The Determinants of Livelihood Graduation of Rural Poor Women in Bangladesh: Experiences from RMP

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Abstract

Rural Maintenance Programme (RMP), operating in rural Bangladesh since 1983, has been proved effective in poverty alleviation of destitute women. Economic emancipation of the women and having sustainable livelihood is one of the two mandates of RMP. The project employs the women in maintaining rural earthen roads for a four-year cycle and provides training on different life skill issues. Research interest of this study is to identify the significant inputs of RMP as well as the contextual community and household determinants, and investigate the extent of influence of these inputs on the livelihood of the women applying multinomial logit model. The results show that regular wage received from employment is the most significant input of RMP. Among different issues of training that RMP provides to the women, nutrition training is found significant. Other than RMP inputs, electricity, skill based technical training, organizational affiliation, lower household size and dependency ratio are observed significant in overcoming poverty burden.

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Introduction

Rural Maintenance Programme (RMP) is a large poverty alleviation programme that covers 93% of the rural areas of Bangladesh. The programme began in 1983 with CIDA and Government of Bangladesh funding. CARE Bangladesh implemented the programme across Bangladesh from 1983 to 2006. RMP was implemented in three phases – all funded by the GoB and CIDA through the proceeds of food aid donated by Canada. In 1983, Phase I was initiated as a food-for –work road maintenance project within a food security framework. In 1992, RMP was redesigned as a food security cum sustainable development project by adding an income diversification component (IDC). The redesigned RMP continued as a phase II until 1994. RMP was further expanded through the addition of a capacity strengthening component (CSC) targeting local government institutions. CIDA and GoB continued as sole funders of RMP of phase III. Starting in 2001, the European Commission (EC) contributed to funding as well until mid-2006. GoB took over sole responsibility from CARE Bangladesh for the programme's total funding and operation as of mid-2006.

Rural Maintenance Programme (RMP) works with the poorest and the most socially disadvantaged women, the majority of whom are divorced, separated, widowed, outcast or otherwise destitute; and who are typically heads of single parent families. The Programme provides employment for them in rural earthen road maintenance activities. In doing this, the Programme maintains two mandates: long term socio-economic development of the disadvantaged women, and rural road maintenance. Recruited women are often landless, have no house or shelter of their own, possess very limited assets, have very few employment opportunities apart from irregular labor, and so are only able to feed their children 1-2 meals daily. RMP operates under two components, namely Income Diversification Component (IDC) and Road Maintenance Component (RMC). IDC provides various training in different issues, counseling and follow-up to the women. RMC deals with road maintenance activities.

Twenty-two years have been passed since RMP started maintaining rural earthen roads by the women. In the process of large scale implementation the project has taken a unique shape to cater to the needs of the destitute women. Various studies and assessments reveal that the women are have higher income level from their own income generating activities (IGAs) than the level once they had before joining RMP. Consequently the enhanced income affects their consumption practices. They may invest on schooling of the children, health and nutrition, clothing, housing and other areas for future and long-term human development,

the project expects. On the other hand, some women are seen going back to the destitution level, and there might be various reasons or hindering factors functional behind the failures. Analyzing livelihood status of the beneficiaries and the associated inputs in any development project always draws the attention of the policy makers and the practitioners. From this point of view this study focuses on identifying the significant inputs of RMP as well as the external causes for the changes in livelihood of the women. Perspective is to revisit the programme design, policies and strategies.

Answering the question "what are the inputs that influence the livelihood sustainability of graduated RMA women?" involves answering two questions. Firstly, "to what extent the RMA[3] women have been successful in sustaining their livelihoods?" And "what are the sources of variation in achieving success and what is the power of each of the inputs in explaining this variation?" The interest centres on knowing which components or inputs of the project are adding significant value to achieve the desired goals and objectives. Also the presence or absence of specific community or any other contextual determinants behind the success or failures need to be explained. Research interest of the study is to identify the significant aspects of RMP and the extent of influence of these inputs on the livelihood of the women applying logit model. Based on the findings recommendation will be made to look for further options for better livelihood of the women considering the existing socioeconomic, cultural and geographic settings of the respective areas.

