Examining the Spending Patterns of *Compensated Displaced Households* (CDHs): Empirical Evidence from Diamer-Basha Dam Site

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Abstract *This research has two objectives. First, it explores the spending patterns of the households who receive monetary compensation for their land that government takes over for initiating national projects; in our case, it is about building the country's largest dam. Second, it examines what we call the demonstration effects. Literature abounds with cases examining behaviors of 'internally displaced individuals while the opposite is true for the 'compensated displaced households.' This is the backdrop, this research carried out a field survey to collect data for 192 households. The compensation received is divided into communal land compensation and private land compensation. In line with arguments with the Keynesian consumption function that provides the theoretical foundation to our empirical work, findings suggest a positive and significant correlation between spending patterns and private land compensation while the communal compensation appears to be insignificant. Education and one out of two demonstration effects have positive influence on spending behaviors.*

Key Words: Diamer-Basha Dam, Private Land Compensation, Communal Compensation, Spending Patterns

Introduction

This research examines the spending patterns and behaviors of the households who receive monetary compensation for their land that was taken over by the state for constructing the country's largest hydropower generation project--Diamer-Basha Dam. Literature abounds with cases examining behaviors of 'internally displaced individuals. However, there rarely exists academic scholarship that investigates the post compensation spending behaviors of what we call the 'compensated displaced households.' Understanding these patterns is imperative as it has important policy implications for the post displacement policymaking. This becomes more important when the compensation amount is in billions and has potential to create seismic policy challenges. While examining the spending behaviors, we explore two types of demonstration effects. In the first effect, we consider whether household spending patterns get induced by the spending decisions of their neighbors. In the second effect, we examine the spending behaviors on luxurious goods what we call the "positional goods' as a mean to showcase or guise their social and class status.

In this backdrop, this research carried out a field survey and collected data for 192 households. For the purpose of analysis, the compensation received is divided into two types: communal compensation, and land compensation. Using a Keynesian consumption function that provides the theoretical foundation to our empirical, the pre and post compensation changes in the average spending behaviors have been studied. The results suggest that after getting compensation the households increase their average expenditure share on post compensation positional goods, durables, healthcare, recreational services, and on social causes. The communal compensation appears to be insignificant having no major impact on aggregate spending of households while the privately owned land compensation is highly significant showing a large increase in the consumption expenditures of households. Results further suggest the household level of education plays an instrumental role in determining their

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consumption behavior, especially in the cases where monetary compensation is higher. Another important finding is the influence of spending patterns of neighbors: the demonstration effect.

Basic economic theories indicate that consumer spending is the largest component of 'national income identity'. In everyday life people consume. Normally their spending includes consumption on basic necessities such as food, shelter, clothing, and investment. Anyanwu (1995), Frank and Bernanke (2001) defined consumption as the spending by households on goods and services such as clothing, food items, entertainment, health services and acquisition of assets among others. Most of the existing literature examines expenditure related consumption patterns across different countries, races, cultures. In contrast, this research examines the spending patterns of individuals who were required to vacate their lands so the state could start constructing the Diamer-Basha Dam (DBD). As they were compensated for their land, this research calls them 'Compensated Displaced Households' (CDHs). This is the backdrop, the present research analyzes the spending patterns of CDHs.

Most of the research work on consumption are time series and rely on secondary sources of data to make it a sophisticated study and the data set they used is very large but the study which I made is based on primary cross-sectional data and finds it very difficult to increase my sample size because of larger population being suffered and due to lack of access to all of the affected villages which I think is the foremost limitation I faced while conducting this research work. Apart from this unavailability of data on consumption survey conducted by some renowned governmental organizations will make this work quite uneasy to conduct pre and post compensation changes in the spending pattern of the households. The hesitance of people towards disclosing their spending areas will leave a gap in extracting the true expenditure details of each of the households.

The rest of the paper is structured as follows: The next section presents the related literature followed by a section on information about the study area and dam site. The next section briefly outlines the theoretical of the research work. Data and methodology make the second last section of the paper. The last section concludes the paper.

Literature Review

Keynes' consumption function or the human psychological law is regarded as the most appealing pioneering work on consumption. Based on this law, he proposed the absolute income hypothesis. According to Keynes it's the current or the absolute size of income that defines the spending of a nation.

