The role of micro-finance in environment and development in Bangladesh: some opportunities and challenges.

A working paper for the UPCD-CIDA tier 2 project "Building Environmental Governance Capacity in Bangladesh"

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Introduction

The UPCD project "Building Environmental Governance Capacity in Bangladesh" is a partnership between the University of Manitoba (Canada), North-South University (Bangladesh), BRAC University (Bangladesh) and the Center for Natural Resources Studies (CNRS), Bangladesh.

Here are some of the stated aims of the project:

...to strengthen institutional and human resource capacity in Environmental Governance to support an integrated approach that reconciles pro-poor economic growth with community-based, sustainable resource and environmental management in Bangladesh. This will be achieved by linking higher education with civil society stakeholders (NGOs, the private sector, rural communities) as well as with national and local governments.

At the community level, the livelihoods of the poor will be diversified and enhanced as rural women establish green micro-enterprises through accessing existing micro-credit programs administered by the Center for Natural Resource Studies (NGO partner) (Haque 2005, p.2).

By accessing ongoing micro-credit programs administered by the Natural Resource Studies (CNRS), about 200 women from 10 Savings Groups will develop environmentally sensitive, green micro-enterprises that use renewable natural resources (e.g., wetland fisheries, horticulture, organic farming) to to enhance and diversify livelihood options and increase their family income. The women's Savings Groups are affiliated with 5 community-based organizations (CBOs) that are operating in 2 wetland areas located in 2 different *upazilas* (sub-districts) in northeastern Bangladesh. Under the applied field-research component of the NSU Masters program, the students will assist CNRS personnel in mobilizing village women (with whom the NGO has ongoing micro-credit and community development programs) to develop green micro-enterprises and participate in awareness raising on Environmental Governance for reconciling poverty reduction with local resource and environmental sustainability. The results of the Community development component will be shared with non-project communities for greater impact (Haque 2005, p.5).

A key aspect of this project involves future NSU master's students participating in internships with CNRS, to work in the creation of micro-green enterprises for livelihood diversification, women empowerment and sustainable resource management. This working paper is a compilation of descriptions, notes, data and comments on the micro-finance activities of the CNRS and on related issues of relevance to the UPCD-NRI project. It provides the main

findings of exploratory research on this topic, focusing on CNRS activities in Hakaluki haor, especially the Borolekha and Juri *upazilas*. The broad questions addressed were the following:

What are the micro-credit activities of the CNRS?

How do they tie to the mandate of CNRS relative to natural resource management?

How does it help the beneficiaries?

What do beneficiaries think about how the program could be improved?

What are the implications for gender development?

About this study

This background research was carried out during an internship with the CNRS from October 2007 to January 2008, made possible by the Student For Development program of the Association of Universities and Colleges of Canada, with funds from the Canadian International Development Agency. During my time in Bangladesh, I spent over two months at the Borolekha field office of the CNRS, in the Sylhet division. The focus on micro-credit was one of the three main components of my activities, the other two being research on issues of local environmental governance issues and on efforts for the restoration of the swamp forest in the Hakaluki area.

I sought to obtain details on the micro-credit activities of CNRS through interviews with staff and credit group members, as well as through survey of available accounting documents. This was not without difficulties. While the staff was supportive, and group members welcomed my inquiries, there remained serious limitations as to the depth and breadth of details I could obtain, especially as a foreigner who does not speak the Bangla language. In most cases I had to rely on the interpretation of CNRS staff. Furthermore, carrying out this study as a male researcher was difficult in a context where interactions with women are often discouraged,

whereas micro-credit program participants are exclusively women. The micro-credit sub-branch of the CNRS Borolekha office has one staff member who is a woman, while the program manager, accountants and others are all men. I have attended some micro-credit meetings, which were helpful, and where I had the opportunity to ask questions to program participants through an interpreter, which provides a picture of how the program runs, and what it does. It was, however, almost impossible to meet with credit members without the (sometimes dominating) presence of male staff. Even after hired independent interpreter, insistence was required to be able to meet with some of the members without micro-credit staff.

Study Area

Hakaluki *Haor*¹ is one of the largest freshwater wetlands in Bangladesh. It is situated in the Sylhet division, spanning over both the Sylhet and Moulovibazar districts (latitude 24 deg, 35' N to 24 deg. 45' N and longitude 92 deg 00'E to 92 deg. 08' E. The *haor* covers a land area of over 18,000 hectares, most of which is completely inundated during the monsoon (May-October), making it look like an inland sea into which flow a number of rivers and canals coming from the surrounding hills. As the monsoon ends, these waters recede, gradually exposing an intricate network of *kandas* (pastures), rivers, canals, and *beels* (perennial water bodies). There are over 230 *beels* within the *haor*, covering over 4,000 hectares.

