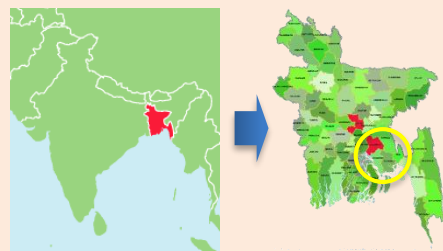


Bangladesh 農村地域における、 持続可能な住民参加型ゴミ処理システムの構築

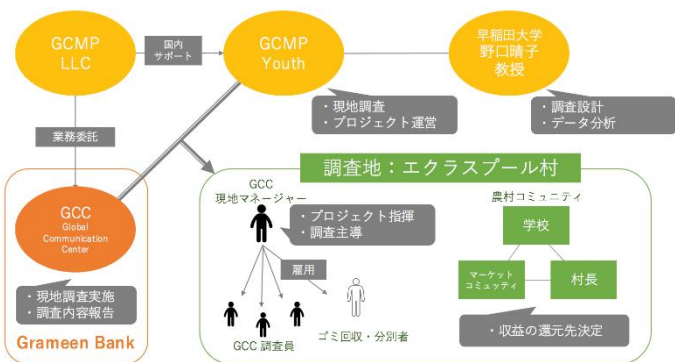
早稲田大学大学院政治学研究科教授 野口晴子
GCMP Youth / 合同会社GCMP



活動背景・目的

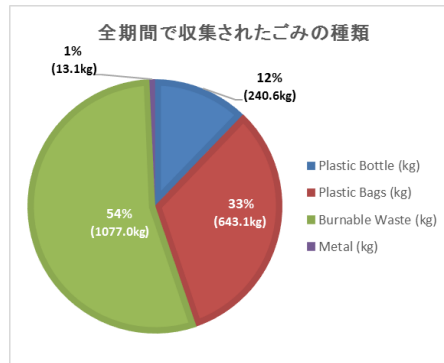
Bangladesh のエクラスプール村(チッタゴン管区、Chandpur)を拠点に、村民主体のゴミ処理システム構築が目的。ゴミ処理システムが確立していない Bangladesh の農村地域では、発展するにつれて土に還らないゴミが増え、問題が深刻化している。これらを解決すべく、持続可能で現地の住民が主体的に取り組めるモデルを実施している。

活動実施体制



パイロット プロジェクト

ゴミ処理システムの試験導入を、2016年2月からエクラスプール村2区の約100世帯をカバーする地域で開始し、その後2区・3区全域(653世帯)まで拡大した。ゴミの組成やゴミの種類ごとの換金価格に関する情報収集が概ね完了。一部のゴミ(色付きペットボトル、軟性プラスチックなど)についてはリサイクル先が Bangladesh 国内で確定しきれておらず、今後燃料利用などの可能性を調査していく。



ベースライン サーベイ4

ゴミ処理システムの導入の実効性を学術的・定量的に実証するため、ベースラインサーベイを実施した。現地パートナーの協力のもと、6人の調査員が分担して対象家庭を訪問する個別面接法により行なった。



調査の様子

調査対象 エクラスプール村3区(介入群)、ジャヒラバッド村1区(統制群)の各150世帯

調査内容 5つのセクションに分かれた全25問
◆セクション: ①世帯構成員の基本属性/②経済水準/③健康水準/④ソーシャルキャピタル/⑤環境・ゴミに関する行動様式・意識

Month	Plastic Bottle (kg)	Plastic Bags (kg)	Burnable Waste (kg)	Metal (kg)
February	10.4	29.9	40.8	2.9
March	12.3	25.5	57.9	0.9
April	7.4	17.9	41.4	0.5
May	14.0	24.3	37.9	0.8
June	9.2	17.9	25.7	0.0
July	9.7	18.7	24.1	0.0
August	9.8	27.1	35.0	0.0
September	14.7	24.9	44.0	0.0
October	12.8	27.5	50.8	0.0
November	16.2	34.6	62.8	0.0
December	16.2	53.4	113.3	8.0
January	15.5	70.6	96.5	0.0
February	22.8	64.5	95.1	0.0
March	33.8	100.6	158.8	0.0
April	29.0	86.8	156.0	0.0
May (~8th)	6.8	18.9	37.0	0.0
Total	240.6	643.1	1077.0	13.1

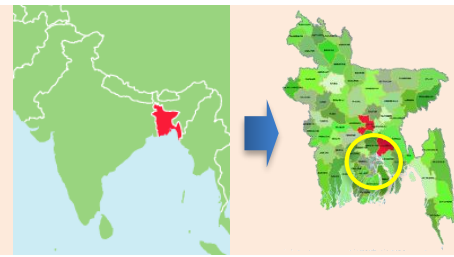
今後について

プロジェクトの拡大は予定していたよりも遅れているが、次の段階としてはランニングコストをカバーするため住民から少額のサービス利用料の徴収を計画している。2017年秋のエンドライン調査時に有料化を見据えたデータ収集も行い、早ければ2018年から有料化の導入を行う予定である。