Among the several other alternative theories, there is the relative income hypothesis put forwarded by Duesenberry (1949) which is based on the fact that consumption expenditures depend on an individual's income relative to other people's income rather than the absolute size of his or her own income. Another Economist Modigliani posited that an individual plan his life-long consumption profile is based not just on his current income but on his life-long expectations of income as well. This theory is called 'the life cycle hypothesis'. Likewise, according to Milton Friedman's permanent income hypothesis, an individual's expenditure relies on a permanent income rather than on the current income level.

Much of the existing literature examined spending patterns of individuals and households. For instance M (2012) investigates causes of spending patterns among the Ondo State's rural inhabitants. Their research work used both primary and secondary data sources with the support of a well-structured questionnaire, one hundred respondents were randomly selected from the area of study. Results of the study suggest that current income, planned pension fund, shareholdings and long-term capital in the study area are linked positively to consumption. On the other hand, expected future profits, bank deposits, and respondents ' shares are statistically significant.

In a similar vein, Yocum, (2007) studied the household spending pattern of four census regions of the United States. Across three of the four regions surveyed, the level of consumption was the second leading cause of change across spending. When households determine how much of a good or service to buy, the level of consumption also leads to the total expenditure.

The research work conducted by Kamakura et al. (2012) is a bit different from the aforementioned studies in the sense that it aims at studying the effect of peaks and troughs on spending behaviors. In their research, the authors comprehend why allocations of household budgets across different categories of spending change when the economy is in recession or expansion. The common assumption is that the taste of households would not

change as a function of economic conditions, and thus any shift in patterns of spending during economic booms/ contractions would be purely due to changes in product packages. Standard economic models convert these effects of bundles of consumption into lateral movements along a collection of angel's curves that relate to total spending class shares. Their finding shows that people decreased their consumption of non-essential or relative positional goods during recession and increase the expenditures on non-positional goods or necessary goods. The opposite is true in case of economic expansion.

While focusing on expenditures on non-durables, Bibi et al. (2012) aimed at testing "the validity of Rational Expectations and Permanent Income Hypothesis theory" (Hall, 1998) and analyzing the spending pattern in the area of Wah Cantt. The study relied on the descriptive analysis of data collected through stratified cluster sampling. Study findings have shown that consumers here favor quality and quantity together as they make their consumer choices. The findings do not support the hypothesis of a random walk.

In order to examine the changes in household consumption behavior in Pakistan during two periods (1984-85 and 2000-01), Khan & Khalid, (2010) estimated the consumption patterns through estimating average /marginal expenditure shares and expenditure elasticity's at the national level and among rural and urban areas The key findings in terms of average expenditures conclude that there are sharp changes in consumption patterns among the regional categories (urban and rural) for both periods.

A similar study by Siddiqui, (1982) test the validity of Engels law with data on rural and urban household consumption patterns in Pakistan through taking data from "Household Income and Expenditure Survey 1971-72". The methodology used is weighted least square (WLS) because the number of households is not the same in various income groups, and the OLS estimates are likely to be biased. Likewise, Kumar & Aggarwal, (2003) studied the pattern of consumption for slum dwellers of Delhi. Their study aims at determining the extent of poverty in Delhi slums through slum population trends, employment, and education. To conduct the research, slum clusters were chosen for survey on the basis of maximum number of "juhugies". A sample of 196 was taken for the study, reflecting diverse age, income, education, household size groups, and food consumption patterns.

Another study conducted by Moulaert & Cannière, (1988) on income inequality and consumption spending behavior in Belgium focuses on whether the Keynesian argument on the allocation of revenue and its impact on spending is right or it requires more theories on consumption like "Friedman's 'Permanent Income Hypothesis", Duesenberry's 1949) relative income hypothesis and Tobinian synthesis to describe the behavior of consumption and the income inequality. To answer the question, data for 2,443 households were collected from the "Household Budget Survey (HBS)" of Belgium for the year 1978-79. The data was then analyzed through ordinary least square regression (OLS) analysis on the basis of each of the considered theories and calculated the respective macroeconomic MPC and APC. The conclusions revealed that in view of the Keynesian the MPC declines as one moves from the low-income class to the high-income class, and hence the proportional redistribution of income from high to low-income levels, would have a stimulating effect on macroeconomic consumption spending or would result in a higher volume of savings instead. The relative income hypothesis of Duesenberry's (1949) supports the suggestion that demonstration results and social factors influence the consumer behavior of the household. Tobinian synthesis of current disposable income as a major determinant, Wealth as a buffer for unexpected events and indicators of income inequality refers to the difference in consumer behavior between restricted liquidity and households that are restricted by wealth.