This ecosystem supports around 190,000 people, most of whom derive their livelihood from inland fishing and agriculture (rice and vegetable) within and around the *haor*. in 1999, this

^{1.} A Haor is a bowl-shaped, annually inundated depression in the landscape of Bangladesh.

wetland has been declared one of the country's eight Ecologically Critical Areas (ECA) by the government of Bangladesh, as it has ecological features of prime importance to Bangladesh biodiversity, and it is under severe pressure from human activity (IUCN-Bangladesh and CNRS 2006). Since the mid-1990s, the Bangladeshi government, in partnership with international and local NGOs, has been a number of initiatives to enhance sound management of this ecosystem. These initiatives have so far focused on sustainable, community-based, fishery management (e.g. the Community-Based Fisheries Management – CBFM program) as well as ecological restoration and management of floodplains (Sustainable Environmental Management Program – SEMP and Coastal and Wetland Biodiversity Management Program – CWBMP).

These program usually have a similar structure. They are funded and largely designed by international agencies such as the United Nations Development Program (UNDP) and the IUCN, funded through the Global Environmental Facility (GEF) or similar funds, and implemented through partnerships between the government of Bangladesh and consortiums of local NGOs, and local groups organized under community-based organizations (CBOs). In this context, NGOs usually play the roles of community-mobilization and project facilitation through the provision of logistical support. Many of these programs involve a micro-credit component.

Center for Natural Resources Studies (CNRS)

CNRS is one of the key environmental NGOs that is active in Hakaluki. This is a relatively small and young (est. 1992) Bangladeshi organization that focuses on fostering ecological restoration and conservation through community-based resource management,

mostly in wetland environments. It is the NGO partner of the CIDA project "Building Environmental Governance Capacity in Bangladesh". This organization directly addresses the links between environment and development, focusing on the restoration of biodiversity for the poverty alleviation. This organization usually acts as local-level facilitator at the local level of various projects that usually share the following similarities:

- Financed and designed by international agencies
- Implemented by the Bangladesh government.
- Partnership with non-governmental organizations (NGOs) for community mobilization and facilitation.
- Central role for community-based management committees composed of resource-users themselves.
- Link between poverty alleviation, participation in decision-making, and sustainable resource management.
- Strong emphasis on restoration and conservation of resources and livelihood diversification

In the Hakaluki *Haor* area, the main program currently active is the Coastal and Wetland Biodiversity Management Program (CWBMP), which runs along the same lines as the previous initiatives (Sustainable Environmental Management Program (SEMP) and Community-based Fisheries Management, CBFM)). It is a partnership between international organizations (in this case GEF and UNDP), with the Bangladeshi government as overseer, and a consortium of NGOs as implementing agencies, whose mandate involves the training and facilitating of community-based organizations in multiple villages. It is these community-based organizations that make decisions on which activities are undertaken, according to the general goals of the overall program.

Most of CNRS activities are project based – in some ways, the current CWBMP initiative

could be seen as the replacement of CBFM, which came after SEMP. The mandate and activities remain relatively constant from one project to another, but emphasis, structure, and others vary slightly. Some of these various large projects come with a credit components, and all of these are overseen by the same staff of each credit branch, which is a staff of five to six people. The remainder of this document provides details on the status and inner working of these credit programs.

Micro-credit

For decades now, micro-credit has been a central part of development initiatives in Bangladesh and elsewhere (Khandker 1998). It is praised for its role in poverty alleviation, capacity building and empowerment of women (Amin, Rai, and Topa 2003; Yunus 2003), although the ubiquitousness of these programs has generated some criticisms². These loans granted to poor households, guaranteed by a peer-based collateral (solidarity-lending), have granted access to credit to many people who would otherwise lack the means to provide adequate guarantee to legitimate lender, and therefore rely on usurers (*Mohajons*). At the same time, the non-government organizations (NGOs) that provide these loans have come to rely on the income generated by the interests on these loans (Stiles 2002).

^{2.} In a growing number of cases, micro-credit is used mainly as a source of funding for NGOs, raising concerns, ethical and otherwise, over their true role in helping the poor. Some observers report that in some cases, credit-driven organizations derive profits from the more vulnerable (Rahman 1999). This is tied to some concerns over the extent to which NGOs play a central role in the country, which may be undermining development potential in the long run (Stiles 2002; Kelly 2008) . Furthermore, the staff of certain organizations have used intimidation and coercion to ensure loan repayment (Rahman 1999). At the same time, the extent to which access to credit substantially borrowing truly improves borrowers' situation remains questionned (Goetz and Gupta 1996; Koenig et al. 2003).

While some NGOs such as the Grameen Bank concentrate solely on micro finance services (Bornstein 1996), others, such as BRAC, incorporate credit as a specific component within more comprehensive programs that include often include training, technical support, and market integration (Halder and Mosley 2004). Numerous factors, including donors' preferences, NGOs mandates, requests at the community level for access to credit, and funding requirements of the NGOs themselves have led to the inclusion of some micro-credit component in most development-related initiatives. This includes the programs of ecological restoration and conservation that focus on community-based resource management. As most of these initiatives aim at fostering both the sound use of resources and the alleviation of poverty, some degree of capital-lending is warranted. The existing micro-finance initiatives offer interesting potential for synergy between these two goals.

