# The Role of Environmental Amenities in Determining Housing Prices, a Hedonic Price Analysis



### **Department of Environmental Economics**

Study Researcher	Atif Naheem Khan
Supervisor	Dr. Iftikhar Ahmad

Enumerator's Name	
Date of Interview	

Study Area	Mirpur City, AJK
Sector	
Questionnaire No.	

Pakistan Institute of Development Economics, Islamabad

# The Role of Environmental Amenities in Determining Housing Prices, a Hedonic Price Analysis

#### <u>Survey Questionnaire:</u>

This survey is being conducted as part of an M Phil degree at the Department of Environmental Economics at PIDE, Islamabad and is mainly concerned with the Environmental Valuation in your locality. The following questions are thus purely for academic purposes and mainly concerned with household perception about the environmental quality, living standards and its impact on housing demand and resultantly on housing prices. Your input is highly valued and I will be grateful if you could please take few minutes out to express your views in this regard. This information and identity of respondent will be kept confidential. The information will only be used for this research and not for any other purpose. Your cooperation is highly appreciated.

Enumerators Only	Date:
Area Name:	
Enumerator name:	
Address:	
A. Structural in	formation of House

#### 1a. Do you own the house you are living in? Yes No (>> 1c) 1b. If yes, How much rent you will get If you rent it out (in R.s/month)? 1c. If no, how much you are willing to pay to get house like it (in Rs. /month)?? 2a. When did you purchase this house? 2b. What price did you pay for it? 2c. What would be the market price of this house? 3. What is the plot size in (Marla)? 4. Type of house (main structure/rooms etc.)? 3. 1. 2. Other Kucha Semi Pukka Pukka

5. How many floors in your house?	1.One	2. Two	3.Three	4.Four or>	
5a. Is there a kitchen available at each floor?	Yes		No		
5b. Total number of kitchens in your house?	1.One	2. Two	3.Three	4. > three	
6. Total number of rooms in your house?	1. Two	2. Three	3. Four	4. five or >	
7. Basement?	Yes	•	No		
8a. Total number of bathrooms in house?	1.One	2. Two	3.Three	4.Four	
				or >	
8b. Attached bathroom with each room?	Yes	•	No		
9. Garage is present?	Yes		No		
10. Open space/Lawn is present within the	Yes		No		
boundary?					
11a. Age of house (in years)?					
11b. Would you like to sale it out or shift from	Yes		No (>>12a)		
here in near future (about in one year)?					
11c. If yes, then what would be reason for it?			•		
12a. Is there any special facility available at your	Yes		No (>>13)		
house which is not usually common in other					
houses (like Swimming pool)?					
12b. If yes, please specify			•		
13. Corner plot?	Yes No				
14. Exterior of house?	Simple		Fancy		

## B. Accessibility information of House

15a. What are the	1.	2.		3.		4.	5.	6.
available sources of water in the locality?	Fetch	Fetch		Govern	nmei	nt Private	Pump/	Other specify
water in the locality.	from	from outside		water		water	Motor	
	Spring/	(Govt.		tap		tap	(tank)	
	Streams/	/Private) tank						
	Ponds	tank						
15b. Water availability in	1. Poor	2. Fair	3.	Good		4. Very	5. Excelle	ent
your house?						Good		
15c. No of hours water is	/2	4 hours				-		
available?								
15d. You are receiving	1.	2.	3.			4.	5.	
Water on?	Daily	Twice a	Tł	nrice a		Once in	Other spe	ecify
	basis	week	week			a month		
16a. Any open sewages	Yes	Yes			No			
around your house?								
16b. In order to convert	Yes (>> 2	16c)			No	(>> 16b)		
the open sewages into								
underground sewage								
system around your								
house, would you be								
willing to pay Rs. 100/								
month								
16c. If yes, would you be	Yes (>>	16d)			No			
willing to pay a even more								
in order to convert the								
open sewerages into								
underground sewage								
system around your								
house, like Rs. 200/ month								

16d. What is your							
maximum/minimum	Rs.	/ <b>m</b>	onth				
Willingness to pay for							
underground sewage							
system around your							
house?							
17. Streets around your	1. Poor	2. F	air	3. Good	d	4. Very	5.Excellent
house?						Good	
18. Telecommunication	1. Poor	2. F	air	3. Good	d	4. Very	5.Excellent
facilities in your locality?						Good	
19. Sui gas is available in	Yes				No		
your area?							
20a. Public transport is	Yes (>> )	20b)			No		
available in your area?							
20b. Common mode of	1.		2.		3.		4.
public transportation in	Van	n Bus		Rickshaw		Other specify	
your area?							
20c. What is the walking	1. <1 Km	Km 2. I Km		3. 2 Km		4.Other specify	
distance of public							
transport from your							
house?							
21a. Availability of	Yes (>> 2	21b)			No		
educational institutions in							
your area?							
21b. Majority of the	1.				2.		
institutions in your area?	Public				Priv	ate	
21c. Distance of	1. <one k<="" th=""><th>Cm</th><th>2. one Km</th><th>1</th><th>3. tv</th><th>wo Km</th><th>4.Other specify</th></one>	Cm	2. one Km	1	3. tv	wo Km	4.Other specify
educational institutions							
from your house (in Km)?							

