REPORTING STRUCTURE

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<tr><th colspan="4">GENERAL INFORMATION</th></tr>
<tr><td>Name:</td><td colspan="3">CRISPIN PROSPER KINABO</td></tr>
<tr><td>Details:
Position:
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Phone no (office + mob):</td><td colspan="3">SENIOR LECTURER, UNIVERSITY OF DAR ES SALAAM
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+255 22 2410013 and +255 784 458820</td></tr>
<tr><td>Brief Description of the project:</td><td colspan="3">Assisting small scale limestone aggregate miners in Tanzania to meet their challenges through
1. Assessment of limestone resources - geological mapping, trenching and shallow pits;
2. designing and installation of demonstration energy efficient and effective coal fired small vertical lime kiln and
3. Training of trainers (TOT) how to build and manage such kilns, safety, health and environment, entrepreneurship and appropriate mining methods.</td></tr>
<tr><td rowspan="2">Expected Outcomes:</td><td colspan="3">Outcomes - impacts</td></tr>
<tr><td>Short term results
LEARNING</td><td>Medium term results
ACTION</td><td>Long term – impacts
CONDITIONS</td></tr>
<tr><td></td><td>1. Awareness of energy saving;
2. Appropriate knowledge on mining methods;
3. Change in attitude – from deforestation to coal; use of working gears (gloves, masks etc)
4. Aquire skills in lime burning technologies;
5. Able to give opinions to existing environmental, water, land and mining policies, laws & regulations;
6. They will aspire for higher productions as resources are certain;</td><td>1. Behavior change from wood cutting to use of coal;
2. they will practice energy efficient methods of lime burning;
3. make wise decisions on market supply and demand as the limestone reserves are known;
4. They will practice appropriate technologies as stipulated by the Land-, Environmental-, Water-, & Mining Regulations;
5. it will improve rural social welfare through employment and income.</td><td>The miners dealing with building materials face challenges of poor working environment, poor access to financial services, market information, technology, and geological data; the projects long term impacts are:
1. Reduced health and safety risks through demonstrations and extension services from Department of geology;
2. Access to financial credits using the Limestone Resources Assessment certification – conduted through mapping and trenching by expert geologists.
3. Improved evironmental performance of forests through use of coal.</td></tr>
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<tr><td></td><td>7. As they will be formally recognized, they will be motivated to pay taxes.</td><td></td><td>4. Poverty alleviation through proper market survey of value added lime products, high quality lime;</td></tr>
<tr><td rowspan="3">Expected outputs:</td><td colspan="3">Outputs</td></tr>
<tr><td colspan="2">Activities – what I will do</td><td>Participation – what I can reach</td></tr>
<tr><td colspan="2">1. Briefing Zonal Mines Officers, discuss topics for conducting training to ASM
2. Conducting meetings with the local government – village council meeting;
3. Undertake geological mapping (geological, geochemical and geophysical surveys)
4. Undertake trenching and digging shallow pits, sample collection for quality control;
5. Design and deliver training to ASM - Conduct train of trainers (TOT)
6. Deliver services - design & construct verical shaft kiln
7. Partner with Ministry of Mines in Kenya in assessing limestone resources;
8. Facilitating value addition through sampling and packing of final products;
9. Advertise the work in media through video production on best practises to pretect environment;</td><td>• Zonal Mines Officers and technicians;
• New ASM clients interested in investing in lime production;
• NGOs dealing with protection of environment will be interested in energy serving technologies;
• Tanzania Revenue Authority team to collect revenues;
• Customers running hardware – building material stores will be interested in buying the finished, value added products</td></tr>
<tr><td>Please describe how you plan to implement the return to work project: (outline key partnerships and collaborations across sectors in your country as well as any joint collaboration with other countries)</td><td colspan="3">Implementation plan
• STAGE 1 - Sent the draft of project proposal to the Zonal Mines Office, in Songea Region for approval. The draft of proposal will cover Limestone resource assessment in terms of limestone type, quality (grade) and quantity (tonnage) available.
• STAGE 2 - Briefing of the activities to the village council and the Primary Mining Licence (PML) owner about intended activities in the site.
• STAGE 3 – Collaboration with Mr. Martin Nyakinye (mnyakinye@yahoo.com) of MINISTRY OF MINES KENYA, who works on unique limestone deposit of the Nyanzian Rift, Western Kenya to undertake geological mapping, trenching, pitting, geological and resource report writing, kiln design, kiln erection, test run of lime burning, quality assessment and assurance and training of trainers; these activities will be conducted in Songea Tanzania.
• STAGE 4 – Commissioning the operating vertical shaft kiln to the Commissioner of Minerals as training and demonstration unit for ASM. It will be under the management of the PML Holder.</td></tr>
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What indicators of success will you employ? (include indicators of success that go beyond activity-level implementation)	• Indicators of stage 1 – Implementation plan proposal report sent to the Zonal Mines Office in Songea; • Indicators of stage 2 – meetings report with the village executives and council; • Indicators of stage 3 – Limestone resources assessment reports, design technical drawings for the construction of a vertical shaft kiln, value added lime products through assessing the quality of lime, number of TOT trainees and workshop reports; • Indicators of stage 4 – Commisioning photographs including final project report.
What other strategic opportunities have you identified that will contribute to the success and sustainability of your project? (include opportunities linked to national level policy, strategies and programmes as well as linkage to sub-regional and regional agenda)	The project proposal will contribute to the National Strategy for Growth and Reduction of Poverty (NSGRP II or MKUKUTA II in Swahili) of the United Republic of Tanzania, in two of its three goals, namely goal 1 – accelerating economic growth to reduce poverty through; and goal 2 - improving the quality of life and standard of living. • How? *In geological mapping and assessing the resources, miners will be able to access credit facilities; while undertaking training of trainers and field technological demonstration units will improve productivity through value addition and miners health hence improved standards of life* The activities in addition contributes two of the three objectives of National Development Vision 2025, which are achieving quality and good life for all; building a strong and resilient economy that can effectively withstand global ASM competition and good governance; Ministry of Energy and Minerals in collaboration with the University of Dar es Salaam (the Author was Coordinator) has developed a standard Training Manual for ASM. The project will use this national training manual as guide during training and demonstration activities.
What aspects of the training will be most useful in implementing your project? Explain	Aspects of training on "Stones for Development" training that are useful include: • The unique limestone deposit of the Nyanzian Rift, Western Kenya, which is magmatic origin, may in addition of making lime, contain rare earth elements, which might be potentially economical; • The use of remote sensed geodata in assessing the resources – similar techniques will be used in this project, but will be followed by ground truthing.
What are your future plans? (include any additional capacity building needs for your professional development that you have identified during the course of the workshop).	Future plans include training of M.Sc. students at the University of Dar es salaam in various areas including: • Geological mapping and resources assessment of limestone used for burning lime; • Assessment of energy utilization of traditional and modern vertical shaft kilns in Tanzania; • Health and safety risks/impacts to ASM working in lime kilns – an example of Tanzania; Preparation of technical papers to be presented in the coming Geological Society of Africa (GSAf) in Ibadan Nigeria 2016.