CNRS and micro-credit

The principal focus of the CNRS is the restoration of wetland environments for renewal of fish biodiversity. Many of the fish species play a key role in the subsistence livelihoods of impoverished villagers, and the work of CNRS has established that restoration of fish habitat quickly results in increases in protein intake at the local level (Rahman and Minkin 2003).

As such, CNRS's main focus is on fostering the sound use and management of natural resources, with the hope that the restoration, enhancement or conservation of ecological services contributes to both the alleviation of poverty and the maintenance of biological diversity. Given this mandate, CNRS did not engage in micro-credit services during its first years. It even saw

micro-credit as possibly undermining their focus on restoration, as well as adding a burden on their resources (M. M. Rahman, pers. comm., Oct. 2007).

In 1998, when the organization sought to start a new project in the area of Sunamganj (Sylhet division), villagers requested that CNRS's activities in this area involve a micro-credit component: in other parts of the country, impoverished villagers have access to various credit programs, something that this area lacked given the absence of NGO activity there (M. M. Rahman, pers. comm., Oct. 2007). After careful consideration and discussion with the donor (Ford Foundation), CNRS decided to add a credit component to its activities in the area. It did so somewhat reluctantly however: micro-credit is a large undertaking, given the high transaction cost, inherent risk, and logistic requirements of ensuring the management of large numbers of loans.

Wanting to avoid that this new initiative overwhelms the NGO focus on community-based resource management and ecological restoration, it was decided early on that the microlending would be kept separate from the remainder of activities, a decision that remained to this day.

During the period following 1998, CNRS micro-credit programs have been developed only in three districts (Sunamganj, Moulovibazar, and Maghour), including thirteen CNRS branches out of the thirty-one active branches it holds throughout the country. As such, CNRS is not sustained by credit, it remains financed currently by projects mostly. It is seen by the organization as a service provided to its project participants, and its operation is usually financed through the related project's funding structure (e.g. SEMP, CBFM).

Those branches are divided between a "program" sub-branch and a "micro-credit" one, as to ensure that the day-to-day requirements of these credit programs do not impede the environmental activities. CNRS branches that have a micro-credit program work rather independently from the "project staff", those who are actually in charge of facilitating community-based organizations and their activities. The two sectors of activities are overseen and managed by separate teams.

While this approach to keep the two sectors separate during the formative years of the credit program is still seen as a worthwhile approach. After ten years of micro-finance activities, there may exist a potential for actively fostering the synergy between these themes without undermining the organization's ability to achieve it's main mission.

This potential is of interest to the UPCD-CIDA project. In what ways can the micro-credit activities of CNRS be tailored to enhance sustainable resource-use in *Hakaluki Haor*? What potential is there for the creation of micro, green enterprises that allow its holders to improve their livelihood while also enhancing the sustainability of resource use? The following sections provide starting points to these questions, by providing descriptions and data on the on-going credit activities of CNRS in Hakaluki.

CNRS micro-credit activities in Hakaluki Haor

There are three branches of CNRS active in Hakaluki, all on the southern side of the haor. Kulaura, Juri and Borolekha. This study concentrated on the Borolekha branch, where the author was based, and on the Juri branch.

The Borolekha branch is implementing the Coastal and Wetland Biodiversity

Management Program (CWBMP) for the southern part of the Hakaluki Haor ECA, and it also
has a micro-credit sub-branch The Juri branch operates micro-credit activities only, and provides
support in some CWBMP activities as well.

Both branches oversees these different types of loans: the regular credit, out of the CNRS main fund, CBFM-2 loans, with funds that were initially provided by the phase II of the Community-based fishery management program (CBFM-II, DFID), and SEMP loans, with funds that were initially provided by the Sustainable Environmental Management Program.

How do these loan programs work?

The system of implementation and loan delivery itself is similar to the one of Grameen Bank and other micro-credit organizations, with the exception that the interest rates are lower (interest rates vary between 12% (CBFM-2 loans) and 15% (regular and SEMP loans), whereas Grameen is at 20%).

At the onset, the 'unit manager' (at the branch level) receives funds from head office.

These funds are then administrated by the unit manager and field staff. The unit manager visit village areas to find 10 people to form a loan group, bring them under a group for organization.

These 10 people may not all be interested in loans, but their membership is sought to provide collateral for the actual borrowers.

Once groups are formed, a group leader is designated to be responsible for the resolutions and for keeping accounts. Group members then fill a form on their composition, and

draft a proposal stating their goals and general strategy. The plans of the credit groups are evaluated on the grounds of organizational capacity, feasibility, and to some extent on the degree of relevance to sustainable resource management.

When the request (proposal) is accepted, the loan is granted. Upon approval, the money comes with written directives and training from CNRS on how to attain the goals, and some directives as to what the money can and cannot be used for.

