that we tried our best to approach the maximum number of beneficiaries of the programmes. The sample size and area of study may be another reason for disparity in number of beneficiaries in our study and Shirazi (1996) and Arif (2006).

#### TABLE 1

#### Distribution of Beneficiary and Non-Beneficiary Households

	Beneficiary Households of				Non- beneficiary household (6)	All households (7)=5+6	
	DBM (1)	OZS (2)	BISP (3)	More than one programmes (4)	All programmes (5)=1+2+3+4		
Beneficiaries and non- beneficiary households (No.)	38 (37.0)	11 (10.8)	37 (36.3)	16 (15.7)	102 (100)	384	486
Beneficiaries and non- beneficiaries out of all households (%)	7.8	2.3	7.6	3.3	21	79	100

Source: Statistics computed by the author based on the data collected through a survey conducted in April 2013. Figures in parenthesis are percentage of beneficiaries for each programme out of total beneficiaries.

# DISTRIBUTION OF BENEFICIARIES BY REASONS FOR RECEIVING FINANCIAL ASSISTANCE

Beneficiary households were asked as to why they considered themselves eligible for financial assistance. Their responses are reported in Table 2 which reveals that at all programmes level more than 70 percent of the beneficiaries are of the view that presence of a widow in the household and low income makes them eligible for financial assistance from these programs. At the programme level, the table shows that the presence of a widow in the household of the beneficiaries of Zakat (72.7%) and Dandot Bait-ul-Mal (48%) is quoted as major reason for receiving financial assistance from these programmes. The second main reason reported by the beneficiaries of Dandot Bait-ul-Mal is the disability of a member or head of household. The low income is reported by 69% of BISP beneficiaries as an explanation for registering their names with the programme.

#### TABLE 2

Distribution of Beneficiary Households by Reasons for Receiving Financial Assistance (%)

Reasons cited by beneficiaries for receiving financial assistance	Beneficiaries of				Reasons cited by non- beneficiaries for self- assessed eligibility
	DBM	OZS	BISP	All programmes	
Low income	9	9.1	69	33.3	83
Disability	26	9.1	11.5	18.6	6
Presence of a widow	48.	72.7	14.5	37.3	4
Unemployment/No source of income	13	4.5	2.4	6.9	5
No bread winner	4	4.5	2.4	3.9	2
Overall	100	100	100	100	100

Source: Statistics computed by the author from the data collected through a survey conducted in April 2013

It appears that low income and presence of a widow in the household turn out momentous reasons for receiving financial assistance by beneficiaries for the whole sample. The analysis of the responses reveals that 35% of the non-beneficiary households also consider themselves eligible for financial assistance. Eighty-three percent of the nonbeneficiary households who consider themselves eligible for financial assistance report (last column of Table 2) that low income is the main reason for considering themselves eligible for financial assistance.

### V. ASSESSMENT OF TARGETING EFFICIENCY

#### TARGETING OF BENEFICIARIES BY EXPENDITURE QUINTILE AND PROGRAMME WISE

Several studies in the past have questioned the efficiency of the welfare programmes including Zakat and other programmes implemented by the government of Pakistan. To evaluate the effectiveness of the programmes, the statistics of beneficiaries and non-beneficiaries calculated by quintile and sorted based on per adult equivalent expenditure are presented in table 3. The first and fifth quintile represents the poorest and the richest segment of the population respectively. The table provides distribution of beneficiaries at programme level and non-

beneficiaries for better understanding and comparison of targeting efficiency of the programmes. The data in table 3 shows that about 60% of beneficiaries of Dandot Bait-ul-Mal and Official Zakat System belong to poor households.

