

**Report Back
NW province Site Visits and IZWA Workshop in Brits**



Madibogo Project Visit, November 17, 2008



Ramosadi Project Visit, November 17, 2008



**IWRM ZW Multiculture Community Workshop,
18 / 19 November 2008 – at Brits
(Peu ya Balimi and Ntsha Peu Projects)**



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MADIBOGO PROJECT VISIT, NOVEMBER 17, 2008

Site description:

Madibogo Project is situated West of Mafikeng, (26.408710 S 25.155010 E), headed by Miriam and supported by 7 additional members in the group. The group started in 2000, but due to the lack of water the project started growing broiler chickens.



Since municipal water has been laid in the area, they have fenced off a small section where they are growing a variety of vegetables.

This year the group acquired a small property close by (\pm 1 ha) and have built on it a 3m x 10 m chicken house, a caretakers room and a toilet.



The property is slightly sloping to the west, its soil is very sandy and sparsely vegetated, with a mix of veld grass and succulents.

The group want to use half of the property for growing poultry and the other half for

vegetables. They intend to drill a borehole, as presently there is only municipal water in the road.



Recommendations:

This property and project has great challenges ahead as this is a harsh environment to start off with. It is therefore our recommendation that:



- Together with Ramosadi and possible other projects in the area a two-day workshop is held to expose the group to the ideas of Zero Waste, Multi-culture/Integrated Farming/Polyculture. Out of this we can develop with the group what it is that they want to implement.

We suspect that this will be some or all of the following:

- That a comprehensive design and production plan is developed;
- That a solar borehole pump and suitable (drip) irrigation be provided;
- That we design and implement rainwater harvesting with appropriate tanks and/ or appropriate infiltration into the ground;
- That the chicken enterprise is developed with outside runs as a free-range system;
- That alternative protein production possibilities are investigated, e.g. rabbit and small scale fish production;
- That speciality crops will be investigated, e.g. multi-plants, prickly pear, fruit trees that grow well in the environment;
- That product value adding is investigated;
- That we choose and implement appropriate agricultural practices for all the enterprises;
- That we develop and teach a simple accounting system to understand farm finances;
- That we develop and implement simple record keeping tools to support the above;
- That we develop and implement a training programme on agro-ecology so the food they are growing is done so in a sustainable manner and can be market as such.

RAMOSADI PROJECT VISIT, NOVEMBER 17, 2008

Site description:

Ramosadi Project is situated in Mafikeng, (25.853890 S 25.623860 E), on the primary school grounds. The group was initiated by Ma Agnes (74 years old) and supported by 4 additional members as well as occasional school children. The group has water from municipality and a borehole, that is operated via a Play Pump. A variety of vegetables are grown and some fig and citrus trees.



They have organised a load of pig manure for fertilising and also make a liquid manure from it, that they use as foliar feed.



A major challenge is scavenging from birds and Ma Agnes has stitched together orange and pumpkin bags to



make tunnels to protect the veg from being eaten.

The property is slightly sloping to the south-east, its soil is sandy loam with very little organic matter content. The group would like to cover a large area with a shade house, to be able to increase production without interference by wildlife.





Recommendations:

This property and project has a good foundation on which a great project can be built. It is therefore our recommendation that:

- Together with Madibogo and possible other projects in the area a two-day workshop is held to expose the group to the ideas of Zero Waste, Multi-culture/Integrated Farming/Polyculture. Out of this we can develop with the group what it is that they want to implement.