Upon approval, there is a four-week training period. Members learn, among other things, how to write their name (sign) and to maintain accounts. During this session, they receive training on management, bookkeeping, organization. Also they discuss how they plan to use their money. It is during this orientation period that 'proposals' are evaluated, in the sense that their is this back and forth communication between what members want to do and what the staff suggest that they do.

There is a one-time admission fee of 45 tk³ (including 5 tk cost of the passbook. Of this amount, 20 tk goes toward the group saving fund. This 20 tk contribution to the saving fund is due every week, and the group receives 5% interest toward from this saving (6% under CBFM-2).

The orientation period lasts 4 weeks, after which the members receive loan (at the end fourth week/early fifth week.

The first week after that (no 6.), no installment is due, and after, the loan has to be paid over the

³ Amounts are written in TK, which refer to Bangladeshi Takas (BDT), 1 BDT ~ 0.70 CDN.

46 following weeks, at 15% interest rate per year in SEMP and general loans , whereas under CBFM-2 the loan has to be refunded at 12 % interest over 40 weeks.

The loan is provided up-front, on a one-year basis, and reimbursement installments are paid at subsequent weekly meetings. The community facilitator collects money and write the transaction in a log book, which is signed by all members. Throughout the duration of the loans, the credit staff evaluates and ensures proper follow-up (making sure that borrowers invest in what they said they would, which influences the possibility of further loans in the future). The staff meets with each of the groups every week, during group meetings in villages. The office is in a central location for that purpose, and on the office wall are maps and charts. Charts have, group name, code, village, group leader name, day and hour of weekly meeting, and distance from office, as well as extensive information on expenses (utilities, interests, supplies, transportation, savings etc).

There are different types of loans. The differences result from which program or initiative the credit program originate:

The "traditional" or "general" loan

This program offers 'simple' income support to household, as a loan to individual members of savings groups. It is run out of CNRS main fund, and operates at 15% interest rate. CNRS staff try their best to approve or suggest initiatives that work within the natural resource management mandate of the organization, encouraging environment-friendly (and lawful) initiatives. Nonetheless, group members are free to use their loan for any purpose within certain guidelines.

Project-based loans

The project based loans (SEMP, CBFM-2) were initially funded by the respective projects, and are now maintained for regular loans; these are well-established groups (especially CBFM) who continue borrowing money, but they do not receive any special training or have special projects anymore. Under these two projects, there were two main types of loans, a) project money to individuals within CBOs, those who participate in the saving group under the organization, and b) grant money for proposals made by the CBOs (See appendix for figure diagrams).

SEMP

Under the SEMP project, members of CBOs were provided with loans for a year, which were at a 15% rate, same as the regular loans. More details are required on the micro-credit component of this project. In this project, there was also a possibility of group loans, in which a bank account was opened in the name of the loan taker. Three names were given to the bank, two from the saving group and one from the CNRS staff. In the case of group loans to community-based organizations, to obtain a loan, a CBO must rank well in the assessments, such as having a good rating in savings, an adequate attendance record during and after the training period.

CBFM-2

Under this program, CNRS received 1,700,000tk in principal amount, distributed over 61 CBOs (Source: Worldfish Center 2006). Under this program, CNRS had 873 female borrowers, with a 99,71% recovery rate (From Worldfish Center 2006, p.9). Again, there were two types of

initiatives, individual loans and grants to groups. Here is how these programs were described in a CBFM-2 booklet (From Worldfish Center 2006, p.2):

To help individuals and households to undertake alternative income generating activities (AIGAs). The AIGA micro-credit was generally extended through the mainstream microfinance operations of the partner NGOs. A typical system was to offer loans for a one year period and the borrowers repay by instalments on a weekly basis. For AIGA loans the partner NGOs charged a 12% flat rate of service charge interest. This is lower than their normal interest rates (around 15%) for regular micro-credit programmes. Any interest accrued by the partner NGOs was added to the principal amount of money because their operating costs were already covered by the project.

Grants paid to CBOs as one-off group loans (revolving funds), to help the CBOs meet their objectives. They are actually grants that are not re-paid by the CBO to the partner NGOs.

Both these initiatives came with some training, weekly meetings were arranged for training on activities such as planting crops, looking after cows, business investments and family planing information. This offered education on many aspects that spanned beyond fisheries management, and these programs were much appreciated by beneficiaries.

CWBMP program

There is no micro-credit program under the Coastal and Wetland Biodiversity management Project (CWBMP), but in late 2007, a new initiative of fund installments to villages was started. This initiative, called Micro-Capital Grant (MCG), is a one-time lump sum of 1 lakh takas (100,000tk, or ~1500 CDN) directly given to each CBO, (akin to the one-off group loans (revolving funds) under the CBFM). Recipient groups are free to use these funds according to their own priorities toward the achievements of their mandate. With this fund, CBOs may start a business, other initiative, they may run their own micro-credit facility, It is for the CBO to be sustainable and to run its course. It is too early to evaluate the outcome of this experiment, but

follow-up should be interesting. In 2006, the report on the CBFM-2 micro-credit program included mentions that CNRS did particularly well with CBOs when it granted them sufficient funds early on (Worldfish Center 2006).

