## IMPACT OF SEASONAL CREDIT ON PRODUCTIVITY AND LIVELIHOOD IMPROVEMENT OF BENEFICIARIES

Shah Muhammad Ikhtiar Jahan Kabir &
Others
Research Cell of PKSF

**August 2012** 

Microfinance for Marginal and Small Farmers Project Palli Karma-Sahayak Foundation (PKSF)

## **Executive Summary**

The executive summary of the study includes a brief introduction about Sesonal Credit (SC) or Seasonal Loan under the Microfinance for Marginal and Small Farmers Project (MFMSFP), and objective, rationale, methodology, and major findings of the study alongside to what extent it may may be usefull where. First of all, it must be kept in mind that this study is not on the SC implemented by PKSF as a mainstream program, but on SC implemented under the MFMSFP.

To begin with the intoduction of the project, SC of Palli Karma-Sahayak Foundation (PKSF) under MFMSFP starts in July 2006. Till 2010-2011, a total of 35 Partner Organizations (POs) of PKSF disburse Tk 22465.27 lakh of SC under the project as its number of beneficiary households reaches 157706 in 113 sub-districts of 14 districts of middle and north of Bangladesh. The SC achieves remarkable growth in disbursement by reaching the target marginal and small farming households.

About its scope, it should be said, this study aims at seeing the diversified use of SC by the beneficiaries and its impact on their livelihood improvement through investigating productivity in the income generating activities (IGAs) financed by different microcredit programs.

One thing should be mentioned about scope of the study. The study is done under a Terms of Reference (ToR) written by a consultant. In consultation with the project authorities the study is done following that ToR alongside doing some additional works. However, the data remain the same. As per the written ToR, among others, the study specifically investigates the modalities of SC management in the POs, profitability of credits used in agriculture, presence of technical persons deployed for rendering agricultural extension services, consumption rate in crops, livestock and other enterprises, investment pattern, employment creation, impact on income and expenditure of families/ households taking SC and Rural Microcredit (RMC).

As per the verbal agreement with the project authorities, the additional works done include: juxtaposing the trend of receving credit and its use, investment, and impact on profitability and livelihood of the beneficiaries taking SC with those taking RMC. It is in conformity to the main theme of the study, which is to compare the impact of the two credits. Morever, it touches upon the demand-supply gap and multiple lending issues as without this the very rationale of bringing in dual credit into context ceases to be. Also, the study sees into the number of IGAs the households undertake and the number of IGAs where the beneficiaries use the credit. This is done to narrow down the scope of analysis in relation to profitability.

Having accomplished these tasks, the study recommends strategy for the relevant stakeholders.

In methodology the study uses quantitative as well as qualitative technique. For quantitative data, it administers a prescribed questionnaire at the household level and adopts Focus Group Discussion (FGD) and Key Informant Interview (KII) for qualitative information.

It surveys a total of 600 households. For this, it selects 300 households identified as taking SC. This study considers them as participants. It also surveys another 300 households identified as taking normal microcredit in RMC and AC. It considers these households as non-participants. Among the normal microcredit takers 165 are taking RMC, 126 AC and 9 Microcredit for the Ultra Poor. The present study confines its analysis to data from the households identified as taking SC and RMC. It also conducts 10 FGD sessions and 24 KIIs in the sample POs.

It uses a two-stage random sampling technique and as methods of analysis descriptive statistics consisting of mean, percentage and proportion. In order to show the effects of factors responsible for the use of SC by the beneficiaries it uses Tobit model and shows significance of relationship of variables through t-tests.

Before entering the core of the findings it is important to give some hints about the nature of the households. Among the households identified as taking SC 22.67 percent and 54.55 percent of the households taking RMC have cultivable lands upto 50 decimal. They generally are labeled as landless farmers. More than 67 percent SC taking households have 51-500 decimal cultivable lands while 44.24 percent of the households identified as taking RMC have lands of this range. As 10.00 percent of the households identified as taking SC have 500+ decimal cultibable lands, only 1.21 percent of the households identified as taking RMC have this amount of cultivable land.

The households identified as taking SC have an average of 216.59 decimal lands in agricultural operation, while the households identified as taking RMC have 114.53 decimal lands. The amount of lands in operations determines the size of an agricultural farm.

The households having inadequate agricultural lands of their own increase the lands in operations by resorting to various local arrangements, such as, rent, lease, mortgage, and sharecropping. This increase of lands in agricultural operations (farm) by the households identified as taking SC is 26.08 percent and that by the RMC taking households is 47.45 percent.

The average duration of membership in microcredit of the households identified as taking SC is 4.10 years and the average duration of membership of the households identified as taking RMC is 4.52 years.

Men represent 49.04 percent of the beneficiary households identified as taking SC and women the rest. Men represent 5.56 percent of the households identified as taking RMC while women the rest.

