Repaying Mortgages to Build More Houses: A Key to the Success of Habitat for Humanity's Project in Kenya

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1. Introduction

Habitat for Humanity (Habitat) is an international development NGO that supports the building of houses among poor communities around the world. Activities in Kenya first began in the Bungoma District of Western Province in 1982.

Currently (as of July 2007), Habitat Kenya operates in six different regions with its headquarters in the Westland neighbourhood of Nairobi. There are several affiliates registered within each region (Table 1). There are a total of 41 operating affiliates in Kenya and over 2000 houses have been built in total.

Table 1. List of the 6 Habitat Kenya regions and 40 affiliates

Regions	Bungoma	Maua	Runyenjes	Kisii	Machakos	Bomet
Affiliates	Ndabarnach Lubokha Kimilili Bungoma Mulembe Katira Myanga	Athiru Gaiti Kirindine Athimba Kanthiari Antubochiu Nkinyanga Akirangondu Antubetwe	Kigumo Mukuuri Kimuri Thuita Mufu Kathari Gichiche Mbiruri Gikuuri	Kiru Bigege Matieko Nyamemiso Bomwagi Boronyi Bonyagatanyi Bonyanchaire Nyanchwa Kegati	St. Naumi Kwangolya	Kiptulwa Kabusare Chepngaine Mosop Kaplong

Source: http://www.hfhkenya.or.ke/html/hfhk_affiliates.html (browsed on July 5, 2007)

The basic philosophy of Habitat's housing construction aid is to use resources from the local community as much as possible. Rather than depending on outside donations, mutual support is encouraged between members of Habitat affiliates. For example, all members of an affiliate are obligated to perform a certain amount of labour (over 40 hours) in helping to build houses for other affiliate members. This system is called 'sweat equity'.

Furthermore, once a house is completed and a member becomes a 'homeowner', he or she must repay the construction costs in monthly instalments. As long as there is a balance maintained between loans and repayments, Habitat's operations are sustainable. On the other hand, if homeowners fall behind on their payments, there is a shortage in the absolute amount of money available for recycling funds ('revolving fund') and it becomes impossible to build new houses through the affiliate.

Habitat Kenya gives each affiliate seed loans and technical advice on how to operate a business, but local volunteers are the ones to actually craft business plans, run the office, staff mortgage repayment windows, manage finances, and perform other aspects of running a business. Each affiliate operates as a highly independent self-help group also in the sense that a certain level of discretion is called for in the selection of households qualifying for aid.

This paper is a report on the author's anthropological research in January 2006 on Habitat Kenya's activities in a farming village in the Nyambene region of the central highlands of Kenya. Emphasis will be placed on the state of loan and mortgage repayments in Habitat Kenya housing construction projects. As an example of conditional aid, this case study presents interesting insight into small loan development aid schemes. Finally, based on the author's findings after having conducted research in Nyambene, this paper discusses the possibilities and tasks at hand for Habitat Kenya.

2. The Nyambene region of Kenyan central highland

The Nyambene region referred to in this paper corresponds to the former Meru North District. Meru North District was created when the grater Meru District was divided up in 1993. Although its official name at the time of establishment was Nyambene District, this was later changed to Meru North District.

The majority of the district's 604,050 residents (1999 national census) are the Ameru and speak *Kîmîîrû*, the Meru language as their mother tongue. People living in the western and eastern areas are called Tigania and Igembe respectively, but both are considered Ameru sub-groups. In January 2007, Meru North District was subdivided into the Igembe District and the Tigania District (*Daily Nation*, January 19, 2007).

The research for this study was conducted in the Igembe Southeast Division, located southeast of the central town of Maua. The land slopes gently from northwest to southeast and connects to the Thaicu Plains and Meru National Park. The highland plateau rises over 1000 meters and is home to the majority of the population as well as numerous government offices, churches, elementary schools, market stalls, and shops. In comparison, the lowland area is only sparsely populated.[1)] Almost all households in the highlands own arable land in both the highland and lowland areas and farm various plants according to social and environmental conditions. In the highland areas, people concentrate on raising livestock such as cattle, goats, sheep and fowl and producing cash crops such as *mîraa* (to be discussed later), coffee and tea. The lowland areas are used to cultivate self-sustaining crops such as maize, haricot beans, cowpeas, and millet. Many people walk five to ten kilometres one way to tend to multiple fields (Ishida 2008).

Before moving into a discussion of Habitat Kenya's housing construction aid and the state of mortgage repayments in Nyambene, the following subsections will outline (1) housing conditions in Nyambene, (2) local industries that provide valuable cash income to Nyambene residents, specifically cash crops typical to the area (*mîraa*), and (3) the activities of other development NGOs in Nyambene.

2.1 Housing conditions in Nyambene

Diversity in housing culture can be found in the ecologically diverse environments of the Nyambene region. First, in humid areas including the Igembe Southeast Division, along the southeastern slope of Nyambene ridge, many houses and yards are surrounded by tithonia or lantana hedges. In comparison, residents living on the northern slope generally use euphorbia hedges because there is less precipitation. Second, in areas where low levels of rainfall make it difficult to obtain income from cash crops (to be discussed later), houses are built in a traditional style using locally available materials. The author observed many such houses in the Njia Division (the northwest slope of Nyambene ridge) as opposed to few in the highland areas of the Igembe Southeast Division.