How are the installments calculated?

There seems to be variations from one branch to another, or perhaps it is different from one fund to another (e.g., SEMP vs CBFM). In some examples, the first loan is usually 5,000-6,000 tk, with possibility of increase of 2,000 per year if follow-up is successful, in the first and second year. The complete amount is provided to the borrower at the end of the training period, and a fixed amount is to be paid at each weekly meeting. The amount to be paid each week is calculated this way:

For SEMP and general loans: (amount of the loan capital + service charge + interest rate)/ (52 weeks - # training weeks). For example, a member receiving a 9000 tk loan at 15% interest would have to pay a total of 10350 tk over the year, which means 225tk every week. There is an admission fee of 45 tk, of which 20 tk is returnable (as contribution to the groups saving). The group's saving fund receives 5% interests under SEMP (and 6% under CBFM-2).

Under CBFM-2, if a person receives a loan of 9000tk, at 12% interest rate, (9000 tk + service charge/interests 1080)/40weeks = 10080/40 weeks = 252tk each week

In the next section (and appendix), lists of examples of loans also show the amount, and weekly installment.

What are the loans used for?

This section provides some specific examples of how the CNRS micro-credit program works. It is based on interview with group members, and supplemented with data collection from the accounting books of the CNRS credit sub-branches (see appendix).

The loans are provided for a wide range of purposes. In fact, they contribute to projects representing about every sector of the local economy. This includes: start-up for rice farming, vegetable farming, fish business, tea stall, small grocery shop, handicraft operation, sewing machine, and so on. A complete list of the stated purposes of the loans in Borolekha and Juri in the current year is provided in the appendix. Below are details on the loan situation of 7 members of the Borolekha branch, followed with details on some of the projects. The amounts of loans, and weekly payments in this section were the ones reported by the borrowers themselves.

Name	yrs	Other loans	Purpose	#	Amount	Weekly instal- lment		Family members	Children
Hasia	2	No	Fish business	1	5000	150	Kutaura	7	5
Raya	1	No		1			Kutaura	5	3
Moni	4	No	Grocery	4	10000	300	Jaifarpur	7	5
Parvin	2	No	Firewood	3	8000	220	Chutalauka	4	2
Shuja	4	No	Firewood	2	10000	270	Chatal	7	5
Hasarun	2	No	Betel	2	10000	210	Kutaura	4	2
Niestirani	1	No	Rice	1	7000	150	Pabijuri	3	2

Table 1: Some examples of loans provided by CNRS Borolekha

Name= first name

Yrs= Number of years as member of the program

= how many times has the member contracted a loan from the branch.

Amount= Total amount borrowed

Weekly installment = How many takas paid each week.

Raya is a new member undergoing training. She has not received a loan yet.

See appendix for more comprehensive results.

Here are some explanations on these loan purposes:

Fish business

Many loans are for "fish business". Some villages are composed exclusively of fishers who do not have access to other resources. Instead of fishing themselves, since they can't access beels in the closed season (they would have to pay their way in to the beel lease-holder, if allowed at all, at a high cost). Instead members, use the capital from the loan to purchase fish from from harvesters in the beel, and then take it to the local market for resale, at some profit. In most cases, the husband operates the business, and the woman administers the loan. This fish business only involves the purchase of fish from the haor, and taking it to the market in Borolekha. In other

areas people may do invest for fingerling hatching, trade, and smoking, but the interviewed members do not engage in these specific activities through the microcredit program.

Grocery shop

Investments in a stall and purchase of food items for resale. Some smaller operations involve selling items from a basket that men carry on their head. Again, in this area, women administer the loan, but it is men who run the businesses.

Firewood

With the capital received as part of the loan, beneficiaries purchase firewood from people in the surrounding hills, transport it to the market for resale at a profit.

Betel leaf

This is the purchase of Betel leaves (Piper betle) that are cultivated by the $\bar{A}div\bar{a}s\bar{\imath}s$ (tribal/indigenous) people in the forests of the surrounding hills. These leaves are widely consumed, chewed as a stimulant, an antiseptic and a breath-freshener (Paan). Borrowers use the money received as part of loans to purchase these leaves from $\bar{A}div\bar{a}s\bar{\imath}s$, and then sell them at the local market. This is a rather lucrative business, each leaf being worth around 2 takas.

Rice

With the loan money, a family purchases the seeds to cultivate rice, which is sold at the market. Rice is by far the main crop and main staple in the area.

Another series of interviews provided details on the following activities (not included in the table):

Cow rearing:

This is the purchase of a cow, rearing it for milk production. For example, a woman purchased a milking cow, which have cost her 15,000tk. She contracted a loan for 10,000, and advanced 5,000 herself. The price of a cow varies from 5,000tk for a small one, up to 50,000, 60,000. Cows for meat are more expensive than milking cows.