Most of the studies on consumption spending are based on Engle curve analysis based on remittances receivers/not receivers and beside this, some studies analyzed the consumption pattern on the macroeconomic level by applying the Keynesian consumption function. Consumption pattern according to economic booms and expansions are also studied. This research work fills the gap by examining the consumption pattern of the compensators and it will make it a distinct study in the existing literature on consumption spending.

Background of the Diamer-Basha Dam and Study Area

The location of this Dam is such that it includes a village—Bashsa in the Kohistan district of Khyber Pakhtunkhwa (KP) province as well as the Diamer District in Gilgit-Baltistan (GB) province. Our focus will be on the locations that come under jurisdiction of the latter. Most of the land for the DBD has been acquired in the district Diamer of GB. Therefore, households who receive compensation for their land in the Diamer remain the unit of our

analysis. The region has been dubbed the "gateway to China-Pakistan Economic Corridor". Trade and transportation are esitmated to increase manifold in the years to come (Alam et al, 2019). Diamer-Basha Dam being on the route to the corridor has merited attention by the policymakers in recent years.

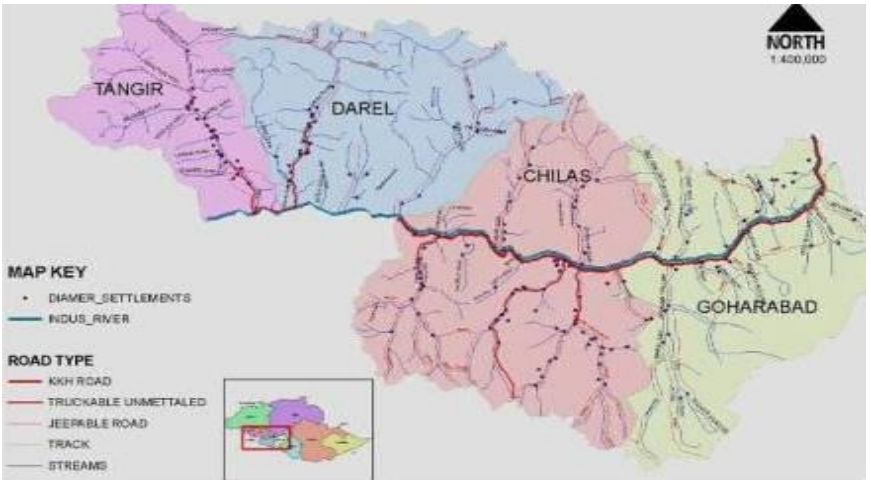

Figure 1. A geographical image of district Diamer source: Diamer Poverty Alleviation program

Dam Site

Diamer Basha Dam (see

Figure 2) is located in the Gilgit-Baltistan District of Diamer. It is situated on Indus River, about 315 km upstream of Tarbela Dam, 165 km downstream of Gilgit Capital and 40 km downstream of Chilas District Capital Diamer

Figure 2. Dam2 site image (*source: Pamir times*)

Description of the Dam

- It's an RCC (roller compacted concrete) type dam.
- The height of the dam is 272 m.
- Storage capacity is 8.1 MAF (million-acre feet)
- The live storage capacity is 6.4 MAF.

- Power generation capacity 4500 MW.

Source: WAPDA, Pakistan

Table 1. Dam Costs

Financial status	Local	FEC	Total
	(Rs. Millions)	(Rs. Millions)	(Rs. Millions)
Original PC-1cost	581,314	312,943	94,257
1st Revised PC-1 cost	-	-	-
PSDP Allocation FY 2017-18	21,000	-	21,000

Source: http://www.wapda.gov.pk

Land acquisition (see Table 2) process started in 2010 after signing an agreement with the land affectees as per provisions of the Land Acquisition Act 1894. Total of Rs. 54.66 billion were spent on areas acquired and approximately 10.5 billion (Pak Rs.) funds are left over for the acquisition of remaining lands. The estimated compensation is 3.2 to 4 billion.

Table 2. Land Acquisition Statistics

Total land (state private) Acres/Kanal	State land transferred to WAPDA Acres/Kanal	Private land acquired 2009-16 Acres/Kanal	Private land to be acquired Acres/Kanal
35504.5 acres	17213 acres	14316.75 acres	3974 acres
284036 kanal	137710 kanal	114534 kanal	31792 kanal

Source: This information been has collected from deputy commissioner office Chilas.

