

Appendix A – Community Details

Communities in Bangkok

Community 1: geographically distinct section of famous Klong Toey slum located on a huge swath of land surrounding the Port of Thailand. The area has a large number of neighborhood-based NGOs including the Duang Prateep Foundation (founded by a Magsaysay Prize recipient living in the community) working to improve the physical conditions and community residents.

Community 2 (Ruam Samakkhi): located in a newly (last five years) urbanized section of inner Bangkok, along a small very contaminated klong (or canal). The entire community sits about six feet above the surface of a canal, a position that is maintained through the use of concrete stilts; brackish water sits below the housing structures, emanating odors into and around dwellings.

Community 3 (Trak Tan): located outside of central Bangkok in the adjoining province of Samut Prakan but the area around Trak Nan is entirely urban. Most of the land is owned by a variety of entities including a nearby Buddhist temple and private landlords but wealthy households have begun to build large, impressive homes in the midst of the crowded lanes. Solid waste is a major issue and garbage is everywhere; rats appear to be the most aggressive, problematic form of vermin in this community. This community is the wealthiest slum and has the largest average household size of all five slums.

Community 4: located on the north and south of a major road (soi) running through downtown Bangkok. The housing stock is particularly poor in quality, and mostly composed of wood. Standing water and garbage is clearly common beneath the houses. The community's central location in Bangkok means that the value of real estate is quite high, therefore, the likelihood of eviction seems greater than at the other four locations.

Community 5 (Sin Samut/Prachatipat): located in suburban Pathum Thani province. Residents are dispersed in an almost rural environment along the banks of a large klong full of plants and animals. Within the slum there are at least two distinct areas, differentiated by age and land ownership although both groups are very poor and earn significantly less than households from the other four settlements. The first settlement, which resides upon land owned by the Irrigation Department, is about 20 years old. The second settlement, existing for around thirty years, occupies land that was recently transferred from a member of the royal family to an insurance company. Both communities are actively being threatened with eviction. Intervention on the part of the Department of the Interior has given slum members the opportunity to purchase property through their savings groups. They are in the process of trying to assemble the required down payment. Unfortunately, there is not enough space to accommodate all the households even if all of the members of both communities were interested in moving there. Specific households – those living on land owned by the Irrigation Department – have been given the option of moving to other sites owned by the Housing Authority. There is considerable resistance within the community to this second option, because the land is distant, the residents must pay for the land, and they would need to find jobs in the new

area, which would likely be difficult to do. In fact, a group has formed to resist attempts to move the community from along the edges of the canal.

Communities in Ho Chi Minh City

Community A (Tan Dinh): located in the central district (ancient Saigon) in a single triangular-shaped city block. The community is close to the Tan Dinh Market, a scene of much economic activity both day and night. Some residents have lived there since prior to the war but others (mostly recent migrants) live around the market without any permanent dwelling. The housing pattern is extremely dense; a mix of materials including plaster, brick, tile and cement with the occasional tin roof or siding. Quality of housing structures seems high (many consist of two stories) but conditions are extremely crowded with little floor area available per household. Despite high density, communal alleys and walkways are kept clean and most residents appear to have toilets/septic tanks as well as daily access to garbage collection.

Community B (District 2): bounded on one side by the Saigon River and on the others by rice fields, District 2 was recently rezoned by the City's People's Committee as urban land. The area remains relatively isolated and rural with no current access by car; work is underway on a highway that cuts through rice fields owned by community members that will allow quick passage into the city across the river. While most households are very poor rice farmers and own simple wooden homes with roofs made of palm fronds, some community members have sold land near the planned highway and are constructing very large, modern plastered houses. Public services within the community are quite limited, even for the wealthier households. Most houses have piped water and electricity but there few indoor toilets and garbage collection is unavailable. The community relies on public outdoor toilets that release waste into swampland; each household has a garbage pit in which to dispose of solid wastes.

Community C (District 8): located on one side of a small island that is formed by the meeting of three canals. Community uses a deteriorated wooden bridge to cross the canal; very poor housing conditions. The structures are predominantly one story and few improvements have been made to the wooden and corrugated tin exteriors. Community resembles Bangkok because it is very urban in character, dilapidated in terms of built structures, has narrow pathways, and borders a canal full of garbage. Interesting array of small industry, including an industrial laundry, cottage shoe production and a small open-air market where merchants sell goods under thatched umbrellas. Little garbage collection.