Third, in the humid lowland areas (Thaicu Plains) of the Igembe Southeast Division, there are traditional treehouses called *kîlîngo*. This style of housing is unique to the area and allows farmers to guard their millet crops from birds and also protect themselves from elephants, rhinoceros, and other dangerous wild animals nearby. Fourth, changes are emerging in the materials used for housing. Although grevillea wood is used most commonly in the Igembe Southeast Division today, local residents used to use indigenous trees such as *mûkûi* (*Newtonia buchananii*), suitable for walls and pillars, *mûringa* (*Cordia africana*), suitable for doors, and *mûkweo* (*Bridelia micrantha*) to protect against termites. Since the government currently strictly regulates the use of these endemic species to promote biodiversity and environmental conservation, local residents have turned to non-indigenous plants such as grevillea for building material. A small number of houses have also been built using stone collected locally or from Meru Central District.

Fifth, changes are also emerging in styles of housing. The typical homestead in the Igembe Southeast Division today consists of a main house for the husband, wife and small children, a shack for cooking, a house for girls of marriageable age, and a house for boys who have been circumcised. However, this arrangement is a reflection of recent societal changes; comparatively older styles of homes have a cooking area within the wife's house while the husband lives separately.

2.2 Local industries in Nyambene

Coffee was widely grown in Nyambene as a cash crop beginning in the 1960s (Bernard 1972: 118-121). A majority of households farmed coffee as it continued to enjoy steady growth into the 1980s. Towards the end of the decade, however, market values for coffee dropped and remained stagnant, causing many people to lose motivation to continue farming it. Instead, they turned to *mîraa* (*Catha edulis*).[2] As *mîraa* grows best in the same kind of soil as coffee, coffee was gradually eliminated from the fields in the 1990s.

Today, the *mîraa* industry has expanded beyond simple production to include processing and distribution, creating many temporary jobs for people especially at the processing stage. Farmers bring the *mîraa* bundles they have collected between six and seven in the morning to a local public gathering spot where they are then sold to middlemen between seven and eight o'clock. Immediately afterwards, the *mîraa* is processed (leaves are removed from branches) and packaged in assembly-line workshops set up by the middlemen. By eleven o'clock or noon at the latest, the *mîraa* is transported to delivery vans lined up along the outskirts of Maua and handed over to the Somali wholesalers who originally placed the orders.

Mîraa workshops are set up almost every day and are staffed by local residents, especially unmarried men and women (including single mothers). Compared to the dry season, wages are better in the rainy season because crop yields are so high that there is often a shortage of workers. Even in October, however, that is, between seasons, it is not difficult to earn 150 shillings (one shilling is approximately 1.6 Japanese yen) for a day's work between eight and eleven o'clock in the morning. For schoolchildren, unmarried women, and both married men and women, performing unstable and unskilled labour in 'ill-mannered' workshops is frowned upon. This is not the case at all for simply farming *mîraa*. However, citing the instability of the workshops and the gambling element[3] involved in trading, people who emphasise the social value of higher education and regular employment frequently criticise the *mîraa* industry overall as a 'fake business'.

At present, the *mîraa* industry has developed on a large scale only in Nyambene. The farming, processing, and distribution of *mîraa* has become an important source of income and a great number of people, from local farmers growing small crops, to labourers working temporary jobs in the workshops, to businessmen who have struck it rich dealing in production and trade, are participating in the *mîraa* business. The cash flow that emerges from the *mîraa* industry has also had a synergistic effect on other areas of the local economy and boosted consumer activity. The industry also supports the sale of packing materials such as banana fibres and ensete leaves and unoccupied buildings and land that would otherwise go unused.

2.3 Development aid in Nyambene

Habitat Kenya specialises in house-building aid through the provision of small loans to individuals. In contrast, Plan Kenya (Plan) is an international NGO that has provided comparatively large-scale grant aid in a comprehensive approach spanning multiple development areas. Plan further differs from Habitat in that its activities have specific time spans. In other words, the Habitat programme is ongoing, while Plan has fixed-term projects.

Plan aid activities began in Nyambene in the early 1980s. Its primary projects thus far have been very diverse and include water supply aid, road development, school construction, agricultural technology aid and foster parent programmes. Although weight is placed on water supply projects currently, Plan initially focused on foster parent programmes to build relationships that gave a face to both the aid-giver and receiver. The Igembe Southeast Division was formerly a programme participant and many residents had received letters or gifts of school supplies from foster parents abroad when they were primary school students. When the programme was first introduced, the nuance of the word 'foster parent' caused a number of misunderstandings among local residents at a time when foreign development aid was still unusual.

The water distribution network currently in use in the Igembe Southeast Division was also built with Plan aid, allowing clean water to be pumped directly from the source and distributed to various areas. Local residents are highly satisfied because sanitation has improved dramatically, the burden of drawing and carrying water has been reduced, and irrigation of crops has become much easier.

In addition to international NGOs headquartered in the West, such as Habitat and Plan, there are a large number of grassroots organisations operating in Nyambene. One example is the Maua Disabled Centre Self-help Group. Established in 1993, this NGO supports economic self-sufficiency for disabled individuals using money gathered through independent fund-raising, the Kenyan government's Community Development Trust Fund (funded by the European Commission), and donations from Methodist churches in England and Germany. Currently, the centre is finalising plans for opening shoe repair, furniture and clothes-making workshops in a multipurpose hall completed in 2006.