The areas which are going to be submerged and where the necessary land acquisition process in progress is shown in the figure below

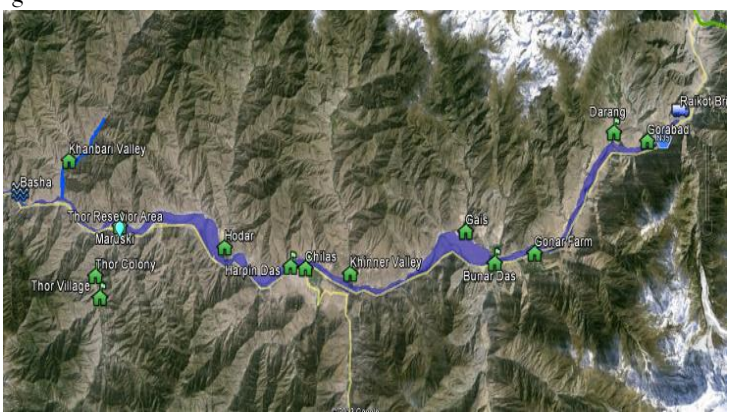

Figure 3. Land acquisition/affected areas (*Source: Google Earth)*

Compensation Procedure

This dam will deluge about 32 villages and the affected household constitutes a total of 4228 households including 30,360 people and will submerge 2660 acres of agricultural land (Sabir, Torre and Magsi 2017). In order to maintain equity among the reservoir affectees and to avoid the exploitation of the rights of households, authorities compensate the affected individual households of the suffered valleys/villages. The prices of the land acquired were set through the joint collaboration of local community stakeholders and the concerned administrative authorities of Diamer district. Local dwellers were allotted the due compensation based on private land affected

due to reservoir (both barren and cultivable), residential houses, and trees. The lands whose property rights are owned by community in their respective villages and which are going to be suffered because of the reservoir are the communal lands or common lands. Based on this, the compensation can be divided into two types: private land compensation; and communal land compensation. A brief description of each type of compensation is presented in the following paragraphs

Compensation for Private Land

Private lands are those in which the residents owned their individual lands (cultivable, uncultivable and barren) and their residential houses used for the purpose of dwelling or the land which came under the direct possession of the household and the compensation which is based on privately owned land of individual household residential houses used for dwelling is called as the private land compensation.

Compensation for the Communal land

Communal lands are those lands whose property rights are owned by the community stakeholders of the villages, where these lands would lie. Mostly these lands are barren and in the local dialect, these are called "dasses" which means barren tract of land. The compensation based on this joint possession of land by the community is called communal land compensation. An example of such communal or public land is "Gais Das".

Compensation for Trees

Apart from these the trees going to be destroyed which lie inside the individually owned land are also subject to the compensation procedure and each of the households would receive the compensation money in this regard also and this would be included in the land compensation.

According to a rough estimate and our discussion with some of the employees of the administration department of Diamer, there could be almost 1300000 households who are able to receive the communal compensation. We take both these types of compensation mentioned above as independent variables into our regressions. Another interesting fact which could be observed in such process is most of the people collude with each other to increase the compensation money but unfortunately due to unavailability of the data we cannot undergo with such complexity of the compensation procedure for now what is important for us is the consumption pattern of the affected households upon which are the goods for which they (households) raise their consumption after compensation.

Land Compensation Rates for Diamer-Basha Dam Project

In 2015, the apex committee of Gilgit-Baltistan upon the request of Dam affectees has decided to pay 25% Harjana (interest) on the compensation rates of 2010. Thus, the notified compensation rates including the Harjana are as follows (GOP 2010).

Table 3. Land Compensation Rates including Harjana (Interest)

Location	cultivated land per Kanal including 25% harjana interest	Uncultivated land per Kanal including 25% Harjana (interest)	barren land per Kanal including 25% Harjana interest
Chilas (municipal area)	Rs. 13,75,000	Rs. 4,00,000	Rs.3,12,500
Harpin Dass	-	-	3,12,500
Thore	-	-	1,25,000
Hudur	-	-	1,25,000
Guner dass/ Kino Dass	-	-	1,25,000
Khiner	10,00,000	2,58,750	1,25,000
Thak	10,00,000	2,58,750	1,25,000
Goner farm & bunr dass	10,00,000	2,81,175	1,25,000
Gais to shing nullah	10,00,000	2,58,750	1,25,000

Khanbari	10,00,000	2,58,750	1,25,00

Source: Deputy Commissioner Office Chilas

Theoretical Background

The main aim of the study is to determine the spending patterns of the cohorts, who acquire compensation in terms of money. We take 'Keynesians Absolute Income Hypothesis' or 'Human Psychological Law' as the theoretical foundation of the present research that states that "Men are disposed as a rule and on average to increase their consumption as their income increases, but not as much as the increase in their income."