22a. Availability of	Yes (>> 23b)		No		
hospitals in your area?					
22b. Majority of hospitals	1.Public		2.Private		
in your area?					
22c. Distance of hospital	1. <one km<="" th=""><th>2. one Km</th><th>3. two Km</th><th>4.Other specify</th></one>	2. one Km	3. two Km	4.Other specify	
from your house (in km)?					
22d. Availability of small	Yes		No		
retailer shops near your					
house?					
23a. Distance of shopping	1. <one km<="" th=""><th>2. one Km</th><th>3. two Km</th><th>4.Other specify</th></one>	2. one Km	3. two Km	4.Other specify	
Centre from your house (in					
Km)?					
23b. Services provided by	Yes (>> 24a)		No		
shopping centers are					
satisfactory?					
24a. Do you recommend	Yes		No		
other to purchase house in					
your locality?					
24b. If yes, Why/? If not,			•		
Why?					

## C. Environmental quality information of House

25. Main windows facing sun light?	Yes	No
26a. Visibility of Mangla lake from your	Yes	No
house?		
26b. Distance of Mangla lake from your		
house (in Km)?		

26c. Your visit to Mangla lake?	1.	2.	3.	4.	
	Daily	Weekly	Monthly	otl	ner specify
	basis	basis	Basis		
27a. Any open space/park available around	Yes		No	<u> </u>	
your house?					
27b. How people use this?	1. recreation 2. waste disposal				
28. Any Waste disposal site located near your					
house?	Yes		No		
29a. Any industry operating near your house?	Yes (>> 29b)	)	No		
29b. If yes, Type of industry?					
29c. Do you think industries have negative					
impact (due to pollution) on housing prices in	Yes (>> 29d)	)	No		
your area?					
29d. Major type of externalities caused by the	1. Air	2. Noise	3.		4.Other
industries?	pollution	pollution	Sanitation		specify
			Problem		
30a. Availability of public parks in your	Yes (>> 30b)	)	No		
locality?					
30b. Distance of public parks from your house	1.	2.	3. 4.		
(in km)?	<1 Km	I Km	2 Km Otl		ther specify
30c. Are you satisfied with the aesthetical	Yes (>> 30d)	)	No		
services provided by parks?					
30d. How frequently you visit parks?	1.	2.	3.	4.	
	Daily	Weekly	Monthly oth		her specify
	Basis basis		basis		
31a. Tree plantation in your streets?	Yes (>> 31b) No				
31b. How much they charge from you for single					
tree (in Rs)?					

32a. How would you rank the environmental	1.	2.	3.	4. Very	5.
quality of the area you are living in?	Poor	Fair	Good	Good	Excellent
32b. Better environmental quality leads to?					

# D. Additional Information about Drinking Water

33a. Are you satisfied with the	Yes		No (>> 33b)			
available drinking water quality?						
If yes, skip the rest of questions otherw	vise proce	ed to Q 73				
33b. Which is the major issue in	1.	2.	3.	4.		
drinking water?	Taste Appearance		Smell	Other specify		
33c. Has any member of HH suffered	Yes	<b>-</b>	No	<b>-</b>		
from water born disease in the last						
two months?						
33d. Which option you exercise at	1. 2.		3.	4.	5. Other specify	
home to avert bad quality of the	Boring	Bottle	Filter	Fetching		
available drinking water?	water					
33e. What is the monthly cost that			1			
you bear to avoid the bad quality of	Rs	/month				
drinking water at home?						
33f. If you are provided with regu	lar Yes	(>> 33g)	No	) (>> 33h)		
supply with sufficient pressure, and	supply with sufficient pressure, and the					
water will be of good quality, pota	ble					
without boiling or any other treatment						
24 hrs a day, would you be willing to p	oay					
Rs. 200 per month?						

33g. If yes, would you be willing to pay	Yes (>> 33h)	No
Rs. 400 per month for the given better		
quality of water?		
33h. What is your maximum/minimum		
Willingness to pay for the said better	Rs. / month	
quality of drinking water?		

## E. Household information

34a. Name of the respondent	Code for Q 40c & 41.
34b. Respondent Gender: Female/Male	01=Under-primary
34c. Age of respondent (in years)	02=Primary 03=Middle
35. Are you the head of the household?	04=Metric
36a. Name of the head of the household?	05=F.A 06=BA
36b. Household Head's Gender: Female/male	07=MA
36c. Education of Household Head?	08=Degree in Law 09=M. Phil. Ph.D.
36d. Age of Household Head's (in years)?	10=Metric + PTC
37. Highest education within the HH members	11=FA +CT 12=BA + B. Ed.
38a. Total household members?	13=others (specify)
	••••••
38b. Number of household's members those are of age below 1 year	
38c. Number of household's members those are of	
age 1-5 years	
38d. Number of household's members those are of	
age 6-14 years	
38e. Number of households members those are	
above age 14 years	
39. Total Monthly income?	
40. Remittances received per month?	

41. Occupation?	
42. Land Holdings other than this house?	

#### 43. Your house expenditure on the following:

	Items	Amount spent per month (Rs.)
43a	Food, Drinks and Tobacco	
43b	House Rent	
43c	Health and Education	
43d	Transport and communication	
43e	Recreation and Entertainment	
43f	Utility Bills (Electricity, Gas, Water)	
43g	All Taxes	
	Total per month	

### THE END