3. Habitat Kenya in Nyambene

Habitat supports housing construction in Nyambene through eight affiliates (Table 1) under the direction of the Maua regional office. In January 2006, the author visited the Maua office in a multi-tenant office building (housing law offices, etc.) located in the centre of town. The office was then staffed by three field officers dispatched from Habitat Kenya's headquarters. The eight affiliates directed by the Maua regional office operated as highly independent self-help groups and local volunteers were responsible for running the affiliate office, staffing mortgage repayment windows, managing finances, and performing all other aspects of running the business. Field officers at the regional office directed and supervised the eight affiliates in terms of whether they were providing effective support and maintaining sound fund management. They also assisted with house-building seminars and seminars on how to facilitate mortgage repayments (see Section 6).

3.1 Procedures for affiliate approval

Grassroots self-help groups interested in housing construction aid must undergo the following general procedures before being officially approved as a Habitat affiliate (Habitat for Humanity Kenya 2002).

(1) Habitat Kenya assesses the possibility of operations at the potential site(s).

(2) The field officer evaluates the self-help group (SHG) that is to act as the window for operations. Final selection of the SHG is determined by headquarters in Nairobi.

(3) The SHG prepares their Operations Manual[4)] (see 3.3) as instructed by the field officer and submits it to headquarters.

(4) The SHG conducts independent fund-raising for construction of the first house.

(5) The SHG selects three qualified households[5)] for house-building support.

(6) The selected households prepare toilet facilities[6)] and assemble the required building materials (described later). A down payment is made and the mortgage agreement is signed.

(7) The SHG selects a fundi (carpenter in Kiswahili) and building material suppliers and reports cost estimates to headquarters. The SHG purchases the building materials and begins building (toilet and house) together with household members and construction workers.

(8) The SHG signs a contract and written oath and submits both to Habitat's international and Kenya headquarters. The SHG presents the completed home and a commemorative Bible (Kîmîîrû version) to the selected households.

(9) Mortgage repayment by the homeowner commences and the SHG submits financial report to headquarters. Habitat headquarters officially approves the SHG as an affiliate.

3.2 Outline of the Athiru Gaiti affiliate

This study focuses on an affiliate of the Athiru Gaiti community, the first SHG to complete all of the above procedures and begin activities in the Nyambene region. Table 2 shows the number of Habitat houses built by the Athiru Gaiti affiliate between 1996, its first year of operations, and January 2006. (Table 2 contains data on mortgage repayments to be discussed in Section 6.)

As Table 2 indicates, there were a total of 28 houses built in the first year of operations (1996). The very first Habitat house to be built by Athiru Gaiti was completed on February 24, 1996. Although a simple comparison shows that the number of houses completed in 1997 and 1998 dropped by half, the average pace of construction was a steady one house per month for both years.

In fact, between 1996 and 1999, Athiru Gaiti was one of the top performers in all of Kenya. Although there were far fewer affiliates operating in the country at the time, in 1997, Athiru Gaiti was recognised by Habitat Kenya for having the best overall performance in terms of mortgage repayment rates and number of completed houses. Likewise, in 1999, Athiru Gaiti ranked number one in three evaluation categories and number two for overall performance.[7)]

Table 2. Athiru Gaiti's performance by year (1996-2005)

Year	No. of Houses constructed	Repayment completed	Repayment uncompleted	Bad Debt
1996	28	13	15	13
1997	15	4	11	6
1998	12	3	9	7
1999	9	0	9	2
2000	2	0	2	1
2001	4	0	4	1
2002	0	0	0	-
2003	0	0	0	-
2004	20	0	20	-
2005	8	0	8	-
計	98	20	78	

January 2006

However, between 2000 and 2003, Athiru Gaiti's finances deteriorated to the point that continuing business became impossible. Not even a single house was built in 2002 and 2003. Funding that should have been circulating through the affiliate ran out as a result of delinquent mortgage repayments (to be discussed in Section 6). Athiru Gaiti was essentially dormant during 2002 and 2003 after Habitat Kenya cut off financial support as a 'sanction' against its poor performance (according to an affiliate committee member).

Operations recommenced in 2004 and 20 new houses were built. Out of the twelve houses planned for 2005, eight were actually completed. Having been forced to experience a suspension of business, Athiru Gaiti has since promoted much stricter management of its funds. For example, it has brought civil suits against two homeowners who showed no intent to repay their loans. Furthermore, one affiliate member advocated raising the required down payment from the current five percent to fifteen percent. House-building procedures and mortgage repayments are discussed in Sections 4 and Sections 5 and 6, respectively.

3.3 Operations of the Athiru Gaiti affiliate

In a recent undated Operation Manual, Athiru Gaiti's operating structure and business policy are outlined as follows:

Committee meetings

- Meetings are to be held at Athiru Gaiti's offices.
- Regular meetings are to be held once per month.
- Seven days prior notice is to be given in case of any special meetings.

Committee organisation

- A fifteen-member committee is to be organised (Habitat Kenya rules require between 14 and 21 members).
- Of the fifteen committee members, more than five should be women (Habitat Kenya rules require greater than one third of the total to be women).
- Of the fifteen committee members, two should be under 30 years of age (Habitat Kenya rules require more than one).
- The committee is to elect a chairperson, secretary, and treasurer, and establish four sub-committees on membership, finances, construction, and fundraising (same as Habitat Kenya requirements).
- The committee is also to elect a vice chairperson and vice secretary.

Terms of service

- Committee members and elected officials may serve up to two three-year terms (according to Habitat Kenya rules).
- Retired officers may serve as advisor after completing their terms of service.

Elections

- Committee members are to be elected by affiliate members by a majority rule show of hands.
- Executive members of the committee are to be elected by the committee by secret ballot.