Seasonal Loan

3

Since inception the size of credits achieves a great growth in less than six years. The average ratio of growth of SC is 69.58:100. The growth of disbursement of SC by all POs is 24.61 percent in a three year period, 2008-2009 to 2010-2011, while this growth in the sample 12 POs is 16.01 percent.

Occupationally, the highest number of households irrespective of credit links are involved in agricultural activities, with a greater inclination of the households identified as taking SC to crop cultivation and livestock activities, while the RMC taking households' affiliation slightly tilts to non-crop agriculture, particularly livestock.

The households are involved in five types of borrowing: free of interest, microcredit, on interest other than microcredit, against collateral/mortgage, and in kinds. Microcredit is the most prominent among all sources of borrowing that covers 35.76 percent of total borrowing of the households taking SC and 44.18 percent of the households taking RMC.

Without segregation of credit types, the households identified as taking SC uses an average credit of Tk 15727, while the households identified as taking RMC uses a credit amount of Tk 12506.

Overall, size of SC is Tk 15823 and that of RMC is Tk 13674. The size increases and decreases in relation to households' borrowing pattern. The largest size of SC is found Tk 17000 while it is taken by of the households taking only SC and the lowest Tk 12583 while taken by the households involved in multiple borrowing. At the same time, the size of RMC becomes the largest Tk 115302 while it is taken by of the households identified as taking SC and again the lowest Tk 11636 while taken by the households involved in multiple borrowing.

The size of SC is greater than that of RMC in all aspects excepting while taken by the households involved in multiple lending.

Delivery mechanism or fund management in different types of credit in many ways influence credit supply. The gap in demand and supply in SC is 20.16 percent while that in RMC is 14.08 percent.

On an average 47.14 percent of SCs and 45.10 percent of RMCs are being rationed. The operation principles of the MFIs are responsible for the highest 22.22 percent rationing of SC. The highest 20.26 percent RMCs are being rationed by the MFIs through promise of giving a higher amount in future.

While rationing of SC the MFIs let 43.77 percent beneficiaries know reasons for rationing. While rationing RMC the MFIs let 39.87 percent beneficiaries know the reasons.

Dual credit, a system inserted in SC to minimize the demand-supply gap and multiple borrowing, proves to be effective in minimizing the latter. Its role in bridging the gap is found limited. As 54.33 percent of the households identified as taking SC take dual credit while 26.67 percent households identified as taking RMC

have double/ dual credit. A very low 4.0 of the households identified as taking SC while 19.39 percent of the RMC are involved in multiple borrowing.

Average duration for full repayment of SC is 5.64 months. Qualitative information reveals, a good number of beneficiaries prefers a longer duration for full repayment of SC.

More than 90 percent of the SCs are on one-shot repayment mode while 9.62 percent on weekly mode. A vast 81.95 percent of the recipients are content with the existing one-shot while 16.54 percent prefer weekly and a minuscule 1.51 percent monthly repayment mode.

There is no default in credit repayment, but advance payment in SC. The operational principles of MFIs are responsible for this advance payment in most cases.

Before going to discuss use of credit in IGAs and profitability in them it is good to know the notion of households' undertaking of different IGAs. Overall, the households undertake 3.27 IGAs on an average, with the highest number of 3.75 IGAs undertakne by the households involved in multiple borrowing followed by 3.26 IGAs of the households taking only RMC and 3.04 IGAs of the households taking only SC. The households taking dual credit undertake the lowest number of 3.03 IGAs on an average.

Overall, the households use credit in 2.08 IGAs. The multiple credit households use a credit in the highest number of 2.61 IGAs, followed by 2.33 IGAs of the households taking dual credit and 2.06 IGAs by the households taking only SC. The households taking only RMC use credit in the lowest number of 1.28 IGAs.

Of the total SC amount 77.88 percent is received in crop agriculture, 10.68 percent in livestock and 9.15 percent in business. Of RMC, 40.81 percent is received in crop agiculture, 36.00 percent in livestock and 9.40 percent in business.

Agriculture is also the main area of using credit. More than 70 percent of SC is used in crop activities, 13.28 percent in livestock and 3.59 percent in business, whereas 40.34 percent of RMC amount is used in crop, 14.54 percent in livestock and 7.27 percent in business activities.

A good amount of the credit received is used in areas not mentioned as purpose of taking it. The households divert 6.77 percent of the total SC amount received to meet their household consumption needs, 1.03 percent for leasing of cultivable lands, and 1.00 percent for repayment of credit. Of the RMC amount, 8.79 percent is used for meeting household consumption, 9.60 percent for leasing lands and 2.58 percent for repayment of credit.

The study digs out share of microcredit in investment. In Boro production, the share of SC in investment is 30.88 percent as that of RMC is 21.20 percent. In Aman the share of SC is 42.38 percent of investment to 41.91 percent of RMC. In

Seasonal Loan

5

potato the share of SC in investment is 37.20 percent to 37.35 of RMC. In beef fattening, the share of SC is 45.01 percent in investment to 42.03 percent of RMC and in cow rearing the share of SC in investment is 36.18 percent while that of RMC is 32.63 percent.

