

Site Visit Summary
CowFund to Maha Bhoga Marga Foundation, Bali, Indonesia
29th January – 2nd February, 2007

About MBM

- Headquarters in Kapal, 10kms northwest of Denpasar
- In excess of 80 staff members, 60 of which are employed in community development and health activities, 24 employed in the Rural Bank section (small loans).
- MBM has responded to the impact of the Bali bombings by assisting farmers and other vulnerable sectors of the community (e.g. women), who previously had supplementary income sources via contracts (e.g. supplying papayas to large hotels, small cake-making businesses etc), with other forms of self-sustaining income streams (e.g. cow rearing or sewing businesses).
- All cow-rearing groups have been established on the basis of field research and formal needs analysis. MBM also requires early and tangible demonstration of commitment by the groups themselves in being willing to construct appropriate stall facilities for cows prior to loans being given.

About the CowFund visit

- In the period 29th January to 2nd February, Fiona and Stuart Higgins visited five cow-rearing locations in East, North and West Bali (Karangasem, Bangli, Tabanan, Galungan, Melaya), representing nine cow-rearing groups, of which three had been assisted by the CowFund distribution of \$20,000 in 2005.
- Fiona Higgins is an accredited Indonesian translator. Stuart Higgins has tertiary qualification in animal husbandry and 15 years experience in primary production.
- All field interviews were conducted in Indonesian, with the assistance of MBM staff members.

Summary of issues identified in the field

Fattening or breeding?

- There was considerable discussion regarding whether farmers should focus on cow fattening (current model) or cow breeding (prospective model that could take advantage of local government adoption of the MBM cow fattening model) – either way, there needs to be discipline at the group level in documentation of progress and determination of the best possible rearing program in order to make higher profits. *The groups need to find ways to ensure that cows put on as much weight as possible, as fast as possible, and money will be made irrespective of whether a fattening or breeding model is used.*
- If younger cow-rearing is to be used as a strategy for finding a market niche (i.e. purchasing cows at less than four months old, and selling them to other farmers involved in cow fattening programs), there will need to be a similar *discipline and structure* around this strategy to ensure that the same issues/obstacles do not occur.

Conditions and data collection

- MBM appears to have very strict and effective protocols around conditions of participation for the women's sewing groups it implements, but appears to be a lot more flexible with the groups of men involved in cow-rearing – *and yet it was not clear why this was the case*. If the cow-rearing model is to be sustainable, MBM may need to place *similarly strict conditions* upon participation for the male participants of thereof, e.g. enforced savings.
- The Achilles heel of whole operation appears to be that most farmers do not know the starting weight of their cow upon purchase, and similarly, do not know for certain the finishing weight upon sale. Given that the program is in the business of weight gain for cattle, it would seem important to rectify this uncertainty. *Portable scales could assist with this.*
- The groups are working between 1-4 hours per day on cow-rearing– this is a vast range and can be the difference between making the programme profitable or unprofitable for the individual farmer. MBM and the farmers need to work together to determine what the 1 hour/day groups are doing differently to the 4 hour/day group – or are the groups over-estimating/under-estimating their time? Accurate data collection is imperative here.
- Farmers should be given a template to work to on a monthly basis to collect information and an incentive for filling in data – the heads of each group could take responsibility for this. MBM needs accurate information going forward to demonstrate the model's efficacy – the program is too good a data resource to waste. Although MBM does undertake a yearly evaluation, where all groups are represented, accurate data will not be generated from a one-day workshop (with approximately 40 farmers in a room) if monthly data has not been recorded.

Nutrition

- Nutrition for cow fattening needs to be right – a range of suggestions have been made regarding optimal nutrition, e.g. waiting to give cows concentrate until 2 months out from sale. Such suggestions are fine, but the nutrition programme needs to be correct and standardized overall, which again is reliant upon appropriate data collection.
- Farmers should consider putting the cow's manure on the grass that will later be used as feed, rather than putting the manure on other plants/crops. A greater ROI is likely by using manure this way.
- Nutrition and feeding volume and administration of supplement – there is no standard nutritional program or understanding of the volume being fed to cows. *Portable scales could again assist here.*
- Hydration: this was a matter which was not routinely covered in discussions, as the focus was on feed. Are the cows drinking enough, given that they do not drink on demand (being tethered)? How do farmers know whether the cows are dehydrated – MBM's field officer could review existing research and make recommendations for optimal hydration.
- Despite the suggestion by some farmers to be given the opportunity to create their own supplement, this should best be avoided as the risk is that the funding will be spent on other needs.