Dismissal

- Committee members are to be dismissed if they are absent from more than three regular meetings without explanation, if they do not participate in committee activities and have no legitimate excuse not to, if they are delinquent on mortgage payments by more than three months, or in the case of long-term hospitalisation or death.
- An executive may be dismissed by a two-thirds vote by all committee members if the one is not performing his or her duties or is using the affiliate's finances for personal purposes.
- The entire committee may be dismissed by a two-thirds vote by all participants in the affiliate assembly if the committee is not performing its duties or is using the affiliate's finances for personal purposes.

Households qualifying for aid

- Households headed by widows are to be given first priority in the selection process. Single-parent households with children under 16 years of age and two-parent households with and without children are to be given equal consideration (according to Habitat Kenya categories).
- Households with monthly income over 2,500 shillings and under 12,000 shillings qualify

(according to Habitat Kenya rules).

- The membership subcommittee is to recommend qualified households to the general committee.
- The affiliate is to confirm the property rights of candidate households with a land demarcation officer.
- Informational meetings are to be held once per month for at least five qualifying households.
- Qualified households are obligated to perform 40 hours of construction labour (according to Habitat Kenya rules).
- The minimum down payment is five percent (according to Habitat Kenya rules).
- Households that do not participate in an informational meeting will not be allowed to sign contracts.

Mortgage Repayment

- A loan repayment window is to be open twice per week (Monday and Thursday).
- A penalty is to be imposed on delinquent payments.
- After one month of delinquency, a notice of seizure of assets will be issued.
- After two months of delinquency, a committee member will visit the homeowner to collect the delinquent payment in addition to a 500-shilling penalty fee. If the homeowner does not make the payment, an application for seizure of assets will be filed at court.

4. Procedures for building houses in Athiru Gaiti

The majority of Habitat houses built by Athiru Gaiti use concrete for foundations and flooring, GCI sheet (galvanised coated iron sheet) for roofing, and grevillea for other parts. As discussed in Section 2, grevillea is a much less expensive material compared to other, strictly regulated timber. Finally, although the subject is beyond the scope of this paper, wooden houses have recently started to give way to stone construction due to exhaustion of forest resources and rising costs of processing (see Table 4 on the fuel costs of power saws).

In terms of floor space, Habitat houses come in small, medium, or large sizes, depending on the household size and amount of income. Table 3 shows the standard costs for each type of house according to a June 23, 1999 notice released by the Athiru Gaiti affiliate. The 24 feet by 14 feet dimensions were later changed to 24 feet by 15 feet.

Table 3. Standards and costs of wooden houses

Measurements	Construction Costs
24ft × 14ft	47,338 Kshs
18ft × 14ft	37,666 Kshs
18ft × 12ft	32,845 Kshs

Athiru Gaiti Affiliate, June 1999

The figures in Table 3 do not include the actual costs of grevillea or ballast used in the concrete flooring because these materials are often collected from the homeowner's own property. Loans are not given to homeowners for the purchase of any materials that can be procured locally. Table 4 shows the standard costs of 24×15 wooden house in Athiru Gaiti in September 2001. Expenses for wall frames, trusses, wall plates, wallboards, and wall battens refer to the cost of power sawing only. Table 4 does not include costs for the construction of toilets.

Table 4: Standard costs of 24 feet×15 feet wooden house

Item	Unit	Qty	Rate	Total (Kshs.)
Cement	bag	25	550	13,750
Sand	ton	4.5	900	4,050
Wall frame 3"×4" splitting only	feet	600	3.5	2,310
Truss & Wall plate 3"×4" splitting only	feet	505	3.5	1,768
Wall board 8"×1" splitting only	feet	1,755	3.5	6,143
Wall battens 2"×1" splitting only	feet	1,470	1.5	2,205
Damp proof course (DPC)	roll	1	900	900
Anti-termite chemical	litre	0.25	2,600	650
Hoop iron	kg	2	70	140
Iron sheet 3M	No.	22	390	8,580
Ridge covers	No.	5	95	475
Nails (ordinary)	kg	18	50	900
Nails (for roofing)	kg	2	120	240
Exterior door	No.	1	400	400
Interior door	No.	2	250	500
Widows & Frames	No.	4	150	600
Total costs of material items				43,610
Labour cost				7,600
Transport cost				-
Legal fee (contract execution)				300
Total				51,510

Athiru Gaiti Affiliate, September 2001

N.B. 10 percent of the total amount should be paid as administrative cost.

Since Habitat's fundamental principal is to use local resources as much as possible in the construction of houses, total costs may actually be less than those cited above if building materials such as nails and sand are already available. On the other hand, actual costs may be higher if materials are not available locally. In such a case, Habitat loans cover the cost of transporting the necessary materials. Furthermore, since the current retail price of cement differs from the price in 2001, separate estimates are prepared before the start of construction. Table 5 shows an example of an estimate that has been fingerprinted by the homeowner and approved by the affiliate in September 1999.

A comparison of Table 4 (standard costs) and Table 5 (estimates) makes it clear that the costs of hoop iron, DPC, doors, and window frames are not included in the estimate. This is because the homeowner prepared these materials without loan aid from Habitat. The estimate also lists costs for two different types of cement. This indicates a change in the price of cement during the construction period as materials arrived in batches.