Sewing machine:

Some women receive a loan to a purchase a sewing machine and operate an in-house sewing shop, where customers come for repair and preparation of clothes. It is usually the husband that operates the sewing shop.

Hair dressing business

One woman has opened a hair dressing business, also in her home. She used the loan money to purchase a chair, scissors, and combs. It is usually the husband who cuts hair.

Handicrafts of bamboo

Weaving baskets and related handicrafts from bamboo, for resale at the market.

Welding workshop

The money received goes toward the rental of a stall and the purchase of welding equipment, operated by the husband of the borrower.

How is micro-credit related to CNRS mandate?

As mentioned earlier, this micro-lending program is, for the most part, not directly related to the mandate and activities of the NGO. It is first and foremost, seen as part of the good relationship with community members, as a service provided to villagers, which helps with community mobilization and capacity-building.

Beyond that, there are two ways in which the CNRS seeks to integrate these micro-credit activities with its broader mandate, according to the local staff, it: a) it places emphasis on those who are interested in the sustainable management of natural resources, especially those who participate in the community-based organization (CBOs), i.e. those households who participate in CNRS activities, and b) it facilitates the implementation of projects that are relevant to sustainable resource management, as CNRS provides training, technical advice and logistical support for the implementation of these projects. Especially, the weekly meetings provide a useful forum where CNRS staff can engage in planning, training, and receive feedback from community members.

Here is an example. During a weekly micro-credit meeting in one of the villages, a portion of the meeting was devoted to an update on the demonstration plots for vegetables. This is program, part of CWBMP, where women in this group received approval to start a vegetable demonstration plot, in order to promote vegetable agriculture in the winter season (as an alternative-income generating initiative to divert harvesting pressure from local fishery during the fish reproductive season). In these initiatives, CNRS provides the means - technical and financial assistance, as a grant and not a loan, and other forms of capital such as seeds. This

specific group, for instance, did not receive any loans for vegetables. This is part of its attempts at encouraging alternative income generating activities, which may contribute to reduction of pressure on *haor* resources. As it was, one member had prepared the seedbeds, after a certain period they will put in the seeds. Another had started planting seeds of Kira vegetable in the field. She was planning two plots: one of kira, one of pumpkins. She already received seeds from the CRNS.

According to CNRS staff, these meetings allow to discuss many of the issues pertaining to sustainable resource management, raising awareness on these questions. This ensures that program participants do consider Natural Resource Management issues in their lives and loan decisions. According to both staff and program participants, they have learned much from CNRS, such as not to catch breeding fish, not to poison and kill birds. For example, some villagers have mentioned a time when the birds visiting the *haor* area were so loud at night they could not sleep: "that was 20 years ago. 7 to 10 years ago, the birds started to be less and less, people hunted everything to eat, even crows. Then we didn't see many birds. In the last 3-4 years the birds are slowly coming back, we can even hear the sound of shore birds".

Micro-credit programs are a particularly efficient way of reaching out to women, who are otherwise excluded from other programs run by CNRS (see next section, women's empowerment).

Lastly, this micro-lending program could eventually be vital to CNRS's work, as it could provide a source of revenue to the organization if it were to run out of project funding. Many small to medium NGOs and Bangladesh rely on these mechanisms to meet of their operations,

and this is a path that CNRS may, or may not, have to take in the future.

What do program staff have to say about the program?

Field staff and unit managers in Borolekha and Juri were asked to comment on the difference that this program makes for its beneficiaries. Most report that there has been substantial improvements in the area. Initially most of the houses in the participating villages were made of thatch, whereas nowadays most are tin-coved. Members have been learning to write their name, kids go in school, people are more aware of their rights, and they are less vulnerable from natural hazards. For example, the Juri unit manager has been here for 1 year and 3 month, and he saw large improvements during that period.

Given that other micro-credit agencies are active in the area (including BRAC, ASA and Grameen bank), I asked staff members if they were aware of members participating in multiple programs, I was told that, indeed, "there are people like that, but normally we don't know".

During discussions with managers and staff, it arose that the main difficulties and challenges that they face in their work are the following:

- Environmental problems, such as floods, make their work very challenging.
- Local political problems; especially regarding the land, some people invest for a project on a given parcel land, somebody else later comes in and claim the land is their, reaping the profits.
- "Take the money and run": people who leave right after loan distribution. About half of the overdues are owed by people who have just 'disappeared'. Some problems with drug addicts and other anti-social behaviours people who participate in the program, take all the money that they can, from many different organizations, and then disappear.

When payments are overdue, staff try and ask to get the money back, working with the group, but ultimately, no legal action is undertaken, and the NGO eventually let go. This is rather rare occurrence, people say that few people default, maybe 4-5 people in as many years. There are a few mishaps here and there, not many people have payback problems with loans, there are a few that skip some installments. Most people either eventually pay back, or else they "just disappear, there is not really any in-between.