Methods and Materials

It is a cross sectional study where the information about income of a household and the other factors related to the household is considered simultaneously. Both intervention and control women were interviewed to assess their livelihood status. Quantitative technique is used in the existence of the causes and their degree of accountability in bringing about the sustainability of the graduated RMA women's and non-RMA women's livelihood. The advanced econometric models such as multinomial logistic regression model are used and fit them to identify the inputs significant for livelihood changes. Some association tests were also performed to understand the association between different socio-economic inputs and income classes. The sampling design that is used in the study is appropriately performed

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3   Women are organized into 10-person work crews, named "Road Maintenance Associations" (RMAs), with one RMA per Union. Each RMA is then assigned responsibility for maintaining approximately 20 km of earthen rural roads.

based on the geographical location and also determined the size of the sample by using the appropriate formula. A stratified random sample was drawn for quantitative data gathering. The survey was conducted over 276 women, 146 women from RMP and 130 from control group.

Economic classification of any household seems apparently easy task, but it involves a bit complex process. Based on the available data from Household Income and Expenditure (HIES) Survey periodically conducted by Bangladesh Bureau of Statistics (BBS) in this study income classes are defined based on consumption expenditure. The non-poor households are those who have crossed the boundary of upper poverty line, and the moderate poor are those who lie between upper and lower poverty line. The households facing extreme level of poverty lie below the lower poverty line. The extreme poor are those individuals who cannot meet the minimum needs of livelihood, and in terms of calorie intake, they are not able to afford to consume more than 1805 k. cal per day. The moderate poor are those who lie in between the upper and lower poverty lines and cannot maintain a minimum living standard. The upper poverty line is the poverty line calculated from the HIES data of the BBS[4] and the lower poverty line is approximately 60% of the upper poverty line as used in different articles on poverty measurement by BIDS[5]. On the basis of HIES data in 2000 the national upper poverty line at the rural level was interpolated as Tk. 830 per capita per month and hence Tk. 494 is considered as the lower poverty line. The individual having consumption expenditure between Tk. 830 and Tk. 494 fall in the moderate poor category, and those having consumption less than Tk. 494 per month are extreme poor. The non-poor has consumption above than Tk. 830 per month.

Results and Discussion

Social and Economic Profile of Graduated RMP Women

Poverty reduction programs as documented in the theories are essentially linked to both income and non-income dimension of livelihood. Attacking poverty means not only creating employment opportunities and hence enhanced income, but also development in other areas of life, e.g. housing, education, health and nutrition, clothing etc. Social and economic development of the women encompasses many areas starting from household structure, economic activities, income, expenditure, savings, assets, social positioning, access to services,

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4   Household Income and Expenditure Survey (HIES) of Bangladesh Bureau of Statistics, 2000.
5   Bangladesh Institute of Development Studies (BIDS)

empowerment etc. Success or failures of the graduated RMP women can be counted on many fronts. Before going for full discussion on the main findings of logit model fitted in the study, it would be better if there is analysis on relative social and economic development of three broad income classes, extreme, moderate and non-poor, through having a detailed socio-economic profile (Table 1).

Table 1: Profile of graduated RMA

Components	Extreme Poor	Moderate Poor	Non Poor
Household expenditure (Tk. average)	1834	2425	4256
Expenditure (Tk. average monthly per capita)	371	635	1264
Land ownership (average per household, decimals)	4.5	2.2	6.0
School Enrollment Rate	69	64	66
Women have savings (%)	71	66	88
Average amount of savings (Tk.)	2711	7908	7839
Male- Female Ratio	105	74	90
Dependency Ratio	49	44	30
Average household size	5.0	3.8	3.4
Average Number of Income Earner	1.6	1.9	1.9
Women have IGA (%)	72	43	59
Women have organizational affiliation (%)	47	49	76
Have electricity in the house (%)	3.9	18	38
Distance of hat/bazaar from home (km)	1.74	1.01	1.61
Have access to credit (%)	65	54	65