Table 5: Estimate for a 24 feet×14 feet wooden house

Item	Unit	Qty	Rate	Total (Kshs.)
Cement	bag	16	480	7,680
		5	500	2,500
Sand	ton	8.75	971	8,500
Wall frame, Truss & Wall plate (splitting only)	feet	946	4	3,784
Wall board (splitting only)	feet	1,416	4	5,664
Wall batten (splitting only)	feet	1,200	1.8	2,160
Termite poison	litre	0.25	2,200	550
GCI sheet		21	360	7,560
Ridge caps		5	95	475
Roofing nails	kg	2	100	200
Total costs of materials				39,073
Labour				6,000
Transport (Cement)		19	40	760
Transport (GCI sheet)		21	10	210
Legal (voucher)				300
Total Costs				46,343

Athiru Gaiti Affiliate, 27 September 1999

The estimate in Table 5 was made for a homeowner (male born in the 1940s) who agreed to pay approximately 51,000 shillings, that is, 46,343 shillings plus a ten percent administrative fee of 4,634 shillings for his Habitat house. Since he made a down payment of 3,000 shillings on the day of the estimate, 27 September 1999, his mortgage repayment once the house was completed was 48,000 shillings (3,000 subtracted from 51,000 shillings). However, the actual amount of payment was probably more than 48,000 shillings. Homeowners do not simply pay the amount that was estimated prior to the start of construction. To maintain the ability to operate continuously, Habitat anticipates price fluctuations and employs a sliding scale using the cost of cement. Specifically, in this case, the mortgage was calculated to be 48,000 shillings after completion of the house, when the price of a bag of cement was 500 shillings. Therefore, the actual payment that the homeowner had to make was the equivalent of 96 bags of cement, equal to dividing the mortgage by the cost of cement (48,000÷500). Since homeowners are obligated to make monthly payments equal to one bag per month, simple calculation indicates that the homeowner in this case had a 96-month or eight-year mortgage. Mortgage payments, however, are not made in kind; if the retail price of cement rose to 550 shillings, the remaining mortgage would be recalculated accordingly. In other words, the owner would have to pay 550 shillings, equal to one bag of cement, per month. Thus, homeowners understand that it is in their best interests to repay their mortgages as quickly as possible before there is any rise in cement prices.[8)]

5. Case studies of mortgage repayment

5.1 Janet Gicece

As discussed earlier, the Athiru Gaiti's first Habitat house was completed on 24 February 1996. The owner of the small 8×12 feet (floor dimensions) wooden house, Janet Gicece (woman born in the 1930s), appeared on the cover of Habitat International's *Habitat World* magazine in 1998. This coverage was probably due to the well-planned and quick mortgage repayment demonstrated by Athiru Gaiti's first homeowner. On 5 July 1999 Habitat Kenya sent Janet and her husband a 'Homeowner's Certificate' after they had successfully paid off their mortgage. The date of the certificate and the date of the last repayment differed because of the processing time, often several months, required to issue the certificate.

According to Janet herself, her total mortgage repayment was 27,000 shillings. The period of the loan, from completion of the house to issuance of the certificate, was estimated to be approximately 40 months, or three years and four months, since the exact date of the final payment was unclear. On average, this means that Janet made monthly repayments of approximately 680 shillings. Given that the retail price of one bag of cement in July of 1999 was 500 shillings, Janet was making monthly mortgage repayments at a far faster pace than required.

The source of cash for Janet's monthly mortgage repayments was in the *mîraa* industry. Yet Janet herself neither grew *mîraa* nor worked in a *mîraa* workshop. Her husband kept a *mîraa* crop, but he did not contribute the income to repaying the mortgage. How then, did Janet make a profit from *mîraa*?

Every morning, Janet sells banana leaf sheaths for 20 shillings a bundle to the *mîraa* workshops in the public clearings. The leaf sheaths (the comparatively dry fibres of the puseodostem) can be cut vertically along the fibre to make rope to tie *mîraa* twigs into bundles. While the division of labour in the *mîraa* industry by social attributes such as age, sex, and marital status was discussed earlier, the leaf sheath business is completely monopolised by middle age and older women. At least in Igembe Southeast Division, there have been few reports of older men or young women selling banana sheaths. As mentioned in 2.2 of this paper, leaf sheaths are one example of a product that became commercialised as a result of the *mîraa* industry, and demand is likely to increase in proportion to the development of the *mîraa* industry.

While Janet derived her primary income from the *mîraa* industry, another woman homeowner, Margaret Karuki (born 1945), used a completely different source of income to make her mortgage repayment.

5.2 Margaret Karuki

Margaret Karuki's Habitat house was completed on 31 March 1997. It was a medium-sized wooden home, measuring 18×14 feet. Like Janet, Margaret completely repaid her mortgage. In contrast with Janet, who was married, Margaret was a widow when her house was built. Her husband had been in and out of the hospital for twelve years and passed away in September of 1995. Of their seven children, four daughters and three sons, the two younger sons (born in 1979 and 1992) were still unmarried as of January 2006.

Table 6 shows the materials for Margaret's 18×14 feet wooden house that qualified for Habitat aid.

Table 6: Building materials for 18×14 feet wooden houses

Item	Unit	Qty	Rate	Total (Kshs.)
Cement	bag	10	430	4,300
		3	450	1,350
Sand	ton	6.75	960	6,480
Wall frame, Truss & Wall plate (splitting only)	feet	296	3.5	1,036
Wall board (splitting only)	feet	1,204	3.5	4,214
Wall batten (splitting only)	feet	1,120	1.7	1,940
Termite poison	litre	0.2		180
GCI sheet	No	16		
Ridge caps	No	4		
Roofing nails	kg	2		

Athiru Gaiti Affiliate, 1 April 1997

A more detailed list such as the one shown in Table 5 is not available because although Margaret kept documents listing the types and amounts of materials supported by Habitat, the costs of these materials were not clearly indicated. However, we know that a down payment of 1,800 shillings was made on 12 March 1997 and that the mortgage was equal to 75 bags of cement when the retail price for one bag was 450 shillings. Therefore, the total mortgage was 35,550 shillings (450 shillings × 75 bags + down payment of 1,800 shillings), including all expenses and the ten percent administrative fee, but not including materials such as hoop iron, DPC, doors, and window frames that were supplied by Margaret herself.