We suspect that this will be some or all of the following:

- That a comprehensive design and production plan is developed;
- There is a large ablution block on the south-eastern corner and we could anticipate that a bio-digester be built, as the best option for sanitation, water and nutrient capture – it is suggested that this opportunity be used to teach the local groups on how to build a bio-digester – this could also include some unemployed builders, who would then have an additional marketable skill;



- That a solar borehole pump and suitable (drip) irrigation be provided, to supplement the play pump;
- That we design and implement rainwater harvesting with appropriate tanks and/or appropriate infiltration into the ground;

- That alternative protein production possibilities are investigated, e.g. chicken, rabbit and small scale fish production;
- That more fruit trees be established;
- That we choose and implement appropriate agricultural practices for all the enterprises;
- That we develop and teach a simple accounting system to understand farm finances;
- That we develop and implement simple record keeping tools to support the above;
- That we develop and implement a training programme on agro-ecology so the food they are growing is done so in a sustainable manner and can be market as such.



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Peu ya Balimi and Ntsha Peu Projects

Feedback session 1:

Problems:



People Issues:

- Lack of training on organic farming
- Lack of problem solving skills
- Commitment issues with workers
- Some conflict with workers
- Lack of administrative skills – refer to SANGOCO
- Labour shortage



Water issues:

- Lack of rain (inadequate)
- Lack of information on water recycling / re-use
- Lack of expensive boreholes
- Unsure of irrigation methods, pros and cons

Production Issues:

- Lack of information on organic pest control
- Compost manufacture, and associated issues (weeds, etc)
- Lack of Organic planting training and knowledge
- Particular issue: peach production
- Insect, pest and disease control
- Weed control
- Lack of information on small scale production and growing
- Seasonal issues
- Soil preparation and nutrient deficiency
- Livestock illnesses and mortalities

Economic issues:

- High price of water URGENT – govt subsidy not understood, Seipipi owe R18000; Raphulo owes R20 000
- Determining pricing of produce
- Information regarding access to markets
- High cost of fertilizers
- Lack of money
- High input costs in general
- Marketing and transport challenges

Feedback session 2:

The wish list of the groups were presented, which came out of the previous' days presentations. Additional items were listed the following day, once they had time to think and look at their land over night.

- How to make fertiliser
- How to grow fish
- Sanitation (Biodigester) needed
- Livestock needed:
 - Pigs, for selling and for eating, producing soap, compost, for tractors

- Goats
- Rabbits
- Sheep (wool & meat)
- Chicken – broilers and layers
- Ducks
- Cows for compost, meat, live sale, milk (value adding), skin (clothes, shoes, earrings), horns (vuvusela)
- Dogs for security
- Flowers growing
- General growing advice
- Solar system for borehole
- Tractor?
- Fencing is required
- Electricity - cable to the irrigation pump
- Borehole testing
- Irrigation system (they use flood irrigation)
- Abattoir
- Planting other crops - Soya, Millies, Sunflower for

Day two:

Problems and possible solutions were discussed. The worst problem is the ongoing additional costs of water via the Hartbeespoort Besproeiingrad who charges the projects about R1500 per month, and both projects are in arrears to the tune of approximately R20 000 each. They seem to be under the impression that the 5 year government subsidy for emerging farmers should have taken care of this expense, but no one seems to know what the actual situation is.

It is possible that the projects are charged regardless of actual water usage, and the idea that they would prefer to use borehole water (which is of superior quality and cheaper) would be

problematic, if they still have to pay for the water via HBPD. This requires investigation, clarity and resolution.

Responses:

It is clear that a multiculture approach will satisfy most of the above issues. It is equally clear that their existing budgets will not cope with the need; for example, there is no budget for training and mentoring, without which nothing will change, and they will be left exactly where they are currently, obviously an untenable situation.

This intervention (suggested and with estimated costs) will result in a model system, which could be both a showpiece and a training ground at the same time. For example, the building of the biodigester can be a training process for others, which may even result in a new enterprise being setup – at worst, it will enable other projects to build their own.

Further, some responses require additional capital expenditure, which was not included in the original project design, as the approach used was simply “standard” agriculture, which has been confirmed as not delivering what the community wishes to get out.