There is a also a relatively high degree of "follow-up"; the extent to which borrowers do invest in what they initially claimed that they would. One unit manager estimates this as a 80% success rate, as maybe 20% fail to follow-up on their plans.

Staff and managers made a few suggestions as to how the program could be improved.

A lowering of interest rates was suggested as a good approach of further helping people.

Another suggestion involves plans for official training outside of the office, for specific programs related to business start up. As of now, there are no official training programs, general advice is provided by the CNRS staff, but more specific information would be beneficial.

There are already planned initiatives to improve the effectiveness of the loan programs.

One of them is in Juri, where there are plans to select the 100 best out of the 1600 members,
those the are good at managing to achieve their plans with the money that they are given. These selected members will receive additional money for specific projects, and more support to achieve them.

What do program participants have to say about the program?

In this section, and the following ones, I report some comments that were collected from participants in the micro-credit program. In general, participants commented that these programs do help, but could help more. Mainly, what came up of these conversations is that in addition to the help provided by the actual loans, the programs provide help with organizational capacity, especially as it pertains to the facilitation of group meetings, bookkeeping, and other related skills.

Meetings provide a good context for discussion, training, and problem-solving on a variety of issue. Group members report receiving guidance such as being encouraged to not to put all their money into one investment but to invest in more than one business, such as raising ducks and also buy a goat.

One member of a long-standing saving group started under the CBFM-2 project pointed out that because they were able to receive starting capital out of the loans, some members eventually became self-sustaining. The group in this village had started a 30 members, and about five years later, they are down to 23, as 7 members felt they had made enough money from starting business with the initial loans and are now loan-free. All would like to be successful enough in their businesses to eventually get out of loan cycle.

Given the wide range of available loan sources in most areas, I asked members why do they taking loans from CNRS and not the others? Some replied that they were drawn to CNRS programs by their relatively low interest rates (12% under CBFM-2, the program under which this specific group is organized). Another point of interest was is that when an individual

member pays back her loan, she can take another one right away, whereas in other lending institutions such as Grameen Bank, the entire group of women must repay back all their loans before any one of them can take another one.

I asked some of the members to comment on what they may have learned through their participation in the credit groups. One member mentioned that most importantly they gained skills for self development, which includes learning how they can be self-employed. Also, the group allows women to meet and discuss and focus on key issues such as health, social problems, and organizing to share resources.

In general, these initiatives may be seen as providing some additional sources of capital for livelihood enhancement, opportunities to diversify sources of income as Part of the 'constellation' of opportunities and sources of livelihood with which households have to compose

Other members report having learned on the importance of protecting the resources protecting against deforestation, harmful gear use, fishing in breeding period, necessity of fish sanctuary, of plantations. In this regard, the savings group is explained as a sort of female counterpart to the male-dominated community-based organization; a forum where women can raise and discuss concerns related to natural resource management.

To provide a sense of the extent to which the participation in the micro-credit programs has benefited them, all say that the business to which the loan goes is their main occupation and their main source of income – in fact none report having other source of income. Floods remain a serious problem, but it used to be even worse off before when they lacked the capital to recover

from disasters. According to the interviewed group members, credit program changed their lives, and they are now better prepared to raise families.

What potential is there for improvement?

I asked the same members to comment as to whether they could suggest ways in which the micro-credit programs could be improved. Initially, I received rather general answers. The first item on which there was some form of consensus was a common desire for larger loans, especially for groups that have been established for long periods. The loans top at 10,000 takas a year, which, according to interviewed members, is not sufficient to truly start something new. This is seen as especially relevant with the on-going inflation crisis in which the price of staples keep increasing. They want higher loans, hoping for amounts ranging in the 40,000-50,000 takas, as opposed to the 10,000 they must contend with. It was added that, if they can have receive more starting capital right away, they could have bigger businesses and become more self reliant. One added that Grameen does offer loans for up to 50,000 takas, but that this group prefers doing business with CNRS, and would like them to increase amount of money made available. They believe to be past the point of requiring 'micro' credit amounts, and are ready to take on bigger investments. It must be pointed that the present CNRS staff seems to disagree. One even pointed out that larger loans would involve larger weekly installments, a comment that generated mixed reactions. A similar discussion took place concerning some desiring monthly installments instead of weekly ones: many changed their mind after a quick estimate of the sum that such a monthly payment would represent.

Another member pointed out that, just as there already exist some insurance opportunity in case of illness or death - a system of debt forgiveness if the main income-earner dies. The current saving schemes would be greatly helpful if it provided special loans and some insurance and extra support in case of illness and for child education. As well as special loans, specific for education; medical expenses be covered by health insurance, and secondary level education, all included, costs as much as 3000tk per month for a child (clothing, tuition, book, etc).