Community D: situated at the periphery in southwest Ho Chi Minh City in the portlands of the city where many migrants have moved to the city over different time periods. Streets and alleys are extremely old and narrow amid high-density warehouses. Appears homogeneous (primarily two stories high, plaster coated with many shared walls) with little evidence of any new construction. The People's Council suggested this slum because the basic infrastructure of the community is in terrible condition. There are two lively street markets located on either end of the community selling primarily processed and unprocessed foods, some of which are made and sold by women of the community. Many of the men from this community find more or less regular employment in the port or nearby harbor.

Community E (Taan Binh): situated in the northeast area of Ho Chi Minh City - a peripheral zone that until 8 years ago included agricultural land and activities. Most of the residents migrated from rural areas, and constructed their houses upon land that used to be a cemetery. There is great variety in housing styles and quality and differing access to piped water, electricity and drainage/sewage connections. Two canals flow through this community and, while regularly dredged, are full of garbage and black water. Area is urbanizing very quickly and is rapidly becoming very polluted. The causes of deterioration include construction of dwellings without adequate planning, lack of a drainage system, and the direct disposal of garbage into canals as well as the operation of small-scale industry (especially in terms of dust, smoke and chemical agents).

Appendix B – Experiment Instructions (Thailand)

Thank you for participating in our study today. There will be three parts to the study: exercise 1, exercise 2, and an interview. For your participation you will be paid. The amount you will get paid depends on the decisions you and everyone else make during the exercises. You will be paid an additional 20 baht (\$0.50 US) for the interview at the end of the study. The money to conduct this study has been provided by a social research institution in the United States.

Any decisions you make in the exercises or responses you give during the interview will be strictly confidential. We will never tell anyone your responses or choices. To assure your responses are confidential, we ask you to not speak to each other until the entire study is completed.

Instructions for Exercise 1

To understand exercise 1, think about how you allocate your time. You spend part of your time doing things that benefit you or your family only. You spend another part of your time doing things that help everyone in your community. For example, you spend part of your time doing things that only benefit you or your family and another part of your time doing things that benefit the entire community.

Specifically, you might spend part of your time hauling or purifying water for your family and you may spend part of your time cleaning or maintaining the community water supply which benefits everyone including you. Another example is that you spend part of your time working for pay or fixing your house. This activity only benefits your family. However, you might spend part of the time cleaning up the neighborhood which benefits everyone.

Exercise 1 is meant to be similar to this sort of situation where you must decide between doing something that benefits you only and something that benefits everyone in a group. There will be five decision making rounds. There are three other people in the group with you.

At the beginning of exercise 1 we will give you an envelope to keep your money in. Keep this envelope with you at all times. At the beginning of each round everyone in the group will be given 10, 5 Baht coins. Each person in the group will then decide how many of these 10 coins to allocate to a group project and how many to keep from himself or herself. Everyone in the group benefits equally from the money allocated to the group project, but only you benefit from the money you keep.

We have designed both exercises so that you can make your decisions privately and so that no one else will ever know your choices. One at a time, you will come to a private location with your envelope and your 10 coins. Once there, you will allocate as many coins as you want to the group project. You will keep the remaining coins and put them in your envelope.

When all four members of the group have decided how many of the 10 coins to allocate to the group project, we will add up all the money. When we know the total, we will double it. Each person will then receive an equal share of the doubled amount. To distribute the proceeds from the group project for the round each person, one at a time, will return to the private location. When you are at the private location we will show you a card. On this card we will write how much each person in the group allocated to the group project but you will not know how much any specific person allocated to the group project.

We will also give each of you your share of the group project. Put your share in your envelope; it is for you to keep. Each person receives an equal share of the doubled amount regardless of how much money he or she contributed to the group project.

Here is an example to illustrate how the exercise works. Each person decides how much to allocate to the group project privately, so you will not know what anyone else has decided when you make your choice. Imagine that on the first round everyone in your group, including you, allocate 5 coins to the group project. In total there are $5+5+5+5=20$ coins in the group project. This is equal to 100 Baht. We will double this amount which makes the total 200 Baht. Each of you then receives an equal share of the 200 Baht. We would give you each 50 Baht. At the end of round one you will have 50 Baht from the group project and 25 Baht that you kept. You will have a total of 75 Baht in your envelope.