It is evident from the above table that average household expenditure per month will differ from extreme to moderate and then to non-poor. But the difference between extreme and moderate poor in consumption expenditure is not as striking as it is between moderate and non poor (Table 1). The households in non poor group spend Tk. 4256, which is 1.75 times of that of the moderate poor. This is reflected in per capita expenditure. In case of landownership, non-poor group have higher amount of land ownership, 6 decimals on an average per household. Extreme poor class is relatively land rich compare to moderate poor, have 4.5 decimals of land. The percent of women in the extreme poor group having savings is 71, higher than moderate poor group (66%), but lower than non-poor group (88%). But the amount of savings is showing much higher figure both in case of moderate and non-poor group, nearly Tk. 8000, which has dipped significantly in

the case of extreme poor group. More investment in IGAs and involvement by the household members has much influence on income. Findings show that extreme poor households have less number of income earners, only 1.6 on an average per household, which is 1.9 in both moderate and non poor group. But it is interesting to observe that the women belonging to extreme poor group are involved more in numbers in IGAs (72% have IGAs) than the other groups of women. The women in the extreme poor group also have more access to credit for running businesses and meeting other needs, though the higher income group (non poor) of women has stronger association with organizations or service providing agencies (72% have affiliation, compare to 49 and 47% in case of moderate and extreme poor respectively). In the education sector, extreme poor households have higher school enrollment rate compare to other groups.

Association between income class of women and intervention of RMP, and the other socio economic indicators

Analysis of livelihood of rural households is a complex one and involves various cross cutting issues. These are mainly household, social and economic phenomena and many factors or indicators determine or influence the way of living. Some of these are positively associated with the improvement in living standard and absence of some factors adversely affect. The RMP women comes from most disadvantaged section of the community and their graduation in economic terms and progress towards social development may take longer period of time as their human, social, natural and financial capital are based in weak state. Due to the intervention of RMP and subsequent involvement with other organizations after graduation some of these women have been able to overcome the ugly faces of poverty crossing the boundary of poverty line and lead a secured livelihood. Their successes might be associated with intervention of RMP and might be with other social and economic contexts. The graduated women may have land and other properties to influence income and have access to support networks. The support networks may come from within the household structures and also from the contexts surrounding the households, e.g., electricity, growth centre, roads and communication, service providing agencies etc. Presence or absence of these factors may or may not direct the households to have higher living standard and well-being.

Is RMP Intervention Positively Associated with Graduation of The Women?

It is seen (Table-2) that the percentages of both moderate and non-poor are higher among graduated RMP (41.8% compare to 32.3% and 23.3% compared to 20.0%

respectively) than compare to non-RMP women who didn't receive intervention from RMP but have had similar economic well-being. On the other hand, extreme poverty situation is more prevalent in case of non-RMP, i.e. they couldn't succeed in overcoming the poorest level of economic well-being and could hardly bare the minimum needs of life. It can be inferred from this picture that RMP's intervention is significant in becoming moderate poor, and even in some cases (not significantly) non-poor from extreme poor. Both Chi-square and Likelihood ratio test tells about that significance. At 10% level of significance it is revealed that there is association between income class and intervention of RMP. RMP's success is targeting lowest income and most disadvantaged group in the rural Bangladesh, and the important thing is that they are women.

Table 2: Association between income class and intervention of RMP

Income class	Type of Respondent		Total	Chi-square and Likelihood ratio test
	RMP Graduate n(%*)	Non-RMP n(%)		
Extreme poor	51(34.9)	62(47.7)	113	Chi-square=4.73
Moderate poor	61(41.8)	42(32.3)	103	Sig=.094**
Non-poor	34(23.3)	26(20.0)	60	Likelihood ratio=4.739
Total	146 (100)	130(100)	276	Sig=.094**

Note: *Percentage shown is the column percentage, ** significant at 10% level of significance

Table 3: Association between income earners, IGAs, land, organizational affiliation, electricity and income class

	Income class of women
Number of income earners (1, 2, 3)	$p=0.046$
Number of IGAs (0, 1, 2, 3, 4)	$p=0.031$
Have electricity in the house (yes/no)	$p=0.000$
Land (landless, functionally landless, small owner)	$p=0.110$
Number of organizations (0, 1, 2, 3)	$p=0.041$

Land ownership occupies much of the literature on development. The destitute women in RMP are severely deprived of land properties and can't purchase even a small piece of land (1 to 10 decimals). These situations push them to more destitute condition. It is observed from the table 3 that there is no significant association between land ownership and income class as indicated by p value, even at 10% level. The women belonging to moderate and extreme poor might not been able to capitalize land for their economic gain.