A common request involves more and better training, especially focusing on business investments, natural resource management and also health and household economy (as it was under CBFM-2; this program was greatly appreciated). This is parallel with the desire for long term support from experts on various livelihood-related issues, especially specific training according to their business.

One woman commented on the CNRS-led flood relief operation in the preceding months (early September 2007). She says that many beneficiaries did not receive relief, even after being member of CNRS program for many years. This is an interesting challenge for NGOs - should they prioritize loyalty to their members or fairness across the broader population? Arguably, the relief is based according to a needs assessment, but I think the needs are very high in these emergency needs - what to do? One staff replied that CNRS had only 2400 packets for 3 *upazilas*, so it was certain that many would not get it, even if CNRS program members. Beneficiaries would prefer having a 'preferential treatment' as group-members during disaster relief operations.

Women's empowerment

One of the most interesting and relevant dimensions of the micro-credit programs as part of the CNRS activities pertain to gender issues in the area. Women are widely excluded from many aspects of the public sphere in this area. The community-based organizations (CBOs) with whom the CNRS work are, as of Fall 2007, still almost exclusively composed of men. The current CWBMP program imposes to these organizations quotas of 25% female participation, along with some measure of awareness campaigns on these issues. Few of these CBOs have reached such a quota, and in those that do, female presence appears to be mere token representation.

Many components of the larger program require that women participate in the resourcemanagement related initiatives, but it is very difficult for outsiders to address the cultural factors responsible for their exclusion in the first place. Importance of some female staff in the organization and also of creating women-only forum groups for deliberation and discussion on natural resource issues.

Micro-credit groups are composed 100% of women. Given the particular nature of micro-saving dynamics, it is one of the 'public' domains where woman's participation is deemed acceptable locally. These groups provide a good opportunity for women forum and for organizing. This can be a good starting point for deliberation group where could be held general discussion of women on environmental issues. The platform provided by the on-going micro-finance activities offers a good potential for this purpose, as the saving groups are composed of women who appear to seek greater

involvement in these types of programs.

The importance of woman-friendly environment for these initiatives is crucial, and to this effect, precautions must be taken to avoid the instances of intimidation and coercion reported in other micro-credit programs, where men employees abused their power vis-a-vis female borrowers.

While this may be difficult to achieve, the importance of female staff for these activities must not be overstated. Perhaps a resource-person on gender issues could be welcome addition to the activities as well.

At the same time, work on these issues with men's groups would be desirable as well.

One approach could be to try to identify priorities, and reasons why women involvement would be both beneficial and feasible in certain activities regarding resource management.

Conclusions

Micro-credit is not a central theme of CNRS activities (only in 13 branches out of 31). But it is still a relatively large-scale organization, as it involves thousands of participants in 3 districts, transactions of millions of takas. There exists a link with natural resource management work as it contributes to poverty alleviation, livelihood diversification and community mobilization. This micro-credit program has important potential for synergy with more focused programs, with capacity building potential of linking existing micro-finance and livelihood diversification activities to sound management of common-pool natural resources. At the same time, it provides potential for addressing gender development issues through women forums.

One framework to evaluate the links of credit activities with their contribution on sustainable resource use and management could be through a focus on the links on ecosystem services, evaluating as to whether activities either contribute to both poverty alleviation and enhancement of ecosystem services⁴. One of the ways of going at it would be looking at possibility of applications of the Millennium Assessment framework at household/local levels.

Lastly, the studies on these topics tend to be highly quantitative, looking at participation rates, group composition, and household surveys to evaluate changes in livelihood and vulnerability. It appears that this type of program would benefit for more qualitative approaches, though critical evaluations based on observations and interviews, in light of which can be interpreted the numbers provided by organization.

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Appendix

Tables

Please refer to the .XLS file/spreadsheet document titled CNRScredit08.xls. This file contains the numbers collected during field work at the Boroleka field office, CNRS, during fall 2007.

The sheet "LOANS" contains all the info available on selected active loans from the accounting books available in the respective offices. There are over 1000 active loans in each office. I randomly picked 5 for each month for each office.

The Sheet "Socio-Economic Data" contains some of the numbers copied from the

participatory mapping and survey exercise carried out by CNRS under the CWBMP project 1st phase in 2006. The table displays the name of villages, number of households (HH), and the numbers of people who self-identify as under one of the listed professions. The spelling of the villages seems misleading. No additional information was available on methodology, but this is the only data that I could find at this level. More details may be found at the CNRS-HQ in Dhaka.

The sheet SAVINGREPORT07 was produced upon request by the credit manager in Dhaka, and it provides the balance of various saving accounts based as they were reported to the Kulaura field station. It breaks down the loans, numbers of members, and how much money, according to the three different programs (SEMP, CBFM and regular loans).

The sheet ReportApril07, as well as the sheet ReportSept07 were provided with little explanations. I believe that these are two examples of monthly, or quarterly reports in which the status of each micro-credit branch, how much money is flowing, how many loans are being reimbursed(savings realized) and how many loans are defective (savings realizable).