Margaret made her first mortgage repayment on 10 April 1997, when one bag of cement was worth 450 shillings, and 81 months later, in January of 2004, she received her homeownership certificate, indicating that she had completely repaid her mortgage. As discussed in Janet's case as well, it is not unusual for the homeownership certificate to take several months to be issued, so in fact, the amount of time that it took Margaret to repay her mortgage, equal to 75 bags of cement, was actually less than 81 months.

Table 7 is an analysis of the 65 mortgage repayment receipts kept by Margaret that shows how she continued to make payments over a long period.

Table 7. Margaret's mortgage repayment records

Date (year/month/day)			Description (Terms of payment)	Start Balance (Cement Bag)	Paid Amount (Cement Bag)	Paid Amount (Cash)	New Balance (Cement Bag)
1997	4	10	Apr	75.0	1.0	450	74.0
1997	4	17	May	74.0	0.1	50	73.9
1997	5	15	May	73.9	0.4	200	73.5
1997	6	9	May+Jun	73.5	0.9	400	72.6
1997	6	10	Jun	72.6	0.1	50	72.5
1997	7	14	Jun+Jul+Aug+Sep	72.5	3.3	1500	69.2
1997	10	2	Sep+Oct	69.2	1.0	450	68.2
1997	11	7	Oct+Nov	68.2	0.6	300	67.6
1997	12	1	Nov+Dec	67.6	1.3	650	66.3
1997	12	22	Dec+Jan	66.3	0.4	200	65.9
1998	1	2	Jan	65.9	0.5	250	65.4
1998	1	23	Jan	65.4	0.4	200	65.0
1998	2	4	Feb	65.0	0.4	200	64.6
1998	2	13	Feb	64.6	0.6	300	64.0
1998	2	23	Mar	64.0	1.0	500	63.0
1998	3	11	Apr	63.0	0.2	100	62.8
1998	3	18	Apr	62.8	0.4	200	62.4
1998	4	9	Apr	62.4	0.4	200	62.0
1998	5	2	May	62.0	0.4	200	61.6
1998	5	8	May	61.6	0.6	300	61.0
1998	6	3	Jun	61.0	0.4	200	60.6
1998	6	10	Jun	60.6	0.6	300	60.0
1998	7	8	July	60.0	1.0	500	59.0
1998	7	30	Aug	59.0	0.4	200	58.6
1998	8	4	Aug	58.6	0.6	300	58.0
1998	8	14	Sep	58.0	0.4	200	57.6
1998	8	26	Sep	57.6	0.6	300	57.0
1998	9	21	Oct	57.0	0.4	200	56.6
1998	10	21	Oct	56.6	0.6	300	56.0
1998	11	10	Nov+Dec+Jan+Feb+ Mar+Apr+May+Jun	56.0	8.0	4000	48.0
1999	6	1	Jul	48.0	1.0	500	47.0
1999	6	11	Aug	47.0	1.0	500	46.0

Date (year/month/day)			Description (Terms of payment)	Start Balance (Cement Bag)	Paid Amount (Cement Bag)	Paid Amount (Cash)	New Balance (Cement Bag)
1999	7	9	Sep	46.0	1.0	500	45.0
1999	8	19	Oct+Nov	45.0	2.0	1000	43.0
1999	11	24	Dec+Jan+Feb+Mar +Apr+May	43.0	6.0	3000	37.0
2000	3	3	Jun	37.0	1.0	500	36.0
2000	4	12	Jul	36.0	1.0	500	35.0
2000	5	12	Aug	35.0	1.0	500	34.0
2000	7	14	Sep	34.0	1.0	500	33.0
2000	8	23	Oct	33.0	0.4	200	32.6
2000	9	27	Oct	32.6	0.6	300	32.0
2000	11	13	Nov+Dec+Jan	32.0	3.0	1650	29.0
2001	1	22	Feb	29.0	1.0	550	28.0
2001	2	13	Mar	28.0	1.0	550	27.0
2001	3	9	Apr	27.0	1.0	550	26.0
2001	4	30	May	26.0	1.0	550	25.0
2001	6	8	Jun	25.0	1.0	550	24.0
2001	7	16	July	24.0	1.0	550	23.0
2001	7	31	Aug	23.0	1.0	550	22.0
2001	8	24	Sep	22.0	1.0	550	21.0
2001	11	7	Oct+Nov+Dec+Jan	21.0	4.0	2200	17.0
2002	2	8	Feb	17.0	1.0	550	16.0
2002	3	4	Mar	16.0	1.0	550	15.0
2002	5	13	Apr	15.0	1.0	550	14.0
2002	6	10	May+Jun	14.0	2.0	1100	12.0
2002	8	15	Jul	12.0	1.0	550	11.0
2002	9	13	Aug	11.0	1.0	550	10.0
2002	11	14	Sep+Oct+Nov	10.0	3.0	1650	7.0
2003	1	16	Dec	7.0	1.0	550	6.0
2003	2	17	Jan	6.0	1.0	550	5.0
2003	3	14	Feb	5.0	1.0	550	4.0
2003	5	12	Mar	4.0	1.0	550	3.0

Table 7 shows no records for the equivalent of three cement bags, that is, repayments made in April, May, and June 2006, the last three months of payment, because Margaret was unable to find the receipts. Unfortunately, Margaret did not remember the date of her last repayment and it is unclear exactly when the mortgage was fully paid off. However, as we have already discussed, the homeownership certificate was issued in January of 2004, making it certain that the mortgage had been paid off by December of 2003 at the latest.