Market issues

- Market has shifted in the past two years, and farmers haven't retained sufficient profit to fill the market gap.
- Farmers almost universally claim that they need more capital to stay in the market and that increasing the number of cows will somehow resolve their capital issues. However, it is unclear whether their concept that they can upscale – without also doubling the costs of stalls, upkeep, food for the cows – is realistic. Despite the call for increased capital, in most cases, the farmers' groups have not retained any profit with which to contribute to their next season's purchase. Perhaps MBM needs to be stricter in its implementation of the model, because currently it is unsustainable without ongoing 'top ups' from MBM and external donors. Farmers need to put aside at least some money to take into account price rises.
- *The best price is not always the best profit.*
- Price fixing at the point of sale by a market syndicate – if this issue continues to be a problem, perhaps farmers could consider forming a cooperative and going through one agent – i.e. being of a size that it is not in the agent's interest to price fix. *How much individuality are farmers prepared to relinquish in order to protect themselves from the market syndicate?*

Sustainability

- Farmers appear to be moving towards an organic system – and livestock are vital for such a system to be fully sustainable environmentally.
- Issue of financial sustainability – are groups prepared to put aside profit for future year's capital and to pay for the use of scales to avoid market pitfalls?

Measuring success

Success in this program is being defined by MBM as:

1. Creation of groups themselves, i.e. the very fact that such groups have been able to be created, sometimes against a background of community opposition, is a KPI.
2. Ownership of cows – and increased social status for participants – is also a KPI.

Financial sustainability of all groups does not, however, figure as a priority for success – and yet this is precisely what external donors will be looking for. MBM's program is five years old in 2007 – if financial sustainability is to be achieved in the next five years, MBM needs to calculate specific projections for savings by cow-rearing groups and stringently stick to them, as they do with the women's sewing groups. An evaluation template could be used at the organizational level for comparing one group against another, in order to determine, as quickly as possible, the things that are working (and not working) for each group.

Scales

- The purchase of portable scales and use thereof by MBM's field officer (who visits all groups on a monthly basis) is clearly not the panacea for resolving all

- obstacles within this program, but it would solve a number of problems and help with integrity of data collection.
- MBM could run the use of such scales at the group level as cost recovery and incentive mechanism, i.e. farmers would need to pay a small amount for use of the scales within the program, and be given targets to meet by MBM which could be rewarded with reduction in interest or increased in capital loaned.

Benefits of scales:

- Knowing starting weight of cow at purchase
- Knowing finishing weight of cow at sale – less at whim of market/victims of syndicates and price fixing.
- Useful for data collection on other matters, e.g. determining supplementation strategy, or how much grass feed is being administered to cows on a daily basis (e.g. fill up a basket of grass then weigh it).
- Physical measurement of cows (e.g. horns, teeth, girth) as a growth indicator is good, but scales will test the accuracy of these ‘guesses’. Farmers only need to be 5% out on their estimates to end up losing the season’s profit.
- Will help to identify early if an animal is sick/losing weight.
- Could lead to more local trading between farmers rather than dependence upon the Beringkit market.
- Very light and portable (15-20kgs).
- Price Rp.12 million for purchase of such scales.

Negatives of scales

- Could cause waves in the market by upsetting the current ‘system’.
- Risk of pressure from outside the group to use the scales for other things – it would be important for only one or two persons to be accredited by MBM to use the scales.
- Farmers may not be prepared to pay for the service. MBM thus needs to work out what it would cost to weigh all the cows in the program once a month and collect/document this data – and then find a way to pass the cost onto the farmer.
- Unclear which method of scales use is most appropriate – walking cows over the scales outside stalls (difficult – possible risk of injury/run-aways) or rolling scales underneath the cows in stalls (more time-consuming).

F.L. Higgins
18th February, 2007

Detailed Field Notes

29th January, 2007 - Morning

Karang Asem Cow-Rearing Group – East Bali

Group name: Sri Nadi

Head of Group: Pak Wayan Mertha

Other contributors: Pak Wayan Karsi

Pak Wayan Latra (0812 399 0701 or email yakkum_bali@yahoo.com - Pak Wayan owns six cows).