TABLE	3
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Distribution of Beneficiaries and Non-Beneficiaries by Expenditure Quintile (%), and Targeting Ratio

	E	Non-		
Quintile	DBM	OZS	BISP	beneficiaries
1 <sup>st</sup> (Poorest)	37.0	45.5	50.0	15.1
2 <sup>nd</sup> (Poor)	22.3	13.6	23.8	18.8
3 <sup>rd</sup> (Middle)	22.2	13.6	11.9	17.7
4 <sup>th</sup> (Rich)	18.5	27.3	14.3	22.4
5 <sup>th</sup> (Richest)	-	-	-	26.0
Total	100	100	100	100
Proportion of beneficiaries in last 3 quintiles	0.407	0.409	0.262	-
Targeting Ratio	0.678	0.682	0.437	

Source: Statistics computed by the author from the data collected through a survey conducted in April 2013

Benazir Income Support Programme targets about three-fourth of the poor (first two quintiles) which is far better than that of the other two programmes. It is worth mentioning that no beneficiary of any programme belongs to fifth quintile while all programmes suffer from under coverage of poor and leakage of the benefits to the non-poor. It can also be derived from Table 3 that about 26% to 40% of the beneficiary households belong to non-poor segment (3<sup>rd</sup> and 4<sup>th</sup> quintile) whereas about same percentage of the non-beneficiary households lie in the poor quintiles (1<sup>st</sup> and 2<sup>nd</sup> quintile). It means that if poor are accurately identified and programmes are well designed and properly implemented, all poor households of the area can be reached by these programmes. Our statistics of targeting are substantially low as compared to the figure provided by Shirazi (1996). One of the reasons of low figures is that it is

impossible to differentiate between official (Public) and private Zakat in Shirazi's study [Arif (2006)]. Other most important reason is the different data sets and period used in the studies.

The estimates of targeting ratio<sup>9</sup> are also reported in the last row of Table 3. The value of targeting ratio varies from 0 to 1.67. If targeting ratio is zero, it shows perfect targeting. If targeting ratio is 1.67, it indicates that the programme has failed to achieve its target. Unity targeting ratio implies that programme has no targeting and; poor and non-poor are in equal proportion. It implies that higher value of ratio shows least targeting and lower value represents better targeting. The value of targeting ratio across the programmes shows that Benazir Income Support Programme (0.437) turns out as a programme of highest coverage. The possible reason may be that BISP has adopted PMT methodology to identify poor which is absent in other two programmes. Our estimates of inclusion of non-poor for BISP are 47.4 percentage points lower than that of Jalal (2017). The reason of difference in findings may be the use of different data set, area and period of study.

# TARGETING BYTYPE-I, TYPE-II ERRORS AND TARGETING COUNT GAP

The foregoing discussion sheds some light on the under coverage and leakage of benefits of the programmes under study but it does not give exact value of type-1 error and type-2 error. These errors and total count gap are calculated following Park et al (2002) Targeting count gap (TCG), type-1 error and type-2 error is calculated for Rs2000/- per adult equivalent expenditure per month poverty line. The results reported in Table 4 show that all the programmes suffer from the problem of under coverage as well as leakage. BISP is the most efficient programme since its targeting count gap (0.147) is the lowest followed by Official Zakat System (0.156) and Dandot Bait-ul-Mal (0.209). BISP has also the highest targeting performance because it has the lowest Type-I error. The results reveal that OZS has better performed in terms of exclusion of nonpoor from the programme as its type-II error is the lowest followed by BISP and DBM. Our estimates of TCG at overall level are lower than

<sup>&</sup>lt;sup>9</sup> Targeting ratio is the share of non-poor (those who belong to three upper quintiles) in total beneficiaries to their share in total population and it is 0.60 by definition.

that of Park et al (2002). The above discussion helps us conclude that BISP is the most efficient Programme.

