

The Rufford Small Grants Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole

Grants Director

| Grant Recipient Details | |
|-------------------------|---|
| Your name | Prince Nwese Cletus Nmkpang |
| Project title | Sustainable cane rat, snail and fish farming as an alternative to hunting and Non-Timber Forest Products (NTFPs) gathering in Korup National Park, Cameroon, Africa |
| RSG reference | 27.11.07 |
| Reporting period | June 2008 to June 2009 |
| Amount of grant | £4 755 |
| Your email address | Kreo100@yahoo.co.uk |
| Date of this report | 2 nd July 2009 |



1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

| Objective/Activity | Not achieved | Partially achieved | Fully achieved | Comments | |
|---|-----------------|-----------------------|-------------------|---|--|
| 1.0 Select/organise contact visits to five villages in and around the park | | | х | 100 % achieved | |
| 2.0 Train five villages on sustainable cane rat, snail and fish farms respectively | | | Х | 100% achieved | |
| 3.0 Construct and stock five cane rat farms | | X | | Four were established. One was not established due to the shortage of funds received as a result of currency exchange at the time fund was received. 80% achieved | |
| 4.0 Construct and stock five snail farms | | X | | Four were established. One was not established due to the shortage of funds received as a result of currency exchange at the time fund was received. 80% achieved | |
| 5.0 Construct and stock five fish farms | x | | | Only one farm was constructed at Ikondo kondo village. The rest were not constructed due to shortage of funds. Four were left out to give room for the construction of the cane rat and snail farms that are easier and cheaper. This village did not benefit from the cane rat and snail farm as the others lost the fish farms as well. 20% achieved | |
| 6.0 Organise monthly monitoring (back stopping) | | | Х | 100% achieved | |

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

| S/N | Problem encountered | Solution |
|-----|---|---|
| 1 | | The number of farms to be established was reduced to meet up with the amount of money received. |
| 2 | The money took longer to arrive and work only started in June when the rains were high. | |



| | | initially planned to make sure construction was done | |
|-----|--|---|--|
| 3 | Amount of money charged by building technicians employed was too high due to wet season and remoteness of the area. | KREO used voluntary workers who are members of the organisation who have knowledge of constructing farms to execute the job on a low daily subsistence allowance rate. | |
| 4 | 90% of project sites are not accessible by cars. The least is 18 km from motorable road through rough/fast flowing streams, rivers and hills. | The villagers organised community labour where all community members carried the building materials as their own contribution to the project to reduce additional cost. | |
| 5 | In the beginning, less care was taken in most farms. This makes us to realise that villagers pay less attention to community farms as they feel that it is everybody's farm and nobody's farm. | From our list of attendance during monitoring of farms, a roster for people taking care of farms was drawn up and we decided to organise these serious guys into COMMON INITIATIVE GROUPS. We only legalised two groups with the little sum of money we had (Fabe Cane Rat Farmers Group and the Koro Iraro group of Esukutan village in Korup Park). These organised groups then took control of the farms and managed it well. | |
| 6 | Transport was too expensive as we made more trips than budgeted due to the constant care that was needed for the animals. | The number of staff going to the field was reduced thus we hired bikes to take staff to the road terminus than cars that were too expensive to hire. Staff took longer trekking tracks to avoid high transport and spent more days in field as it takes too much time and energy to walk that way. | |
| 7.0 | Fish farm | | |
| 7.1 | The slope of the riverbank did not favour the construction of inlet and outlet channels in the pond. | We improvised a method whereby the PVC pipes were connected directly from the main river into the pond (Inlet tube) and the outlet tube from the pond directly into the river. | |
| 7.2 | Presence of wild species of fish that could destroy the <i>Tilapia</i> and <i>Clarias/Heterobroncus</i> (Mud fish) stock in the pond | The edges of the pipes in the river was protected with nylon mesh with micro holes to prevent even the fingerlings of the wild fish from getting into the pond. | |
| 7.3 | The soil here is sandy/ porous thus causes shortage of water in the pond. This sandy nature makes the pond acidic thus disfavour the group of the fish. | We improvise the filling of the pond with a 30 cm thick clay soil layer to prevent water loss. We later on limed the pond to make it more basic (we recorded a pH of 11) so as to encourage the growth of the fish and phytoplankton. | |
| 8.0 | Snail farming | | |
| 8.1 | Ants always attack and kill snails. | We used agrochemicals (Gamalin 20) mixed with water, filled in bamboo to prevent the ants from entering the snail farm. | |



| 9.0 | Cane rat farm | |
|-----|---|--|
| 9.1 | Some villages lack the elephant grass, a herb commonly eaten by the rats. It is the staple food for the rats. | We established food gardens in the villages where the herb was planted to ensure constant food supply for the rats. The villagers also gave us vital information on other type of food as substitute. This was used to feed the rats until the staple food was mature. |
| 9.2 | Cats always get into the cages and kill the cane rats despite their size. | Extra chicken nets were bought to add on the cage cover to prevent the cats from entering the cages. |
| 9.3 | There was always shortage of bones in the villages for the rats to eat for their calcium need and to prevent overgrowth of their teeth | Bones from slaughtered cattle were collected during market days in Mundemba and taken to the farms during monitoring to feed the animals |
| 9.4 | Some cane rats were affected with skin fungi that causes the skin to peel off | Once identified, we isolated the animal to avoid spread to others since we are using joint cages. We are still researching on the cure together with some experts. |
| 9.5 | Rain started destroying bricks in cages | Shades were built with local materials to prevent rain from touching the bricks. |