Accompanied by:

- Pak Gede (Head of Small Business/Economic Capacity Building)
- Pak Pendeta I Nengah Suama (Chairman and Director of MBM)
- Ibu Verasea (Health Service Staff)
- I Wayan Budayasa (Cow Rearing Field Officer)

Facts:

- 20 cows reared by 10 people
- Each person receives two cows from MBM, but some have 5-10 cows
- 25% of profit goes to MBM, 75% to farmer.
- Farmers are spending 10% of their time generating 25% of their income from cow-rearing.
- This group has implemented three rounds of cow-rearing, and encountered difficulties in the latest round by purchasing cows which were too small/light.
- Group pays Rp50,000 per cow for transport to markets at point of sale.
- Best price is attained over 300kg – the market is reasonably steady (standard pricing available) for cows over this weight.
- Government flooding of market with 600 cows (after adoption of the MBM model) resulted in a significant price shift within the last round.
- 2.7 million (MBM's standard budget per cow) is now not buying a cow that will attain 350kgs in 4-6 months. Farmers are wrestling with this shift in costs – now each individual has to spend 3.5M to get into the same cow-fattening market, not 2.7M as per original premise.

Observations:

- Farmers had a variety of off-farm business enterprises (e.g. handicrafts) pre-Bali bombings, but post-bombings such contracts are no longer available. Significant loss of off-farm income.
- Good stalls, but manure management an issue (i.e. just a dry pile at the back).
- Good grasp of costs.
- Only one person from this group has put his initial profit back into another cow purchase in the second round – he was more successful/profitable in so doing, because the others relied entirely on MBM budget/loan.

- Land is limited – there is a silage issue for grass/hay stores for dry season.
- Farmers are questioning the possibility of purchasing smaller cows or stock for breeding, to see if a market niche exists.

Suggestions from farmers:

- Each person should receive five cows – more profit could be derived from scaling up on cow-rearing per person.
- Storage of wet season grass for use in the dry season – is there a way to do to this?
- Lessons on nutrition and manure-making is warranted.
- Can feed supplement be made on site rather than by MBM?
- Should the farmers change from fattening to breeding?
- What is the right age to purchase cows for highest profitability?
- The dearth of female cows is an issue, given the adoption of the fattening program focusing on bulls all over Bali, rearing female cows/calves could be an avenue for advantage for the groups. MBM in discussion with DINAS regarding this issue.

Priorities according to the group:

1. Ensure good quality of cow at purchase
2. Increase the number of cows reared
3. Learn about making hay and feed supplement on-site
4. Lessons on manure for biofuel or fertilizer

29th January, 2007 - Afternoon

Bangli Cow-Rearing Group – East Bali via Klungkung

Head of Group: Bapak Nengah Wirta (081 337 196 131)

Other contributors: Bapak Wayan Pugil, Bapak Neriwa, Ibu Ketut Renin

Accompanied by:

- Pak Gede (Head of Small Business/Economic Capacity Building)
- Pak Pendeta I Nengah Suama (Chairman and Director of MBM)
- Ibu Verasea (Health Service Staff)
- I Wayan Budayasa (Cow Rearing Field Officer)

Facts:

- 3 groups operating in this area – they have the greatest experience of all the groups and the largest number of cows.
- 3 groups: Desa Munding Sari (13 people representing 13 families, 27 cows reared in the last period), Sekecap Sari (10 people, 12 cows reared in the last period), and Desa Apuan (10 people, 10 cows).
- Fattening range is 4-7 months.

- Gross \$1M per cow over a four month period.

Observations:

- Maintaining cows purchased at 220 kgs does not appear to make sense.
- For one of the groups, just keeping the group together was difficult, in the face of objections from the village head, who felt it would give rise to competition and jealousy in the area.
- Identification of a market syndicate at work at point of sale, particularly for those who do not achieve in excess of 300kg for their cows.
- The ideal rearing period is 4-5 months, keeping a cow for up to 8 months only reduces profitability.
- Construction of a group toilet facility in the village is underway - MBM has supported this initiative as a corollary to the cow-rearing program.

Suggestions from farmers:

- Theory and practice is very different – how to marry the two? The theory was that farmers would be able to find a cow that was both big and cheap – but the practice was very different between the first and second rearing seasons.
- Farmers want to study more about selection of stock – some cows were good, some weren't, and farmers would like to understand more about this.
- Some were interested in lengthening the fattening process to up to two years.
- In order to be profitable, farmers need to sell their cows above 300kg.
- Some farmers recommended purchasing cows which have already had their noses pierced.
- Capital issue – to buy two cows at the right size, this may cost up to Rp.8M. Two years ago, Rp.2.5M would buy a large cow for fattening, “now it buys a goat”.
- Possibility of buying female cows for calf-rearing and breeding purposes.
- One suggestion was to only give nutritional supplements two months before sale.
- “Buy calves in the morning for a better price.”
- If funding is available, increase the budget per cow to \$4M.
- Use manure for sale (one group's sale of manure covers 75% of the cost of leasing the land on which stalls are located).
- Consider calf-rearing and sale at four months.