#### TABLE 4

Estimates of Type-I and Type-II Error and Targeting Count Gap

Programme	Type -I error (1)	Type-II error (2)	Total (TCG) 1+2
Dandot Bait-ul-Mal	0.125	0.084	0.209
Official Zakat System	0.121	0.035	0.156
Benazir Income Support Programme	0.096	0.051	0.147

Source: Statistics computed by the author from the data collected through a survey conducted in April 2013

Our results are similar to but somewhat better than the findings of the studies conducted for other countries of the world. Sumarto *et al* (2001), for example, found that out of seven schemes, Subsidized Rice Scheme could reach to 52% of households in the poorest quintile whereas the target rate of other six schemes ranged from 5.42% to 16.5% from 1998 to99 in Indonesia. Perdana and Maxwell (2004) concluded that 70% of beneficiaries of an Indonesian Employment Scheme belonged to non-poor households. The analysis of welfare programmes in China, India, Indonesia, Philippine and Thailand documents the presence of substantial errors [Weiss (2004)].

# TARGETING BY AMOUNT OF FINANCIAL ASSISTANCE RECEIVED BY DIFFERENT QUINTILES

The type-II error doesn't tell about the actual amount of funds leaked to non-poor. The efficiency of any programme can also be evaluated in terms of the actual amount received by different segments (poor or nonpoor) of the population. Average amount of funds received by different quintiles of beneficiary households during the year preceding the survey is reported in table.5. It is evident that average amount received from Dandot Bait-ul-Mal and BISP by richer households (third and fourth quintile) is slightly higher (6.5% and 4%) than that of poor households (first and second quintile). Though Rs. 700 is paid monthly to every household on the list of Dandot Bait-ul-Mal, yet the average amount received by beneficiaries in each quintile is not same. The reasons may be (i) some households are paid Rs. 300 as education stipend, (ii) some households are registered in DBM during the year of the study and (iii) thorough investigation of the profile of beneficiaries; revealed that two members of one household received assistance from the Bait-ul-Mal. It is a clear cut evidence of nepotism/favouritism which is not expected by the management committee running a programme on its own initiatives. The BISP beneficiaries of different quintiles also do not receive an equal amount. Although Rs. 3,000 per quarter is paid to each eligible household as per schedule, some households do not receive an installment and some other households receives Rs. 21,000 rather Rs. 12,000 as financial assistance from the programme during last year. The analysis of the data of annual average amount received by beneficiaries of Official Zakat System reveals that it disburses higher average amount to poor households than that to the rich (third and fourth quintile).

TABLE 5
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Annual Average Amount of Financial Assistance Received from All Programmes by Quintile

Quintile	Beneficiaries of			
Quintino	DBM*	OZS	BISP*	
1 <sup>st</sup> (Poorest)	7,500 (36.1)	4,900 (46.8)	10,285 (46.7)	
2 <sup>nd</sup> (poor)	7,525 (21.7)	4,667 (13.4)	12,000 (26)	
3 <sup>rd</sup> (middle)	7,875 (22.7)	3,667 (10.5)	12,000 (13)	
4 <sup>th</sup> (Rich)	8,120 (19.5)	5,083 (29.3)	11,000 (14.3)	
5 <sup>th</sup> (Richest	-	-	-	
Total amount	4,16,000 (100)	1,04,500	4,62,000	
Programme wise Avg. amount (Rs)	7,704	4,750	11,000	

Source: Statistics computed by the author from the data collected through a survey conducted in April 2013. Figures in parenthesis are percentage of income received by each quintile

It is claimed in the literature that OZS pays a fixed amount of Rs. 500 per month to eligible households and hence the same amount must be received by all beneficiaries in each quintile. Our results do not support this claim. Arif (2006) gave three reasons for receiving different average amounts. The discussion with chairmen of the Zakat committees and

record maintained by them show that fixed amount of Rs. 500 is not paid to eligible (deserving) households. A cheque of specific amount is handed over to the chairman of the local Zakat committee by officials with instruction that the amount should be distributed to specified number of eligible households. The selection of household is left at the discretion of the committee. During the days of our visit, a chairman of the local Zakat committee received a cheque of Rs. 42,500 with the instructions that Rs. 3,000 per household should be paid to 12 households and Rs. 6,000 be paid to blind persons out of remaining amount. The chairman told that there was only one such case in the jurisdiction of his Zakat committee, so Rs. 6,000 would be paid to that blind person. If there were two blind persons, then each would be paid Rs. 3,000. The similar story was reported by other committee's chairmen. It is also clear from the table that about 40% of the funds are paid to non-poor households by DBM and OZS while BISP transfers 27% of its funds to non-poor households.