In his book "The General Theory of Employment Interest and Money", in 1936, Keynes made three important conjectures. The first supposition he made was about the "marginal propensity to consume", which states that the change in consumption per unit of income lies between zero and one. Secondly, he posited that the "average propensity to consume" falls as income increases which are the ratio of consumption to income. His third proposition suggested that the short-run interest rate doesn't have a significant impact on the consumptive behavior of the individuals.

Applying the Keynesian hypothesis in our case suggests that the compensation money received by individual households compels them to raise their consumption as it augments their disposable income. It should be noted here that data on savings is not available in our case and we do not analyze the MPC and APC to keep the analysis simple and just to avoid the complexity. Making the Keynesian consumption as a baseline the econometric models are discussed in the empirical strategy section.

Data and Methodology

Selected Valleys

The selected valleys in the study area include Goner Faram, Chilas, Goherabad, Gini, Thalpan, Thak (teacher), Thor, Gais, and Buner Das.

Data Type

The research work relied on the primary source of data and out the total compensated households 192 households are interviewed through structured questionnaires. The data obtained is of the cross-sectional nature.

Sampling Procedure

The types of data we encounter require a non-probability sampling technique. It is because not every household in the sample does have the probability of receiving the compensation money. Therefore, we conduct purposive sampling to interview only those household heads who receive either communal or private land compensation in the affected nine valleys.

Econometric Models

We consider four different models in total. The first two models don't take the 'Demonstration Effect" into consideration. The first model also includes a variable on communal compensation/royalty (CC) while the second model includes a variable on land compensation (LC) as presented in equations 1 and 2.

$$SP=\alpha+\alpha_1(CC)+\alpha_2(HI)+\alpha_3(A)+\alpha_4(FS)+\alpha_5(EL)+\alpha_6(DFC) \rightarrow (1)$$

$$SP=\alpha+\alpha_1(LC)+\alpha_2(HI)+\alpha_3(A)+\alpha_4(FS)+\alpha_5(EL)+\alpha_6(DFC). \rightarrow (2)$$

Now in the subsequent models we include the demonstration effect measures as presented in equation 3 and 4.

$$SP= \alpha+\alpha_1 (HI) +\alpha_2 (CC) +\alpha_3 (A) +\alpha_4 (FS) +\alpha_5 (EL) +\alpha_6 (DFC) +\alpha_7 (CIEDNPB) +\alpha_8 (CIEOPG) +\mu \rightarrow (3)$$

$$SP= \alpha+\alpha_1 (HI) +\alpha_2 (LC) +\alpha_3 (A) +\alpha_4 (FS) +\alpha_5 (EL) +\alpha_6 (DFC) +\alpha_7 (CIEDNPB) +\alpha_8 (CIEOPG) +\mu \rightarrow (4)$$

Where:

SP= Log of Aggregate Spending Patterns

Spending Patterns are calculated by taking the difference of pre-compensation spending and post-compensation spending on a set of goods both durable and non-durable as specified in the questionnaire.

α= intercept coefficient
HI=Log of Total Household Income
CC= Log of Communal Compensation/Royalty
LC=Log of Private Land Compensation
A= Assets (Total land in Kanals possessed by each household head)
FS= Family Size (Total number of members in the household)
EL= Education Level
Average Education Level of the Household
DFC= Distance from District's Capital (Chilas)
CIEDNPB= Compensation induced expenditures due to neighbors purchasing behavior
CIEOPG= Compensation induced expenditures on Positional Goods.
Variables from α_1 to α_8 are the slope coefficients.
μ= error term

Apparently, the variables household income, compensated income, wealth status, family size, and education level all have a positive impact on consumption behavior. The last two variables are the demonstration effect measures, which considers the changes in spending patterns that can be attributed to neighbors' influence. Likewise, Compensation induced expenditures (CIEOP) on positional goods relates positively with spending. Interestingly the variable distance from capital in terms of communal compensation relates negatively with aggregate spending while the same variable in terms of land compensation relates positively with spending. The variable CIEDNPB (Compensation induced expenditures due to neighbors purchasing behavior) appears to have a negative relationship with aggregate spending.