Sewing Group Interview, Dalung 30/1/07 - Morning

Accompanied by:

- Ibu Putu Listiawatii (Training and Women's Group Coordinator)
- Pak Putu Hans Widiatmika (Assistant Group Officer)
- Visit to head of group, Ibu Vitha (aka Diyarini, mobile 081 7471 6070), a lively, entrepreneurial woman who has paid off two rounds of loans from MBM and is planning on a further loan to expand her business.
- Visit to women's sewing collective, trained/managed by Ibu Ita (MBM employee). Contributors included: Ibu Tari, Ibu Heni, Ibu Indah.

- The group is flourishing, adhering to the conditions placed upon them by MBM and progressing to higher levels of skill and profitability.

Snack Food Group Interview, Tabanan 30/1/07 – Afternoon

Accompanied by:

- Ibu Putu Listiawatii (Training and Women’s Group Coordinator)
- Pak Putu Hans Widiatmika (Assistant Group Officer)
- Very entrepreneurial, professional group operation supplying peanut products under the brand ‘Merpati’ throughout Bali. Active coordination of group activities according to criteria of government funding – very entrepreneurial, savvy head of group.
- Two groups: a women’s group of 17 members, “with husbands doing the marketing”; plus a group of 83 men undertaking cow and pig rearing.
- Contributors: Pak Arnanda, Pak Putu Suratman.

Beraban Cow-Rearing Group, Desa Tabanan 30/1/07 – Late Afternoon

Head of group: Pak Nyoman Warka

Secretary: Pak Wayan Suareja

Accompanied by:

- Ibu Putu Listiawatii (Training and Women’s Group Coordinator)
- Pak Putu Hans Widiatmika (Assistant Group Officer)
- Formed in July 2005, 10 in group, cows sold in December 2006.
- Averaged 4.25 - 5.5million rupiah per cow at sale - purchased for 3.2million.
- Starting weight of 200 – 225kgs (roughly 2.5years old)
- Reared for 4 - 4.5months – 120kgs gain in four months (roughly 800gms/day).
- Profit of roughly Rp1.7M per cow.
- Success attributed to better selection of stock.
- No lease payments for land for this group – it would reduce their profitability greatly if they had to pay lease payments.
- Structured savings plan in operation of Rp200K per person per cow (Rp 400,000 per person per rearing period).
- Currently group has Rp4M in savings and wishes to purchase a group cow with these funds – MBM will thus loan out equivalent of 19 cows next rearing season.
- Selling manure at roughly Rp1,000 per 40kgs (profit of Rp 400,000 over 4.5months).
- Cattle sale and rearing procedure is the individual responsibility of the owner.
- Group spends 1 hour per day looking after cattle – group aims to receive Rp15,000 per hour profit.
- Better selection of stock is an easy way to improve profit.

- Pay Rp25,000 per cow for transport to the market. Some are sold on weight (using scales), others are sold on the basis of estimations using measurements (girth, size of horns, etc).
- Would like to increase to four cows per person.

Priorities as defined by the group:

1. Work as hard as you can
2. Keep the stalls clean and healthy
3. Concentrate on grass feed and the MBM supplement.

31-01-07 Desa Galungan – North Bali

Accompanied by:

- Pak Gede (Head of Small Business/Economic Capacity Building)
- Pak Pendeta I Nengah Suama (Chairman and Director of MBM)
- Ibu Dr Deborah (Women's Group Coordinator)
- Pak Wayan (Field Officer)
- Pak Putu Hans Widiatmika (Assistant Group Officer)

Owner of the house in which the discussion was held: Pak Nyoman Pagehyasa

Head of congregation: Pak Pendeta Yustus

Facts:

- 3 groups of five people, two cows per person.
- Groups headed up by: Pak Dwi, Pak Kapri, Pak Benny
- Two periods of cow-rearing have taken place.
- Groups all purchased cows too small
- Average was Rp700,000 profit per cow. Group members used profit for personal expenses/living costs.
- Weight gain of about 0.5kg per day was achieved, some obtained 0.7kgs.
- Profit was Rp700,000 per period per person – Rp4,300/hour.
- Group members work two hours per day on rearing.

