

Impact assessment of credit programme for the tenant farmers in Bangladesh



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3ie Delhi Evidence Week
7-8 October 2015

Impact assessment of credit programme for the tenant farmers in Bangladesh

IE funded by : International Initiative for Impact Evaluation (3ie)

Treatment component financed by : Bangladesh Bank

Treatment component implemented by : *Bargachashi Unnayan Prakalpa* (BCUP) under BRAC - AFSP-MF

IE conducted by : Agricultural Economics Research Unit of BRAC - RED

IE period : 2011-2015

IE lead by : Dr. Mohammad Abdul Malek

The Project

Borgachashi Unnayan Prakalpa (BCUP) was launched in 2009

Scaled up in 212 sub-districts of 46 districts (out of 64 districts)

Provided credit to about 2,91,000 tenant farmers (Female- 80%)

Features

- Mainly female targeted, VO based operation, monthly installment
- One month grace period, initially flat interest rate at 10%, (recently changed to 18% declining rate, whereas conventional MF charges 26%)
- Diversified credit products with customized repayment periods
Crop loan (1 yr); Agro-machineries (1-3 yrs); land leasing (1-3 yrs)
- Complementary extension services (however, no significant coverage)

BCUP is responsive to the changes in grassroots level demand
(relatively bottom – up or client centric approach)

Impact Evaluation of BCUP: Study Design

Study conducted

Impact assessment of credit programme for the tenant farmers in Bangladesh (2012 – 2014)

Rationale

This type of intervention was very new not only in Bangladesh but also in other developing countries

Research questions

What are the impacts of the programme on-

1. livelihood improvement of the participating tenant farmers;
2. impact on their farm productivity; and
3. food security and nutritional status

Impact Evaluation of BCUP: Study Design (cont.)

Research method

Mixed methods

Quantitative: Three-Stage Cluster Randomization Trial

Qualitative: Longitudinal-Qualitative survey

Analytical technique

Quantitative: Estimated ITT using DiD regression technique

(Checked robustness by controlling baseline characteristics and estimated impact heterogeneity)

Qualitative: Based on sustainable livelihood framework, qualitative data analysis involved an iterative process

Impact Evaluation of BCUP: Results

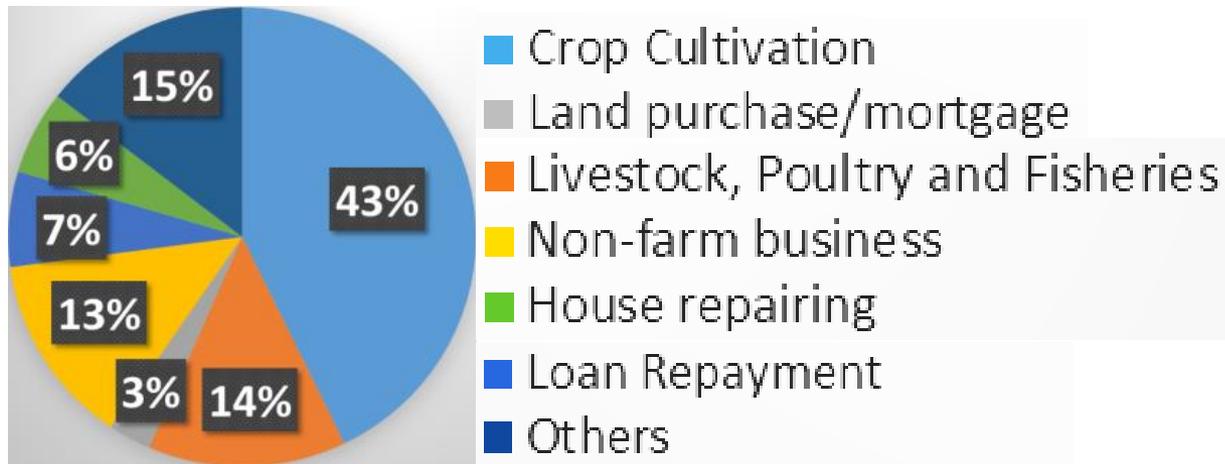
Impact on financial inclusion and extension services

Increased financial inclusion rate by 19.8%.

Access to extension/training increased only by 4%.

Credit utilization

Farmers diversely utilized the credit, which increased income source diversification (using descriptive statistics)



(about 60% of the credit used for agriculture)

Impact Evaluation of BCUP: Results (cont.)

Impact on livelihoods

- Access to cultivated [land](#) increased through cash intensive leased-in arrangement
- Gross value of rice production increased significantly
- Working capital increased in non-rice crop cultivation
- Investment on productive assets increased
- Household income from agriculture increased
- Shifted labor supply from wage earning to self-employment activities and catalyzed new businesses
- Self-reported incidences of food insecurity decreased (but insignificantly)

Impact Evaluation of BCUP: Results (cont.)

Women empowerment

Increased women's decision making power and time allocation for IGAs (based on qualitative data)

- Increased decision making power in land sell/purchase, crop cultivation, livestock rearing and children education
- Women extended their role not only in credit repayment but also in credit investment. Women time allocation for IGAs increased.
- The control of women over the way loans are invested challenges the assumption in earlier literatures on microcredit that **women borrow but men control** (e.g. Goetz and Gupta 1996).

Challenges dealt with

Study leadership changed

- In the middle of the study tenure the leadership was changed, which hampered coordination

Different identification strategies to select eligible tenant hhs

- RED and BCUP followed different questionnaire to select eligible participant resulted drop out a major part of the IE sample from programme benefits

Lower uptake or non-compliance rate

- In addition to the earlier point, several natural shocks happened during the initial stages of intervention made potential participants reluctant to participate in BCUP

Belated programme introduction in several areas

- Due to lower demand and supply side capacity constraints the introduction of BCUP was delayed and the study team replaced those areas

Challenges dealt with (cont.)