Results and Discussions

In Table 5 we have presented the regression results for the four models. Column 1 shows the results for model 1 while column 2 shows results for model 2, column 3 shows results of model 3 and the last column shows results for model 4.

In Model 1, the coefficient of log household income is 0.184, which is statistically significant at a p-value of 0.025. This reflects that household income has positive but weaker significant impact on log of aggregate spending. One unit increase in household income increases the aggregate spending by 0.18 on average provided the other things remain constant. The coefficient of log of communal compensation is .0299 with t- value 1.29 and p-value 0.198, which reveals that log of communal compensation, has insignificant positive impact on log aggregate spending. For every additional unit of log communal compensation, the log aggregate spending should increase by 0.03 on average holding all other variables constant. This variable is insignificant because the communal compensation is quite small in amount as compared to the land compensation and not all households receive communal compensation. It is received only by the indigenous residents of the respective village. Moreover, it is based on the number of family members. Larger the family members larger will be communal compensation. The coefficient of total land is .0083 with t-value 3.00 and p-value 0.003 having a significant positive impact on log of aggregate spending. For every I unit increase in total land holding, the log aggregate spending increase by .0083 on average holding all other variables constant. The coefficient of family size has significant positive impact on aggregate spending with p-value 0.006 so it reveals that for every 1-member increase in family size, the aggregate spending increases by 0.03 on average holding all other variables constant. Larger the family, larger will be the spending. The coefficient of educational level has significant positive impact on log aggregate spending with p-value 0.013 and for every additional education level, the expected log aggregate spending will rise by 0.234 on average holding all other variables constant. The next is the coefficient of distance from capital (Chilas) which has significant negative impact on aggregate spending. For every, 1 unit rise in the distance from capital, the expected log aggregate spending will decrease by 0.03084, holding all other variables constant.

In the second column of Table 5, we see that except for the distance from capital all other variables turn out to be statistically significant. One important difference between the 1st and the 2nd column is the nature of compensation is different in both cases. The results suggest that as the compensation money increases (because

here we use land compensation and land compensation is higher as compared to the previous communal compensation), the distance from capital becomes less important for the household. The variable log of land compensation highly significant in this case. Another important point is that the variable of educational level is more significant here in this 2nd model. This suggests that an individual's education matters if they receive more compensation money. Also, higher level of education leads to higher spending. The coefficient of family size is weakly significant with a confidence interval of $p<0.05$ in the 2nd model when we include land compensation. This result is in contrast to model 1 that shows that family size matters a lot if they receive communal compensation. It's possible that large households get higher communal compensation.

Table 5. OLS Regressions Dependent Variable Aggregate Spending (Log)

	(Model1)	(Model2)	(Model3)	(Model4)
Income (Log)	0.184*	0.154*	0.0399	0.0421
	(-2.26)	(-2.04)	(-0.54)	(-0.59)
Communal Land (Log)	0.0299		0.0188	
	(-1.29)		(-0.92)	
Total Land	0.00829**	0.00683**	0.00501*	0.00455
	(-3)	(-2.68)	(-2.04)	(-1.94)
Family Members	0.0333**	0.0240*	0.0164	0.0128
	(-2.77)	(-2.15)	(-1.52)	(-1.24)
Education	0.234*	0.227**	0.170*	0.176*
	(-2.51)	(-2.68)	(-2.08)	(-2.27)
Distance	-0.0308**	0.00247	-0.0159	0.00405
	(-2.93)	(-0.250	(-1.69)	(-0.45)
Private Land (Log)		0.146***		0.0967***
		(-5.7)		(-3.97)
Neighbors Effects (Log)			-0.504	-0.419
			(-1.87)	(-1.62)
Positional Goods Effect (Log)			0.280***	0.238***
			(-6.68)	(-5.7)
Constant	12.14***	10.29***	11.25***	10.13***
	(-14.24)	(-12.01)	(-10.54)	(-9.54)
N	192	192	192	192