To continue the example, now say that it is the second round. Everyone in the group receives another 10 coins at the beginning of the round. Imagine that this time you allocate no money to the group project. Imagine that the other three people in your group allocate 5 coins to the group project. In total there are $0+5+5+5=15$ coins in the group project. We double this amount which makes the total 30 coins or 150 Baht. Each person receives an equal share of the 150 Baht.

Because we will only use 5 Baht coins, we will always round up to the next highest number that can be divided by 4. 4 can not divide 30 evenly so we will round up to 32 coins or 160 Baht. This means you each would receive 8 coins or 40 Baht from the group project. At the end of round two you will have 40 Baht from the group project and 50 Baht that you kept. You will add another $40+50=90$ Baht to your envelope. In total you will have $75+90=165$ Baht in your envelope.

The rest of the group will also receive 40 Baht from the group project. In total, each of the other three group members will add $40+25=65$ Baht to their envelopes. They receive 40 Baht from the group project and have 25 Baht that they kept.

Let's continue the example for one more round. Everyone receives 10 coins at the start of the third round. Now say that you and two other players allocate everything to the group project and keep nothing. Say that the fourth group member allocates nothing to the group project. The group project will have a total of $0+10+10+10=30$ coins in it. We double this amount which makes the total 60 or 300 Baht. Each person receives an equal share of the 60 coins. Each person receives 15 coins or 75 Baht from the group project.

At the end of round three, you and the other two group members who allocated all 10 coins to the group project receive 15 coins from the group project. The fourth group member who kept all 10 coins adds the 10 coins she kept to the 15 coins she receives from the group project. In total she receives 25 coins or 125 Baht.

In total you have 75 from round 1 + 90 from round 2 + 75 from round 3 = 240 Baht in your envelope at the end of round 3.

This is only an example. You will play 5 rounds and each of you will decide, on your own, how to allocate the 50 Baht you start each round with. Any money in your envelope at the end of the fifth round is yours to keep.

It is important that you understand how the exercise works. Are there any questions about how the exercise will proceed?

Instructions for Exercise 2 (only to be handed out after exercise 1 has been completed)

Exercise 2 is very similar to exercise 1, but there will be one difference in the procedures. The first part of each decision making round will be exactly the same as exercise 1. There will be 5 decision making rounds and you will each receive 10, 5 Baht coins at the beginning of every round. You will each go to a private location and decide how much money to allocate to the group project and how much to keep. When everyone in the group has made this decision, we will calculate the total contribution. We will then double the total contribution. Each person will receive an equal share of the doubled amount.

The only difference between exercise 1 and exercise 2 happens when you return to the private location to receive your share of the group project. We will let you see the card that shows how much each person in the group allocated to the group project and we will give you your share of the group project as in exercise 1. However, exercise 2 is different because you will also be given the chance to send a message to the rest of your group.

If you give us 1 Baht you can send a message to the rest of the group. You may send this message if you are unhappy with how many slips of paper the other people in your group are allocating to the group project. The message will be this picture (show the picture that is below). When you see this picture, you know that one of the group members has spent 1 Baht to tell the rest of the group that she is unhappy with the number of slips that were contributed by the other group members.

-unhappy face-

We will display any messages at the beginning of the next decision making round. When you come to the private location to choose how much to allocate to the group project, you will see any messages sent from someone at the end of the previous round.

At most you will see four messages if everyone sent a message. Here is an example. Imagine at the end of round 6 you go to the private location to pick up your share of the group project and you see that everyone else in your group allocated more or less than you did to the group project. If you do not like this, you can spend 1 Baht to have the picture displayed at the beginning of the next round. When you go to the private location to decide how much to allocate to the group project during round 7, you, and everyone else in the group will see the picture that you spent money to display.

Anyone who decides to send this message will do so anonymously. Nobody will know who the person was that sent the message. After everyone has seen the messages, we will take them down. You will have to spend 1 Baht at the end of each round if you want to continue to send a message to the group.

This is only an example; you will make the decision to spend 1 Baht to send a message to the group.

The rest of exercise 2 is identical to exercise 1. After each group member receives her share of the group project and decides whether or not to send a message to the group, she will return to her seat. When everyone has made this decision the decision making round is finished.

Are there any questions about how the exercise will proceed?