3. Briefly describe the three most important outcomes of your project.

- The villagers have realised they can make a lot of money from doing nonconventional livestock farming as money from the sale of snails in Mossongisseli, Massaka, Mukango villages for instance, was about 425 000 FCFA per village. This is far above the annual income of the richest villagers which stands at about 150 000 FCFA per year (survey by Prince Nwese Cletus and Yufanyi Mbolo of Gottingen University of Germany). Villagers use animals from the farms to cook food to entertain visitor in their villages rather than bushmeat.
- Villagers have developed huge interest in this type of farming and have applied to us for building materials and breeding stocks to establish individual farms. If this is done, it will reduce poaching and NTFP gathering from the park considerably
- Villagers (both men and women) have been organised into Common Initiative Groups (only two have been legalised) to continue with the initiative. KREO is lobbying for government subvention to groups like this. The two legalised groups recently benefited 500 000 FCFA each to improve on their farms at the end of the project. This group will be linked up to the National chapter to protect their interest, maximise profit and improve their livelihood, thus protecting the wildlife population of Korup National Park.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

The villagers assisted our staff in transporting building materials and breeding stock to the various villages. They contributed enormously during on-site training in site selection/preparation, collection of local building materials and the construction proper. They also participated in monitoring and cropping. They did a great job in feeding and accommodating the staff and trainers who worked with them. They also gave us relevant traditional information on the cane rats and snails with respect to



their behaviour, feeding habits, type of food they eat, ways of dealing with predators and diseases that we have incorporated into conventional ways to improve our techniques of doing this type of farming in the area in future. For instance, the fresh palm frond that has much sugar gives the cane rat much energy, but at the same time causes skin diseases to the rats that makes the hair to fall off. We are researching on the remedy now.

Money from the sale of first products of the farm has been set aside for developmental project in the village. For example, building of one classroom in Esukutan village has been agreed upon by all villagers and work will start soon. The same initiative will be done in all other villages that have sold their product. The villagers have acquired skill to get into this kind of farming thus, if encouraged, the livelihood of the villagers will improve and the resources in the park will be conserved.

5. Are there any plans to continue this work?

Certainly, we want to support interested individuals who have had the training to establish their own farms. We also want to continue monitoring of existing community farms which is very important to the success of the project as the cane rat farms are very delicate to handle by the villagers all on their own for now. We also want to organise more common initiative groups and to legalise the existing ones so as to ensure sustainability and continuation of the project.

6. How do you plan to share the results of your work with others?

We plan to publish a practical guide to snail, fish and cane rat farms immediately we get more funds to enable everybody who gets a copy to know what it takes to establish one of the farms and the cost benefit involve. This publication could be put on your website for other people who are not in Cameroon to have access to it. I already did a presentation during a Network meeting of NGOs in the South West Region of Cameroon on snail and cane rat farming (5th June 2009) and many people were interested and willing to take our experience to their project areas. This way, our experience and project will be replicated in other areas.

7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?

The grants were used for 12 months, though the project is still ongoing as most of the cane rats just delivered, thus more funds is needed for constant monitoring and expansion of farms.

The project proposal anticipated 12 months duration, but we did not take into consideration monitoring and expansion of farms. The young animals will definitely need an extra apartment for them to grow.



8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

| Item | Budgeted Amount | Actual Amount | Difference | Comments |
|---|------------------------------|-----------------------------|-----------------|--|
| 1. Contact visit (meeting with villagers) | 500 | 500 | - | - |
| 2.0 Training proper | 3025 (3 025 00 0 FCFA) | 3025 (2 100 000 FCFA) | 925 000 FCFA | Exchange rate was lower than estimated during budgeting, but amount in £ remains the same. The difference is only in FCFA. £1 = 805 FCFA in May/June 2008. So you will not notice the changes |
| 2.1 Materials/labour cost for farm construction | 1 500 | 1 500 | | |
| 2.2 Breeding stock (Cane rat) | 375 | 375 | | |
| 2.3 Breeding stock (Snail) | 250 | 250 | | |
| 2.4 Breeding stock (fish) | 500 | 500 | | |
| 2.5 Trainers' allowances | 300 | 300 | | |
| 2.6 Stationary | 100 | 100 | | |
| 3.0 Monitoring | 1 200 | 1 200 | | |
| 4.0 Production of report | 30 | 30 | | |
| TOTAL | 4 755 | 4 755 | | |

9. Looking ahead, what do you feel are the important next steps?

- Continue monitoring existing community farms.
- Create new accommodation for young cane rats and snails (fattening pens) in the community farms.
- Provide building materials and breeding stock to interested individuals to establish their private farms.
- Legalise all remaining organised common initiative groups to enable them to benefit from government subventions to improve on their farms and continue with the project.
- Produce and publish the practical guide on cane rat, snail and fish farms.

10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

RSGF logo is used on our practical guide draft on cane rat, snail and fish farming in tropical rainforest area which is yet to be published.



RSGF logo was also used during sensitisation meetings on sensitisation leaflets that we produced locally.

11. Any other comments?

I think it was quite a great experience. The enthusiasm of the villagers and the commitment of our staff and trainers made it possible to attain our objectives. It will be great if RSGF can provide a booster grant to enable us to realise the steps listed above in 9 for the way forward. Attached to this report are some photos of our work.