Table 7 raises two interesting points:

(1) Margaret made her monthly repayments in two instalments from 1997 to 1998, but

switched to single instalments beginning in 1999.

(2) Every year after 1998, Margaret made three month's worth of repayments all at once in the month of November. (Amounts are highlighted in the table.)

The first point is a reflection of the affiliate's preference for handling single monthly payments (worth one cement bag) rather than multiple instalments. Because the affiliate certainly did not require a lump sum payment in November every year, the second point reflects Margaret's personal economic circumstances: she was paid in the month of November by a tea factory for growing and collecting leaves in the tea fields.

Tea, however, did not raise enough money for Margaret to feed her children and continue to make her mortgage repayments. In the beginning of the 1990s, Margaret sold three cows she had raised and used the money to buy a one-acre plot of land in the lowlands. However, she used this land solely for growing food for her family. Margaret earned cash by working on other people's fields or by selling the grevillea she had collected from the ridges or the livestock she had raised at home.

Margaret was not involved in *mîraa* farming or workshops, nor did she sell anything that was related to the mîraa industry. Although she started growing *mîraa* on her one-acre plot about ten years ago, it was not a scale that would produce and significant income.

6. Delays in mortgage repayments

Once again, the main focus of Habitat's aid activities is the building of houses. This differs from the more comprehensive approach of Plan Kenya discussed in Sections 2 and 3. However, as a Habitat affiliate, Athiru Gaiti conducts agricultural technical seminars aimed at homeowners. The idea is that by helping people to secure a source of cash income, homeowners will be better able to pay off their mortgages. As an organisation that rejects grant aid and promotes a policy of supporting the 'productive poor', that is, those who are willing and able to work, Habitat's performance in terms of mortgage repayment rates and number of houses built is extremely important in the overall evaluation of its operations.

Table 8 shows the programme and schedule for the agricultural technical seminars conducted between 1999 and 2000 according to an undated document released by Athiru Gaiti in 1999. The technical seminars grew out of the fact that there were very few homeowners who were able to make regular mortgage repayments such as Janet and Margaret. As Table 2 in section 3 indicate, only 20 out of 96 homeowners (20.83 percent) had paid off their mortgage as of December 2005, and more than 30 owners of houses completed by 2001 had grossly overdue payments.

Table 8: Programme and schedule of the agricultural technical seminar

Task Force	Quarter I Jun-Sep, 1999	Quarter II Oct-Dec, 1999	Quarter III Jan-Mar, 2000	Quarter IV Apr-Jun, 2000
Group I Toward modern horticultural farming	Growing kales. Planting potatoes.	Planting carrots. Planting potatoes.	Planting kales. Planting potatoes.	Growing tomatoes. Growing potatoes.
Group II Toward improved animal production	Building goat pen. Planting Napier grass.	Keeping goats. Keeping cows under zero grazing.	Keeping poultry.	Looking for markets for eggs. Visiting homeowners to find out if they are implementing what they have learnt.
Group III Toward better home economics, soil and water conservation	Making truss lines. Laying terraces. Digging terraces.	Planting Napier grass. Planting trees. Laying terraces.	Planting Napier grass. Planting trees.	Planting trees. Laying terraces. Planting Nair grass.

Table 9: Breakdown of delinquent repayments (for houses completed in 1996 only)

	Completion Date (year/month)		Months in Arrears	Amount Paid in Dec 2005 (Kshs)	Outstanding Balance (Cement Bag)
A	1996	2	58	0	5.9
B	1996	3	65	0	19.4
C	1996	4	65	0	14.8
D	1996	5	51	0	3.2
E	1996	5	77	0	66.1
F	1996	5	57	1380	3.0
G	1996	9	53	0	8.8
H	1996	10	56	0	18.8
I	1996	10	76	0	38.4
J	1996	10	91	0	62.1
K	1996	11	3	0	16.4
L	1996	11	44	1200	7.6
M	1996	11	47	0	6.2
N	1996	12	64	0	29.1
O	1996	12	85	1200	75.7

N.B. Homeowners who completed mortgage payment are not included. Outstanding balances in shade are regarded as bad debt.

Table 9 lists fifteen homeowners who had not completed their mortgage payments as of December 2005 even though their homes were built in 1996, when Athiru Gaiti constructed a total of 28 houses in its first year of operation. Of these fifteen households, fourteen were delinquent on mortgage repayments by three year (36 months) or more. Despite the fact that eight years had passed since construction was completed, four households (E, H, J, O) out of fifteen had over 60 cement bags (approximately 36,000 shillings) worth of overdue payments. Specifically, household J still owed 62.1 bags on its mortgage and household O still had 75.7 bags worth to pay back. Both households had been delinquent for more than seven years. Six households (A, D, F, G, L, M) had outstanding repayments of less than ten bags, but all were delinquent by more than three and half years.

According to an affiliate member, many homeowners put off making mortgage repayments even if they have an income since no interest is charged on the loan. Recently, the Athiru Gaiti affiliate has started to take legal action against homeowners who are delinquent on their mortgage repayments for no legitimate reason. In December of 2005, civil suits were brought against two such homeowners at the Maua Law Courts.