From the above discussion it can be concluded that the programmes significantly succeed in targeting the poor, however, there is evidence of under-coverage and leakages of funds to non-poor irrespective of the programmes. Undercoverage problem is not unique to these programmes in the area. It is a universal problem. While evaluating 30 communitybased programmes in the developing countries, Yusuf (2010) concluded that all 30 programmes had suffered from under coverage. He also recorded that Zakat system in Pakistan not only suffered from the absence of monitoring, transparency and accountability but also noted the presence of elite capture, discretion and corruption. We did not find any sign of financial corruption in the programmes under study. His estimates reveal that only 21.5% of benefits of Zakat are received by bottom quintile of households while our results show that about 47% of the benefits from OZS are received by the poorest quintile which indicates significant targeting. Our estimates of leakage of zakat funds to non-poor are five percentage points higher than that of Arif (2006).

#### TARGETING BY LEAKAGE OF FUNDS

The leakage of funds is another aspect pointed out in the literature to assess the targeting performance of any cash transfer programme. The beneficiaries were asked about the amount received and entitlement during the year preceding the survey. If the amount received is less than entitlement during last year, it may be considered as leakage of funds but not necessarily. There may be other reasons for not receiving the amount due. The results of the analysis of the responses of beneficiary households regarding amount received and entitlement are presented in Table 6.

It is clear from the table that beneficiaries of DBM received financial assistance as per their entitlement. About one-fifth of the financial assistance is not received by the first two quintiles (poor) of BISP beneficiaries. It is very hard to imagine such a high leakage of funds because the funds are either delivered through money order or drawn with card. The analysis of the responses indicates that one third of beneficiaries of the BISP reported that they did not receive the whole amount due.

#### TABLE 6

Percentage of Leakage of Financial Assistance from All Programmes by Quintile

Quintile	Beneficiaries of				
Quintile	DBM	OSZ	BISP		
1 <sup>st</sup> (Poorest)	0	0	10.0		
2 <sup>nd</sup> (poor)	0	0	9.0		
3 <sup>rd</sup> (middle)	0	24.5	0		
4 <sup>th</sup> (Rich)	0	0	8.0		
5 <sup>th</sup> (Richest	-	-	0		
All	0	4.9	8.3		

Source: Statistics computed by the author base on the data collected through survey conducted in April 2013

It is stringent to mention that more than 80% of BISP beneficiaries did not receive the last installment of funds. One household informed that it received only one installment during last year. It is strange to note that about four-fifth of Zakat beneficiaries did not know their entitlement. The analysis of the responses of remaining beneficiaries reveals that about one-fourth of the Zakat funds are not received by the 3rd quintile of beneficiaries. Hence the results about leakage of funds for the programmes under study should be interpreted cautiously. The findings about funds leakages of DBM, OZS and BISP support Dasai and Kharas (2008) viewpoint that "Private aid is less susceptible to "leakage" due to bribery and dishonesty, more cost-efficient and larger share of private aid than official aid reach the poor." No leakage of funds is found in DBM while 5% and 8.3% of funds of OZS and BISP respectively are not received by their beneficiaries at the overall level.