Household economy can be fostered by intensive involvement of the family members in economic activities. The more number of income earners can be seen as the driving force for social and economic scale up of the households. The unskilled labor forces can be self-employed through developing basic human capital. The motivated women graduated from RMP may have the lead role in moving for more income. Chi-square test (p<.05) signifies the importance of more income earners in a household, as the association between number of income earner and income class is found significant. It might be said that the more the number of income earner in a household the higher the probability of escaping poverty.

The rural destitute women have less scope of doing income-earning activities. To encourage them in self-employment activities, many development agencies are increasing their emphasis on assisting women to secure income through their own efforts. Scale up of IGAs both in size of capital and number might have impact on generating more income. But investigation is needed whether the empirical findings support this view. In an internal study it is observed that the women are able to manage up to three IGAs at a time. Up to the three IGAs, income and savings from surplus income remain upward sloping and afterwards the trend is downward sloping. It is found that there is significant relationship between number of IGAs and income class indicated by p-value of chi-square test. The women's capabilities to run the IGAs efficiently averting risk and linking with markets have strong influence on profit. Even the small investment but potential to earn profit and optimization behavior can contribute largely to gain big margin from IGAs.

Access to power can be instrumental to accelerated economic growth, poverty reduction and social development. Only one-third of the population in Bangladesh has access to electricity; and access in the rural areas is lower (22 percent)[6]. In this study interest was put forward to know what percentage of women have access to electricity and is there any correlation between infrastructure development (electricity) and poverty reduction. From above observations it is evident that there is strong association between access to electricity and livelihood graduation. That is, infrastructure development coupled with RMP intervention can boost household economic growth and thus contribute to poverty reduction of RMP women. Empirical findings show that the extreme poor women have limited affiliation with organizations. Nearly half of them have no affiliation, and among

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[6]   Unlocking the Potential: National Strategy for Accelerated Poverty Reduction, Government of Bangladesh, December 2004

the rest involvement with one organization is the highest. In case of moderate poor women the scenario is similar. But most of the non-poor has been found affiliated with organization indicating capitalizing the benefits of the services by them. Significant test at 5% level reveals that there is association between the involvement with multiple organizations and income level of the women, and it has positive impact.

The extent of contribution of RMP in reducing poverty of destitute women

From the strategic point of policy discussion within RMP, it is important to know about the influence of specific development inputs (training, regular wage, savings, etc.) of the programme on the livelihood of women. As well as, focus also goes on some other inputs outside RMP, such as skill training that the programme doesn't provide, organizational affiliation and institutional network, access to credit, household size, dependency ratio, number of income earner, electricity, landholding, etc. All these variables together have been fitted into logit model, which are presented in the following table with description of values. Some of these variables are qualitative in nature and some are interval scaled but converted into nominal scale. Logit model tells about probability or likelihood of happening one event (dependent variable) over other event for the occurrence of the point (independent variable) in reference to other point of the independent variable. For instance, logit model reveals likelihood of becoming moderate poor from extreme poor if any individual received development intervention (e.g RMP) against the individual who didn't receive intervention.

Argument can be made in the way that whether numeracy training have any impact on raising account keeping capabilities of women who have no formal basic education or health and nutrition training is creating awareness against health and hygiene practices and develop idea about quick and easily available measures against primary diseases. Have the training on rights and social justice impact on creating bargaining power among the women about their rights and getting access to different services? Probably the most critical discussion in RMP can be tabled is that whether business management training is sufficient in initiating and having profit from IGAs and finally sustain their increased income? Some of the answers of these issues have been addressed in these logit models.