Key capital expenditures that we recommend for EACH project are:

Per project (multiply by two)

Item	Estimate
Biodigester	40000
Solar powered pump	60000 (includes panels)
Additional livestock (pigs, ducks, geese, fish, rabbits,)	3000
Drip irrigation system	20000
Hand tools (floor scrapers, etc)	2000
Chicken ark for over dam	1000
Tree saplings (fruit and nut)	2000
Tuk Tuk	25000 (half – to share with two projects)
Capital cost total:	138000

Build	Estimate
rabbit enclosure	1000
chicken runs	5000
vermi systems (also handle sludge)	1500
duck and geese pens	5000
seedling nursery	1500
Solar dryer	2000
Compost boxes	500
Seed bank	1000
Fish net	500
EM brewing kit	500
Pig enclosure (moveable)	2000
Build total	R20500

Training and mentoring	
Biodigester construction (Richard)	10000
Initial training (Thomas)	
- 2 days per week for three months on-site	40000
- Travel	4000
Winter	
- 8 trips	12000
- Travel	4000
Training and mentoring Total	R70000

Grand total required per project:

R228500

It would be valuable in the IWRM process if the building of the biodigesters are used to train other people at the same time, so that this becomes a local skill, which we can also use for other (future) projects.

Issues of markets, determining local markets and access to markets, cost determination, etc. is catered for within existing budgets (IZWA contract)

Post-workshop Issues:

Thomas did do a day visit with the intention of doing a farm planning participatory exercise, but not everyone was present nor ready – they are very keen to get a crop in (understandably so, for income reasons) but have not thought it through completely. A basic cost-benefit analysis has not been carried out, so while they are able to plant soya, and have a guaranteed buyer for the product (the same person that is supplying seed), there is no way to tell if they will

indeed make a profit, or whether they will generate a loss as they are, for example, with their current wheat crop.

It is recommended that they be funded with the additional recommendations made earlier, and that their labour budget be used to pay them for the work they will do – for example, building of livestock pens, fencing, etc. This will assist in alleviating their income limitations.

Additional Promotional and Training possibilities:

It seems to be a superb opportunity to make relevant videos as a training aid, particularly of key interventions. Certainly (at the most basic level) a “before” and “after” video can be made; but the opportunity is too good to miss to make a video on “How to Build a Biodigester”; and a walk through / talk through video of the whole project, that will also show:

- The before picture
- The after picture
- Some key “in process” footage
- And a “walk through” that captures the team who will explain their thinking on each intervention, as well as show what was actually done and why. (for example, why it is important to use drip irrigation instead of spray; or the value of compost and vermin-compost; solar pumps; etc)

While we have yet to speak to our documenting person, we suspect that the estimates below are close to what will be required:

Item	Estimate
“Before” footage	12000
<i>Travel and accommodation</i>	4000
Biodigester footage	30000
<i>Travel and accommodation</i>	13000
Walk Through / talk through	7000
Editing	1200000
Titling and music	10000
Contingency	4000
Video total estimate:	R200000

This will result in two products: a full blown “How to Build a Biodigester” training aid, and a quality documentary of a full blown “Multiculture” showpiece.

This will be a good physical deliverable, and will be useful for widespread dissemination through the DWAF / IWRM website; through DPLG and SALGA, and possibly through other networks, and is highly recommended.

Key Challenges Faced by the IZWA Team:

On the Monday, we were due to visit three, and possibly four projects. In the event, we waited at the SANGOCO offices for three hours, as they had not sorted out their hire car issues. This meant we visited only two projects in and near Mafikeng.

The workshop went well, except we were informed to start at 9am but the community were there from just after 7am

The worst problem was for the site visits planned and itemized by SANGOCO on the Friday – despite absolute promises from SANGOCO, nothing transpired! We therefore did not visit a single project on the day.

This is clearly untenable and we recommend some way forward be discussed with the team, SANGOCO and IZWA team members, so that this situation does not deteriorate further. This was an expensive trip, with not enough to show for it.

This must be urgently resolved.

Kind regards

Muna Lakhani and Thomas Linders
IZWA