ベースラインサーベイの結果、介入群と統制群は各セクションの回答に関して目立った違いはなく、比較調査の対象として適している事が分かった。今後クロス集計など、より詳細の分析を進めていく。

Establishing a Sustainable Garbage Disposal System with the Participation of Citizens in Farming Regions of Bangladesh

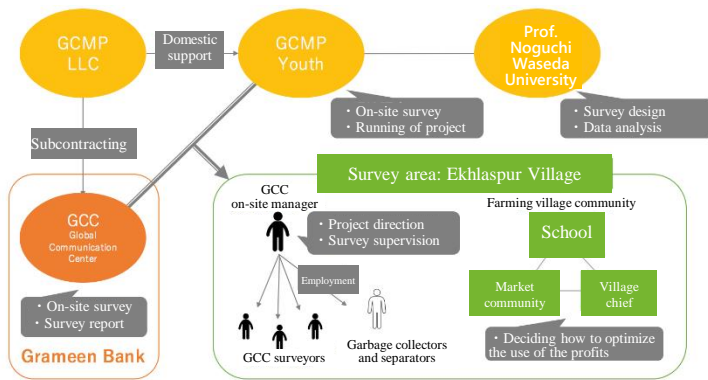
Professor Haruko Noguchi, (Graduate School of Political Science, Waseda University)
 GCMP Youth / GCMP, LLC / Global Communication Center(GCC) of Grameen Communications, Bangladesh



Background and Objective of the Activities

The objective is to establish a garbage disposal system run by village residents centered on Ekhlaspur Village (Chandpur Chittagong Division) of Bangladesh. In farming regions of Bangladesh, where there are no garbage disposal systems, the increase in non-biodegradable garbage is becoming a serious problem as the country develops. To resolve this problem, a sustainable model is being implemented centered on local residents.

Activity Implementation System



Pilot Project

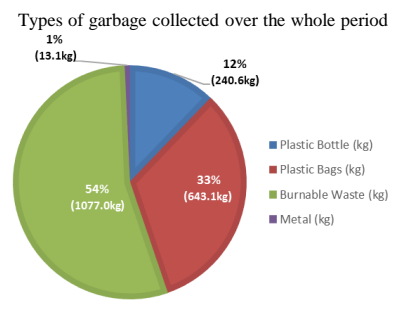
The trial introduction of a waste disposal system was launched in February 2016, covering approximately 100 households in District Two of Ekhlaspur Village. This was later expanded to cover all of Districts Two and Three (653 households). Collection of information on the composition of waste and the conversion value for each type of waste material has been largely completed. The recycling location for some of the waste (colored PET bottles, soft plastic, etc.) within Bangladesh has not yet been confirmed. Going forward, studies will be conducted on the possibility of using waste materials for fuel, etc.

Baseline Survey

A baseline survey was implemented to academically and quantitatively demonstrate the effectiveness of deploying a garbage disposal system. With the cooperation of local partners, targeted households were divided among six surveyors and visited for individual interviews.



A household being surveyed



Month	Plastic Bottle (kg)	Plastic Bags (kg)	Burnable Waste (kg)	Metal (kg)
February	10.4	29.9	40.8	2.9
March	12.3	25.5	57.9	0.9
April	7.4	17.9	41.4	0.5
May	14.0	24.3	37.9	0.8
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July	9.7	18.7	24.1	0.0
August	9.8	27.1	35.0	0.0
September	14.7	24.9	44.0	0.0
October	12.8	27.5	50.8	0.0
November	16.2	34.6	62.8	0.0
December	16.2	53.4	113.3	8.0
January	15.5	70.6	96.5	0.0
February	22.8	64.5	95.1	0.0
March	33.8	100.6	158.8	0.0
April	29.0	88.8	158.0	0.0
May (~8th)	6.8	18.9	37.0	0.0
Total	240.6	643.1	1077.0	13.1

Survey target

150 households in ward 3 of Ekhlaspur Village (intervention group) and 150 households in ward 1 of Jahirabad Village (control group)

Survey details

A total of 25 questions divided into five sections.
 ♦ Sections: (1) Family structure (2) Economic level (3) Level of health (4) Social capital (5) Behavioral patterns and attitudes toward the environment and garbage.

Future

As the expansion of the project was slower than initially scheduled, there are plans to collect a small fee for service usage from the residents in order to cover the running costs for the next phase. There are plans to collect data in anticipation of charging fees during the end-line survey in the autumn of 2017, and to introduce fees as early as 2018.

The results of the baseline survey showed no significant differences in the answers to the respective sections between the intervention group and the control group, and it was clear that the target was suitable for a comparative study. Going forward, there are plans to conduct more detailed analysis, including cross tabulation.