Two different tests, both chi-square test for model fitting (table 5) and Pearson Chi-square for goodness of fit (Table 6) tell us that the logit model very well and is significant in explaining variation in dependent variable. That is, the models fits are significant to explain the influence in income class of women and their

Table 4: Description of variables of logit model

Dependent variable	
Income class (pov_con)	pon_con=1 (Non-poor), 2 (Moderate poor), 3 (Extreme poor as reference point)
Independent variables	
Household size (hsize_ca)	hsize_ca=1 (Small size family having 1 to 4 members), 2 (Medium size family havi ng 5 to 7 members)), 3(Large family having more than 7 members as reference point)
Dependency ratio (dependnt)	dependnt=1 (No dependent member), 2 (30% dependent), 3 (30-50% dependent), 4 (50-70% dependent), 5 (70%+ dependent as reference point)
Sex of the household (sex_head)	sex_head=1 (Male), 2(Female as reference point)
Number of disable family members (disab_no)	disab_no=0 (no disable family member), 1, 2
Number of Income earner (income_e)	income_e=1 (3 income earners), 2 (2 income earners), 3 (1 income earners), 4 (No income earner as ref. point)
Land ownership (land_cat)	land_cat=1 (Marginal owner: 50-149 decimals land), 2 (Functionally landless: 5-49 decimals), 3 (Landless: 0-4 decimals as ref. point)
Practice inheritance right? (inh_yn)	in_yn=1 (yes), 2(no as ref. point))
Have electricity in the house? (elec_hyn)	elec_hyn=1 (yes), 2(no as reference point)
Gave dowry? (dow_in)	dow_in=1 (yes as reference point), 0 (no)
Faced crisis in the last two year? (crisis_yn)	crisis_yn=1 (yes as reference point), 0 (no)
Have organizational affiliation? (org_aff)	org_aff=1 (yes) 2 (no as reference point)
Have IGA? (iga_yn)	iga_yn=1 (yes), 2 (no as reference point)
Access to credit? (cred_yn)	cred_yn=1 (yes), 2 (no as reference point)
Have institutional network? (inst_yn)	inst_yn=1 (yes), 2 (no as reference point)
Have regular employment? (remp_yn)	remp_yn=1 (yes), 2 (no as reference point)
Have savings practice? (fdr_yn)	fdr_yn=1 (yes), 2 (no as reference point)
Have numeracy training? (num_ yn)	num_yn=1 (yes), 2 (no as reference point)
Received training on nutrition? (nut_yn)	nut_yn=1 (yes), 2 (no as reference point)
Training on human rights & social justice? (hum_yn)	hum_yn=1 (yes), 2 (no as reference point)
Training on business manageme nt? (bum_yn)	bum_yn=1 (yes), 2 (no as reference point)
Received business counseling? (buc_yn)	buc_yn=1 (yes), 2 (no as reference point)
Received business follow -up? (buf_yn)	buf_yn=1 (yes), 2 (no as reference point)
Have skill training? (strg_yn)	strg_yn=1 (yes), 2 (no as reference point)

households. Before explaining the full model it is important to look at the significance of individual variables keeping the influence of other variables constant. Here it is clear from the Table 5 that presence of electricity in house, regular employment of women, and organizational affiliation are highly significant. Skill training, household size (small, medium versus large) and dependency ratio (lower dependency versus higher) are found significant at 10% level. It should be mentioned here that the logit model is the regression of outcome variable on presence or absence of event or factor (independent variable). The point is that how the presence of positive event (getting regular employment or having electricity) or absence of negative aspect of household (higher number of dependent family members or higher family size) make impact on economic well-being (overcoming poverty burden) of household.

The results show (Table 6) that within the RMP the most determinant and significant factor is regular employment (significant at 5% level) that can be thought of as regular feeding of the household as well safety net of the family members, in terms of road maintenance works. Beside this, training on health and nutrition is significant. So the message is that we should think about other training, particularly business management training (modification or reinforcement). In addition to the business management training, skill training on different trades can be introduced in the programme that has much potential in running IGAs and sustaining income over the years, as this is found significant. It is observed that the graduated RMP women who received any type of skill training are sustaining their economic activities and optimizing profit. Logit model reveals that picture.

Beyond the RMP inputs, organizational affiliation is the important factor for the women getting access to different services (credit, savings, skill training, seeds and tree etc) and having momentum in economic activities. Demographic and household structures also have importance in social and economic condition. It can be presumably argued that lower the household size higher the probability of being well-off. At the same time, lower the dependency ratio (in turn higher the eligible number of income earning person) it is more likelihood that the household would be in less pressure of consumption expenditure and thus of poverty burden.