7. Evaluation and recommendations

This paper observes the house-building aid activities of Habitat Kenya through a case study of one agricultural community in the central highlands region of Nyambene. As has been discussed, it is clear that Habitat's development work emphasises small loan aid rather than grant aid by obligated homeowner households to repay mortgages. Considering the socio-economic of Nyambene, Habitat's work deserves positive evaluations on the following four points:

(1) The idea of calculating the total mortgage in terms of bags of cement and setting the amount of a monthly payment equal to the market price of one bag of cement is quite unique. Continuous operations are possible because the value of revolving funds cannot be negatively affected by fluctuations in the market prices of construction materials.

(2) The income generation programmes and seminars promote mortgage repayments and may also contribute to boosting local agricultural production.

(3) Women actively participate in the business. The affiliate's decision-making management committee is required by Habitat regulations to be gender balanced (see section 3.3), and this balance is also reflected in the membership of elected officials.

(4) Although difficult to compare based on any data, small-scale, individual loan-based development aid schemes, such as Habitat's house-building projects, make it difficult for unaccounted-for funds to appear. The possibility of corruption is low since expenses per household are detailed and the responsible parties are made clear.

In conclusion, the author will discuss tasks and recommendations for the future. Habitat Kenya currently operates in areas with comparatively high agricultural productivity, including Bungoma, Maua, Runyenjes, Kisii, Bomet, and Machakos. If Habitat Kenya expands its programme to the more arid and less agriculturally productive regions, mortgage repayment rates are likely to decline even further.

In Nyambene, the rapid development of *mîraa* farming and preparation has contributed to active cash flows within the community, stimulating other areas of the local economy. The economic significance of the *mîraa* industry in Nyambene should certainly be recognised. Tea is another cash crop that both directly and indirectly generates income for people to repay mortgages in Nyambene.

As explained in section 3.3, Athiru Gaiti's Operations Manual follows Habitat Kenya rules and defines households qualifying for aid as those with monthly incomes over 2,500 shillings and under 12,000 shillings. In the *mîraa*-growing areas of Nyambene, it is not difficult to secure a monthly income of 2,500 shillings. As discussed in section 2.2., even unmarried individuals with no access to farming fields can make around 150 shillings per day in cash by working at a mîraa workshop.

Despite this fact, a number of Athiru Gaiti's homeowners were drastically overdue on their mortgage repayments. If the same kind of programme were offered in regions where the difficulty of cultivating crops made it difficult for people to make cash, mortgage repayment rates are likely to be even worse than in Nyambene. Although Habitat supports the 'productive poor', its definition may be too narrow if certain households or areas are assessed as being incapable of making repayments and are consequently not qualified to apply for mortgages.

Another concern is that while legal measures against maliciously delinquent homeowners have been taken, affiliates, which act as both loan-giving and collecting agencies, are fundamentally unable to collect on contracted loans as community-based grassroots self-help groups. For extremely poor households and regions, they may consider bringing in a certain amount of grant aid while increasing the amount of sweat equity (services within the affiliate), or offering other such alternatives.

Nevertheless, it is important to stick to Habitat's fundamental principal of mortgage repayment. In terms of sustainability, it is better to expand the programme as a comprehensive, self-supporting housing construction operation, not by increasing grant elements, but perhaps by reducing the required monthly payment amount (although the period of the loan would be longer) and making greater use of technical seminars on how to generate cash income. Finally, there are certain social implications of mortgage repayment that cannot be quantified. Like Janet and Margaret described in this paper, homeowners who manage to completely pay off their mortgages are highly respected in their local community for their diligence and honesty. The significance of this achievement cannot be overemphasised.

Notes

1) The population density in Upperland is approximately 650 people per square kilometre, compared to 100 people per square kilometre in Lowerland (calculated by the author from 1999 census data).
2) *Mĩraa* is an evergreen shrub in the Celastraceae family known as 'chat' in Ethiopia and 'khat' in Yemen and the Arab-speaking world. Chewing shoots that have grown to about 20 cm long off a main branch produces a weak stimulant effect. In addition to major cities in Kenya, *mîraa* grown in Nyambene is exported to Somalia and England. Exports to England alone are said to total 190 million shillings, or approximately 300 million yen per year (Sunday Nation, 25 December 2005).
3) Any decisions after the harvesting stage must be made quickly because the mîraa has to be exported fresh both domestically and abroad. The Igembe middlemen and Somali buyers constantly stand to lose large amounts of money for any misjudgements. To speed the trading process, agreements are not made in writing and fraud and other trouble often occur as a result.
4) The format of the Operations Manual is the same for all affiliates in Kenya. The eighteen-page business plan describes the affiliate's organisation and management, methods of selecting qualifying households for aid, down payment amount for homeowners, procedures for delinquent payments, and other items.
5) Money raised from (4) is used for the first home while Habitat aid is used for the other two households.
6) Habitat Kenya requires the building of sanitary pit latrines prior to any construction of a home.
7) The 1999 evaluation included six Kenyan affiliates (Kigumo, Athiru Gaiti, Kimuri, Katira, Ndabarnach, Lubokha). 1997 data is unclear because the documents could not be accessed.
8) Athiru Gaiti previously issued a notice that the price of cement would rise from 550 shillings to 650 shillings per bag as of 1 May 2001, and encouraged homeowners to repay as much of their mortgage as possible before that date.

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