t statistics in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Model 3 is different from the previous two models in the sense that it contains the variable that measures the 'demonstration effect'. Column 3 of Table 5 shows that all variables except (landholding, education and postpositional goods) are insignificant. It is because in this model we are taking the communal compensation as the explanatory variable on one hand and on the other hand we introduce the demonstration effect measuring variables into the model, so this as mentioned earlier in the previous interpretation that communal compensation is small amount as compared to land compensation and household income the larger families who receive a bulk of communal compensation money would divert this entire money on purchasing the positional goods which are highly significant would spend on positional goods such as luxurious home, car and expensive clothing just to maintain their relative position in the society. The coefficient of land is significant with $p<0.05$ and if land holding increases by one unit then the aggregate spending would also go up by 0.00501 keeping other things constant. Larger the landholding of the households larger will be their spending level. Family size is insignificant here having a negligible impact on aggregate spending. Education has a significant positive impact on aggregate spending higher the education level higher will be the aggregate spending.

The coefficient of compensation induced expenditures due to neighbors purchasing behavior is insignificant and has an insignificant negative impact on aggregate spending it is because only few of the households think that after receiving compensation neighbors purchasing behavior will induce or influence them to purchase luxury items like house or a car. Negative relationship depicts that if the more people base their expenditures on neighbors purchasing behavior the less will be its impact on aggregate spending that is aggregate spending will reduce.

The final model 4 is similar to model-3 except that now we include the variable on land compensation and exclude the variable for communal compensation. If we look at column 4 of Table 5, variables on private land compensation and log postpositional goods are highly significant along with education which is weakly significant, and the remaining variables are insignificant. The coefficient of household income is insignificant and does not have any impact on aggregate spending because the income of each household is relatively small and can only fulfill the subsistence needs of households. The landholding is also insignificant and does not have any impact on aggregate spending similarly family size does not matter because the households divert their entire compensation income on positional goods to maintain their relative position in the society. When it comes to positional goods, households are indifferent to their family size, distance, income, and landholding. An important observation is that the private land compensation received by households is quite a huge amount and increases households' income considerably, which in turn induces the households with low income to spend more on positional goods paralleling the spending patterns of high-income households. And therefore, the private land compensation induces households to depict demonstration effect in their consumption pattern irrespective of family size, distance, income, and landholding.

Another thing that can be seen in their spending behavior is that when it comes to private land compensation, the distance from capital correlated positively. The variable of compensation induced expenditures due to neighbors purchasing behavior again shows a negative relationship and is insignificant. We conclude that neighbors spending habits do not influence the compensated households in their purchasing decisions. The coefficient of land compensation is highly significant and higher the land compensation higher will be the aggregate spending.

Conclusion

This study examined the spending behaviors of 'Compensated Displaced Households' (CDHs). We take the case study of Diamer-Basha Dam located in the Diamer District of Gilgit-Baltistan province. Along with studying consumption behaviors, the research examines two, 'demonstration effects'. One is about the influence of neighbors purchasing patterns on households under study and the other effect is about expenditures on luxurious goods---the positional goods.

The study was carried out by collecting data for a sample of 192 households from nine different villages of district Diamer. Keynesian consumption function provides the theoretical foundation and leads us to construct our hypothesis that the compensation money acquired by the households would add up to their current income, their disposable income will go up, which in turn induces them to raise their aggregate spending on different goods and services.

The findings suggest that in the case of households receiving communal compensation, distance from capital matters that is larger the distance from the capital, lower will be the aggregate spending. Likewise, when the private land compensation is concerned households spending behavior remains indifferent towards the distance although the relationship is still positive. The findings also show a positive relationship between education level and patterns of spending. Again, there is positive relationship between positional goods and spending patterns.

Furthermore, the households increase their expenditures on healthcare and durables after receiving the compensation money. The reason is that healthcare turns out to be a normal good after the increase in their disposable income. Same is the logic in case of durable goods, some of the durable goods like electricity generators and washing machines become normal goods for the households after getting compensation. It is also observed in the data that the average educational expenditures would reduce, this indicates that education appears as inferior good according to the households' preferences after getting compensation. This is also a reflection of

the overall preferences in the study area, which is in a vulnerable state when it comes to education. Raising awareness about the importance of education still remains a challenge for governments.

The average expenditure on recreational and entertainment services shows a significant rise after receiving the compensation money. Post compensation investment spending also goes up on average. Our descriptive statistics reflect households invested the compensation on investments such as dry fruit business, construction, and timber-related entrepreneurial activities. There were investments in purchasing land in urban settlements. This trend has led to high land and property prices Gilgit city.

We recommend further research work on land expropriation and resettlement issues which is imposing an indirect social cost on the displaced households.

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