Although the households under investigation undertake several IGAs and also uses credit in more than one IGA, this study investigates cost, productivity and profitability of only one IGA a household undertake in a farm in a season.

The study finds an advantage of the farmers taking SC in profitability while producing Boro, the main food-supplying crop of the country, with 0.77 percent net profit. The farmers taking RMC gain a net profit of 0.35 percent in Boro. In Aman, the farmers taking RMC have a slight better profit of 18.30 percent to 17.40 percent profit of the farmers taking SC. In potato though both type of the farmers incur loss but those taking SC incur a smaller loss of (-) 13.45 percent as the loss of (-) 14.71 percent is incurred by the RMC taking farmers.

Grain yield per hector of land is Kg 6775.21 in Boro, Kg 4248.40 in Aman, and Kg 19760.00 in potato as being produced by the farmers taking SC, and it is Kg 6787.56 in Boro, Kg 4196.53 in Aman and Kg 19266.00 in potato while being produced by the farmers taking RMC.

Total cost in Boro production per hector of land for the farmers taking SC is Tk 121153, in Aman Tk 80263 and in potato Tk 184696, whereas this cost is Tk 121618, Tk 77652 and Tk 180032 for the farmers taking RMC.

The largest area of cost is labor in Boro and Aman cultivation as it is tuber in the cultivation of potato. As the highest average number of labor per hector of land is used for harvesting of crops, the highest rates of wage are in seeding/planting and in thrashing.

In the total cost of fertilizer the share of manure is distinctively large reflecting a change in the trend of fertilizer application by the farmers, which bears a good omen for the agricultural system of the given geographuic regions.

Price rate of the agricultural produces makes a great difference in profitability nowadays. While per Kg price of Boro for the farmers taking SC is Tk 18.02 that is Tk 17.98 for the farmers taking RMC, and when the per Kg price of Aman is Tk 22.18 for the farmers taking SC that is Tk 21.89 for the RMC taking farmers. The per Kg production costs for Boro, Aman and potato are Tk 17.88, Tk 8.89 and Tk 9.35 for the farmers taking SC, while the respective costs for the RMC taking farmers are Tk 17.92, Tk 18.50 and Tk 9.19.

The introduction of SC contributes to employment creation. For example, in Boro production, its introduction has a significant relationship in creating full time hired labor, while in Aman and potato the relationship is significant in the creation of hired part-time labor.

In most criteria of livelihood—employment, income, expenditure, and asset, the households taking only SC have clear superiority to those taking only RMC. The study also investigates the position of the households taking dual credit and that of those involved in multiple borrowing in this respect.

The households taking only SC have the highest total monthly income of Tk 18428 followed closely by the households taking dual credit with Tk 18425, and the households taking only RMC with Tk 15657. The households involved in multiple borrowing have the lowest monthly income of Tk 14228.

The main sources of income for all type of households are crop cultivation though the dependence on cropping IGAs is bigger of the households taking only SC.

The households taking dual credit have highest total monthly expenditure of Tk 18203 followed by the households taking only SC with Tk 17669, the households taking only RMC with Tk 15100 and the households involved in multiple borrowing with Tk 14652.

The main area of expenditure is consumption in all type of the households, followed by investment. The highest expenditure in consumption is 85.40 percent in the households taking only RMC followed by 83.48 percent in the households involved in multiple borrowing, 80.58 percent in the households taking only SC and the lowest 76.77 percent in the households taking dual credit.

The households taking dual credit have the highest average asset value of Tk 1243129 followed by the households taking only SC of 1053655, the households involved in multiple borrowing of Tk 959483, while the households taking only RMC have lowest asset value of Tk 356000. It should be mentioned that the value of asset, among others, includes the value of land.

The households taking dual credit have the highest average liability of Tk 39406 followed by the households taking only SC with the average liability of Tk 33782, the households involved in multiple borrowing with Tk 30397 as the households taking only RMC have the lowest liability of Tk 21647.

The situation described above shows better position of the households taking only SC than those taking only RMC. The base condition gives the SC takers this leverage. Despite this, it is found that the introduction of SC contributes to productivity, profitability and livelihood improvement, particularly employment creation. As a matter of fact, the time is a little premature for an impact study on the beneficiaries of the SC. It suggests conducting a further study on maturity (of a period of at least full three years) of all the SC households surveyed under this study.

Seasonal Loan

7

As it it is mentioned earlier, it is here also to iterate, this study is done under a specific ToR, which to many critics is not befitting for such a research. Again, the sample size of the households for this study also is not representative by any way. So, there is no strong argument that the findings of the research should be accepted nationally. The findings are of a snapshot-type study. However, all these limitations do not turn this attempt futile. Its value for internal consumption at PKSF particularly in redesigning or directing similar projects or for a further study in the relevant field should be counted.