Political instability

- Political turmoil observed during the study period resulted market failure and lowered programme benefits to the participants

Integration of qualitative and quantitative data was challenging

Overwhelmed engagement of study team with dissemination [events](#)

- Study team was heavily engaged in organizing myriad number of dissemination events beside regular research activities. The engagement were overwhelmed to the team. However, the team successfully organized:

- four PAC meetings
- two national level seminar
- an international workshop
- a series of TV talk shows
- writing newspaper article
- prepared policy brief

Conclusions and Recommendations

It is interesting to note that without insufficient extension services, the impacts attributed by BCUP credit on tenant farmers' farm productivity and livelihood improvement seems to be instrumental. However, the programme could be transformative for the tenant farmers in the long-run if the following issues/recommendations are cautiously addressed:

- Scale up the BCUP
- Strengthen ESs by developing locality-based agriculture technology worker cum business promoter with special attention to the rural women
- Introduce crop/price insurance to minimize risks and incentivize agricultural production
- Build agro-processing centers and storages in grassroots level

Conclusions and Recommendations (cont.)

However, the net impact on household welfare, food security and nutritional outcomes is still ambiguous, thus, we highly recommend to revisit the sampled tenant hhs after four years (2016) of completion of the BCUP intervention. This is particularly important for scalability of such a targeted programme in Bangladesh and other developing countries.

Looking for funding to accomplish this important task

Relevance of IE to the BCUP management

- BRAC needs to ascertain the impact of the loans on socio-economic uplift of sharecroppers with a view to taking up future policy actions;
- To assess the scope and scale of impacts in such a way as to enhance assessments of programme performance and suggest recommendations for the future;
- Think whether a part of the loan could earmark for non-crop activities such as livestock, fisheries and agribusiness and mechanization;
- Test the methodology whether it is fulfill the credit demand of poor farmers and increase the financial inclusion rate specially for tenant farmers;
- Avoid adverse impacts and to ensure long term benefits led to the concept of financial sustainability

Lessons learnt from the IE

Most important lesson is that the intervention can improve livelihoods of the targeted population. There are some others as well:

- Specially targeted agriculture focused credit products/system increases financial inclusion rate
- Tenant farmers can cope with transitional land tenancy market and increase their access to land if compatible credit facilities are available
- Domains of credit demand are highly diversified
- Existing extension service delivery model is not efficient and need to modify as per the IE recommendation
- Credit demand increases for livestock and others productive assets
- Need to invest on farm mechanization, and
- BCUP is impactful to improve food security and women empowerment status in rural areas

Reflections of IE on BCUP-MF operation

The IE helped to improve BCUP-MF operation. The changes the management accommodated based on the IE findings are:

- Extension of the project period and plan to scale up nationally
- Pay special focus on providing more credit for land-lease, livestock, poultry and fisheries, and agricultural mechanizations
- Diversely design newer credit products to facilitate non rice, non/cash crop and high value crop cultivation (e.g. Beatle nut, Beatle leaf, Jute, Fruits and so on)
- Promote agro-businesses with special attention to develop female entrepreneurs
- Plan to modify the existing extension services, however, challenged by fund limitation

What could have been done differently

Evaluation of the BCUP extended the frontier of academic knowledge and helped to improve implementation strategies of the programme. However, there were some aspects that we could have been done differently:

- **From research perspective**, we could design the IE consisting of a different treatment arm for evaluating the impact of extension;
- **From operational perspective**; we could have been emphasized on monitoring to use the loan properly;
 - extended for farm mechanization, cash crop/non crop and livestock;
 - introduced agro insurances;
 - widen training and extension services.

Thank you

If you have any questions/queries, please email:
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Impact Evaluation of BCUP

Access to cultivated land increased through cash intensive leased-in arrangement

VARIABLES	(1) Own Cultivation	(2) Share-in	(3) Mortgage- in	(5) Leased- in	(6) others	(7) Total rented- in	(8) Total rented- out	(9) Total cultivated land
program*year	0.517 (2.518)	0.917 (2.417)	0.251 (1.535)	4.838* (2.857)	-0.172 (0.293)	5.835 (3.868)	-0.277 (1.041)	6.352 (5.077)
Program	-1.251 (3.221)	-5.372 (5.298)	-0.0532 (1.726)	5.490 (6.631)	0.223 (0.224)	0.288 (7.279)	0.593 (1.182)	-0.963 (9.159)
Year	-4.565** (1.911)	7.556*** (1.983)	1.053 (0.967)	-0.264 (1.625)	0.0619 (0.142)	-6.705** (2.827)	3.478*** (0.861)	-11.27*** (3.828)
Constant	38.71*** (2.345)	34.36*** (4.639)	9.057*** (1.226)	7.638** (2.907)	0.196* (0.102)	51.25*** (5.124)	7.657*** (0.951)	89.95*** (6.261)
Observations	8,282	8,282	8,282	8,282	8,282	8,282	8,282	8,282
R-squared	0.002	0.006	0.000	0.003	0.000	0.001	0.003	0.002

Source: BRAC sample survey (2012 and 2014) in Bangladesh

Notes:

- (1) Cluster-Robust (at the Branch level) standard errors in parentheses
- (2) *** p<0.01, ** p<0.05, * p<0.1

Dissemination events



National level seminar



PAC meeting



International workshop



TV talk show

We definitely want to review the study after three to four years.