It can be assumed that some of the factors might be significant in becoming non-poor from extreme poor, which might not be found in case of moderate poor. The table of parameter estimates (Table 6) presents that scenario, where it is found that electricity, regular employment, numeracy and nutrition training, and dependency ratio are found significant in both the models. But organization affiliation, and

Table 5: Likelihood Ratio Tests

Independent variables	Chi-Square	Sig.
Inheritance right (inh_yn)	2.68	.26
Have electricity (elec_hyn)	23.38	.00*
Regular employment (remp_yn)	7.42	.03*
Savings practice (fdr_yn)	.80	.67
Numeracy training (num_yn)	4.22	.12
Nutrition training (nu t_yn)	5.80	.05**
Rights and justice (hum_yn)	2.33	.31
Business management (bum_yn)	1.53	.47
Have skill training (strg_yn)	4.87	.09**
Business counseling (buc_yn)	1.89	.39
Business follow -up (buf_yn)	.03	.99
Have access to credit (cred_yn)	1.29	.53
Have IGA (iga_yn)	.08	.96
Organizational affliatn. (org_aff)	11.17	.00*
Household size (hsize_ca)	21.51	.00*
Dependency ratio (dependnt)	26.58	.00*
Land holding (land_cat)	3.53	.47
No. of income earnr. (income_e)	10.04	.12

Table 6: Parameter Estimates (odds

Model fitting information: Chi -square=148.4, Sig=. 000

Goodness of fit: Chi -square=557.58, Sig=. 000

Income class (Dependent variable)	Independent variables	Wald statistics	Sig.	Odds ratio
Non-poor	Intercept	.00	1.00	
	elec_hyn	18.72	.00	.04
	remp_yn	3.45	.06	5.62
	num_yn	3.31	.07	.10
	nut_yn	5.28	.02	14.65
	org_aff	9.93	.00	.17
	[dependnt=1]	3.72	.05	10.05
Moderate poor	Intercept	.00	1.00	
	elec_hyn	6.47	.01	.19
	remp_yn	6.00	.01	5.73
	num_yn	2.97	.08	.14
	nut_yn	3.10	.08	5.81
	strg_yn	4.67	.03	2.99
	[hsize_ca=1]	3.44	.06	5.93
	[dependnt=2]	2.67	.10	5.63
	[dependnt=4]	4.28	.04	6.63
	[income_e=1]	843.34	.00	.00
	[income_e=2]	1634.16	.00	.00

* At 5% level of significance
** At 10% level of significance

dependency ratio at 1 (having non dependent member) are significant only in the model of non-poor referenced to extreme poor. On the other hand, skill training is significant only in the model of moderate poor in reference to extreme poor. This has much implication. For instance, it might be the case that the women who received skill training on certain trade might be able to utilize much of their skills in IGAs and having maximum profit to become non-poor. At the same time, organizational affiliation is another factor to enjoy non-poor status overcoming

extreme level of poverty. These women might have strong institutional network and access to different government and NGO supported programs and services.

The most interest findings from these logit models (that odds ratio measures indicate) is that the likelihood of becoming non-poor from extreme poor for having had regular employment is nearly 6 times (odds ratio is 5.62) in reference to who hadn't. Thus, employment opportunities, particularly regular one for the destitute women, have much implication for economic well-being of the households and changing their livelihood, and RMP provides that opportunity. Skill training is found to increase the likelihood of becoming moderate poor from extreme by 3 times (odds ratio is 2.99) than who didn't have any. Dependency ratio is found to be more significant in crossing the upper poverty line and becoming non-poor and the odds ratio in this case is 10.05. That is, the likelihood of household who has no dependent member is 10 times than the household, which has 70% above dependent family member. The ultimate significance of the result is that the more the economic activities and thus income earning people in a household the higher the probability of getting well-off, as easily can be assumed. Household size (at 1) is also found significant and have odds ratio as 5.93, i.e. small size family (having 1 to 4 family members) is more likely to become moderate poor (6 times) than the household, which are large in size (8 above family members).