12 Appendix C – Experiment Survey

Experiment Date:

Community:

Group Number:

Player Color:

Record the participant's sex.

Male or Female

1. What year were you born? 19_ _
2. How many years of schooling have you completed? _____ years
3. Does your family own its own house? Yes No No answer
1 0 -9
4. How many people are there in your household (including you)? _____
5. How long have you lived in this community? _____ years
6. When new people come to your community, do they mostly come from the same village or region or do they come from many different places? Same Different No answer
1 0 -9
7. Please tell me how much of a problem each of these issues is to you on a daily basis.
- | Issue | Not a problem | A small problem | A big problem | No Answer |
|------------------------------------|---------------|-----------------|---------------|-----------|
| a. Poor Health | 0 | 1 | 2 | -9 |
| b. Clean Water | 0 | 1 | 2 | -9 |
| c. Uncooperative Neighbors | 0 | 1 | 2 | -9 |
| d. Mosquitoes, Flies, Rats, Vermin | 0 | 1 | 2 | -9 |
| e. Garbage | 0 | 1 | 2 | -9 |
| f. other (specify) _____ | 0 | 1 | 2 | -9 |
8. Have you had a problem with one of your neighbors in the last year? Yes No No answer
1 0 -9
- 8a. [If yes] which one of the following describes how you reacted to your neighbor:
- 0 I ignored this person.
 - 1 I gave this person a critical look.
 - 2 I verbally expressed my dissatisfaction to this person.
 - 3 I threatened this person.
 - 4 Other (specify)
 - 9 No answer
9. Do you have piped water in your home? Yes No No answer
1 0 -9
10. Do you Boil or Filter your drinking water? Yes No No answer

11. Do you have a toilet in your house? 1 0 -9
Yes No No answer

1 0 -9

12. Does your community have any sort of garbage collection service? Yes No No answer

1 0 -9

13. How often have you been ill in the past year? Not at all Not Often Often No answer

0 1 2 -9

14. Please tell me the last time you suffered from the following illnesses.

Illness	Never	More than One Year	Within One Year	Within Six Months	Within One Month	No Answer
a. Gastroenteritis or Diarrhea	0	1	2	3	4	-9
b. Asthma or Breathing problems	0	1	2	3	4	-9
c. Malaria	0	1	2	3	4	-9
e. Other (specify) _____	0	1	2	3	4	-9

15. How much does your household spend on transportation each day? _____

16. How much does your household spend on food each day? _____

17. How much does your household spend on rent or mortgage each month? _____

18. How much does your household spend for entertainment, including drinking, and the legal (or black market) lotteries each month? _____

19. Tell me a little bit about yourself. Do you agree with or disagree with the following statements?

Statement	Agree	Neutral	Disagree	No Answer
a. It is better to cooperate than compete. (+)	1	0	-1	-9
b. People should listen to their conscience when making decisions. (+)	1	0	-1	-9
c. People should forgive others when they are angry. (+)	-1	0	1	-9
d. It is amusing to play tricks on other people. (-)	-1	0	1	-9
e. People should revenge wrongs that are done to them. (-)	-1	0	1	-9
f. Confrontations should be avoided. (+)	1	0	-1	-9

Note: These statements come from internationally validated personality scales on cooperation. They are available at http://ipip.ori.org/ipip/new_home.htm.

20. How often do you chat (talk informally) or spend time together with other people in your community?

- 1 A few times each week
- 2 A few times each month
- 3 A few times each year
- 4 Never
- 9 No answer

21. How do you describe your immediate neighbors?

- 1 Like Family
- 2 Like Friends
- 3 Like Strangers
- 9 No answer

22. In some communities, neighbors will work on projects to help everybody in the community (for example: community clean-ups, developing drainage systems, or building a community hall).

22a. Do you remember such a project happening in your community in the past year?

<u>Yes</u>	<u>No</u>	<u>No answer</u>
1	0	-9

If yes, ask:

22b. Did you or someone in your household participate in those activities?

<u>Yes</u>	<u>No</u>	<u>No answer</u>
1	0	-9

22c. What kind of project was this?

- 1 Building/repairing houses for neighbors
- 2 Building/repairing a road/walkway
- 3 Building/repairing a wastewater drainage system
- 4 Collecting trash/cleaning community
- 5 Other (please specify_____)
- 9 No answer