# TARGETING BY REGULARITY IN PAYMENT OF FINANCIAL ASSISTANCE

Regularity in payment of financial assistance to the deserving households can also be used to judge the efficiency of any programme. The beneficiaries of all programmes were asked about the frequency of receiving funds. The responses of the beneficiaries about the frequency of receiving financial assistance are reported in Table 7. The analysis of their responses reveals that findings are in line with the design of the programmes of Dandot Bait-ul-Mal and BISP. All beneficiaries of Dandot Bait-ul-Mal and BISP reported that they had received financial assistance on a monthly and quarterly basis respectively. It is worth noting that the management committee of Dandot Bait-ul-Mal distributes funds regularly in the first week of every month. We observed this event of funds distribution during the survey month. The disbursement of BISP funds may not be necessarily in the beginning of each quarter and possibility of delay cannot be ignored because some of the beneficiaries of the programme did not receive one or two installment(s) of the assistance. No specific pattern of receipt of funds from OZS turned out since more than 72% of its beneficiaries reported that they had received Zakat funds on quarterly, biannually and irregular basis while more than 27% of beneficiaries were of the view that they received Zakat funds for the first time. This discussion proves that regular disbursement of financial assistance to the beneficiaries is the salient feature of Dandot Bait-ul-Mal and BISP which gives them supremacy over OZS. It is pertinent to bring on record that more than 45% of Zakat beneficiaries reported that Zakat funds were disbursed irregularly which is not documented so far in the literature.

#### TABLE 7

Distribution of Beneficiaries by Frequency of Receiving Funds (%)

Frequency of receiving funds	Beneficiaries of			
riequency of receiving funds	DBM	OZS	BISP	
Monthly	100	-	-	
Quarterly	-	18.2	100	
Biannually	-	9.1	-	
Irregularly	-	45.4	-	
Other	-	27.3	-	

Source: Statistics computed by the author based on the data collected through survey conducted in April 2013

# VI. SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS

The objective of the paper is to assess targeting efficiency of the cash transfer programmes working in the Dandot town. The objective is addressed by distributing beneficiary households by expenditure quintiles, estimating targeting ratio and count gap, amount of financial assistance received by different quintiles, regularity in payment of financial assistance and leakage of funds to non-poor. The beneficiary significantly marginalized than non-beneficiary households are households. Low income and presence of a widow in the household are the rationale given by the beneficiaries for their eligibility. Though the targeting of poor is significantly higher yet leakage of funds to non-poor is evidenced irrespective of the programme. Targeting count gap documents that the programmes have the problem of undercoverage of poor as well as leakage of funds to non-poor. BISP's targeting is better in terms of targeting ratio and TCG. There is considerable evidence of leakage of funds to the non-poor; however, we do not observe any sign of financial corruption in the programmes. The DBM and BISP have amazing performance in terms of regularity in payment of financial assistance while irregularity in payment is the hallmark of OZS.

# CONCLUSIONS

- i. All the three welfare programmes have some degree of success in targeting poor; however, there is evidence of under coverage and leakage of funds to non-poor irrespective of the programmes.
- ii. In spite of the leakage of funds to non-poor, no sign of financial corruption is observed in the programmes.
- iii. In terms of targeting, BISP is the most efficient programme.
- iv. In terms of regular payment of financial assistance to their beneficiaries, DBM and BISP are the most efficient programmes.

# POLICY IMPLICATIONS

Dandot Bait-ul-Mal, Official Zakat System, and Benazir Income Support Programme have almost identical goals of providing financial assistance to the poorest segments of the society though they have different historical background and sources of financing. These programmes can play a vital role in improving the lives of the povertyridden segments of the society but it needs sincere efforts on the part of stakeholders, particularly the government. Base on the findings of this paper, the following recommendations and suggestions are offered.

- i. There is an immense need to integrate and coordinate among the administration of the programmes, specifically DBM and LZC.
- ii. Duplication of the beneficiaries can be avoided by exchanging the lists of beneficiaries and making the lists public.
- iii. The identification of the beneficiaries should be transparent, reliable and credible. The criteria for selecting the beneficiaries should be known to every stakeholder. There is need to have a third party audit of both Dandot Bait-ul-Mal and Official Zakat System.
- iv. The management of Dandot Bait-ul-Mal needs the help of some institution to impart the skill of managing the system and improve its professional competence.

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