Conclusion and Policy Implication

While preparing the profile of the women in respect of different social and economic indicators it is observed that the non-poor women (23%) have done well in most of the areas of livelihood and, so the probability of remaining or sustaining the improvement by these non-poor households is bit higher than other groups. On the other hand, it is seen that the extreme poor has good status in terms of school enrollment rate of the children, land ownership, operation of IGAs, access to credit. While the moderate poor has shown higher performance in economic activities of family members, organizational affiliation, access to electricity. While the measure of association has shown that there exists significant association between intervention of RMP and income class of the beneficiaries comparing with non-RMP women. The results of this test reveals that the RMP women have been able to graduate to moderate poverty from extreme level in significant numbers than the non-RMP women. It is found that higher level of land ownership has limited impact on the households unless there are intensive economic activities, such as cultivation of crops, livestock and poultry rearing, fishing etc. Number of IGAs, organizational affiliation, number

of income earner, electricity in house are found positively associated with the livelihood graduation of the women as indicated by the significance test. Communication and electricity are considered the most important areas from where the households can gain substantially. Social capital, particularly institutional network and the access to services can be a driving force for the poor.

The most compelling picture of these results is that regular wage received from employment in road maintenance works is the significant input of RMP. As the women get employment for a four-year cycle, it gives a sense of relief in the way that they don't need to think too much about income and maintaining livelihood during this period. Beside this, among life skill training on different issues that RMP provides in different years, nutrition training is found significant. Other than RMP inputs, electricity, skill training, organizational affiliation, lower household size and dependency ratio are observed significant in overcoming poverty burden. The influences of these inputs are stronger in some cases. For instance organizational affiliation and lower dependency ratio has impacted significantly for the households to become non-poor. Electricity in the house and skill training are found instrumental to graduate.

In light of the above findings various policy arguments can be made to formulate appropriate model that would be strongly pro-poor, and also pro-extreme poor. It is obvious that the changes would have some implications in resources and mode of operation of the activities. The challenge would be to work for the maximum benefit of the destitute women. If skill based training on various trades is offered, in addition to the business management, counseling and follow-ups, the project can reach its full potential in poverty reduction. Business management training and counseling would need to be intensified and strengthened. Focus of future RMP should be limited on specific training that has strong in inputs. The women, the poorest of the poor and also those who are chronically poor, can overcome both income and human poverty and will have prosperous futures. The future model of RMP based on this study can be represented by the following diagram.
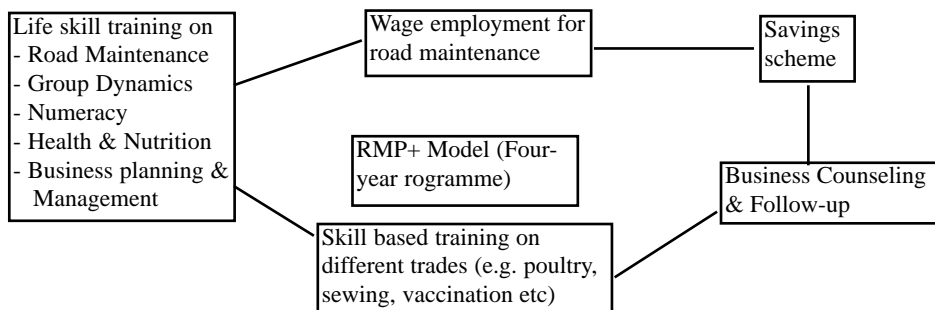
Over the last twenty-two years since inception in 1983 RMP has been proved an effective development model instituted throughout the country. Having the largest coverage in the country and impacting on poverty alleviation efforts, RMP now is considered for replication in other countries in the world. In the Poverty Reduction Strategy Paper for Bangladesh there is mention about contribution of RMP in livelihood improvement of the destitute women. Review of the evolution of RMP, particularly the introduction of IDC, has marked important changes in policies and strategies of implementation. Different studies on RMP also suggested some changes, and tried to focus on how in a more effective way the women can overcome persistent poverty burden and have improved livelihood status in the long run. As some of the women are chronically poor and thus need a big push to remove the burden of persistent poverty, so more strong inputs of RMP are to be generated and delivered. This study has tried to review the existing inputs of RMP and the significances and explore the new ideas. Expectation can be placed in the way that if the model proposed above for future programming is implemented it will have significant positive impact on the livelihood of some of the most disadvantaged women living in rural Bangladesh.

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