Observations:

- Farmers pay Rp5,000 to weigh a calf after it has already been purchased.
- More people want to join the program in the area, but participation is limited by funding availability.
- MBM's original target was 5 groups running in this area per period.
- No personal savings was achieved by any group member in the two periods.
- Purchase of cows at roughly 270kgs was the original plan, however currently this requires Rp4M. MBM's budget of Rp.2.7M only allowed purchase of cows under 200kgs, i.e. cows that are not yet one year's old.

- Pak Gede outlined that if an increase of budget from MBM to Rp3M would be considered if the group also indicated their commitment to saving by contributing, for example, Rp.1.5M, allowing the purchase of a larger cow (270kg).
- The concept of extending the cow-rearing period to up to two years – suggested by a number of farmers and farmer’s wives - is problematic, as there is an increased risk of sickness and death, and no sense that proper calculations have been undertaken to support the concept.

Suggestions by farmers:

- Request for extra capital – Rp.35-40M per group (which equates to Rp.7-8M per person, as opposed to current budget of Rp.5.4M per person).
- Some want to hold onto cows longer than 7 months - up to two years.
- Suggestion to feed cows only grass then use supplement two months before sale.
- Buying local stock is preferable as they are more adaptable in the mountainous regions, as well as thus avoiding the long journey to the market at Beringkit.
- Possibly the wrong stock was selected at inception
- Initiate programs involving women/wives
- Possible change in approach to purchasing very small cows and then selling them at pre-four months old?
- Take into account particular festivals/religious holidays that may increase price.

Priorities:

1. Consider breeding or purchase of very small cows.
2. Weighing system – for use in fattening and to keep market local.
3. Consider extending the period of cow-rearing to up to two years.

1-02-07 Melaya – West Bali - morning

- Ibu Dr Deborah (Women’s Group Coordinator)
- Pak Putuh (Assistant Field Officer)

Group name: Sari Bhoga

Head of the group: Pak Dwi

Other contributors: Pak Wayan Serah and Ibu Serah

Facts:

- 7 people in group, rearing 2 cows each
- Have conducted two periods of cow-rearing – one yielded good profit (1 million over four months), while the second involved purchase of cows that were too small due to budget limitations.
- Work involved in any given day: feeding, cleaning cow, cleaning out stables. This group claimed to be working four hours per day on cow-rearing.
- Main source of income for group members was derived from cropping.

- In the first period of cow-rearing, the group achieved a weight gain of 800gms per day. In the second period, over 7 months, roughly 250gms per day was achieved. This is because the calves purchased were much smaller in the second round.

Issues:

- Interested in using scales, but unsure if they would be prepared to pay for such a service.

Observations:

- Uncertain of feeding volume required in relation to supplement – the theory is that 1-2% of body weight should be given in supplement, but this is impossible to ascertain if the weight of the cow at any given time is uncertain.
- A few members of the group have contributed their own money to savings for purchase of more cows.
- Cocoa plant disease was canvassed – for follow up in Australia to attempt to determine cause.

Suggestions from farmers:

- Small cows should not be given concentrate within the first two months of rearing.
- Reduction of the number of cows from two to one was not favoured: instead, the preferred mode of action was to increase the number of cows reared from two to four.
- It may be more profitable to rear smaller cows – but not too small, however, as they may not grow.
- Extending the rearing period is probably unprofitable (Pak Agut).
- Is it possible to learn to make the supplement on site? (Pak Agut responded that this would create potential difficulties because, if MBM provided money to farmers to allow them to make supplement on site, some members of the group might use the money for other purposes.)

1-02-08 Palm Sugar Production Group, Pangkung Tanah – West Bali – Mid-morning

- Ibu Dr Deborah (Women's Group Coordinator)
- Pak Putuh (Assistant Field Officer)

Meeting with Pak and Ibu Saekan

- Successful small palm sugar product operation, achieved with small loan from MBM.

1-02-09 Introductory discussion with potential members of a women's group to be established in Banyu Poh – Afternoon

- Ibu Dr Deborah (Women's Group Coordinator)
- Pak Putuh (Assistant Field Officer)

Head of congregation: Pendeta Thomas and Ibu Santi.

- Facilitated community discussion, led by Dr Deborah Murthy, regarding why a sewing group might be established, the commitment required on the part of members, the conditions attached to participation.
- Forthright and direct meeting to encourage women to consider carefully whether they will commit to participation.
- Typically there will be four meetings of a similar nature before a group is established.

For follow up:

- MBM to follow up with DINAS Pertanian regarding research undertaken into cocoa plants problem at Melaya. Problem caused by a "capung kecil", a small dragonfly-like insect.
- Follow up in Australia to be undertaken on possible solutions to the cocoa malady.