# CRS-logo.jpg C:\Users\maria.figueroa\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\60LBWCCW\F2F Logo (2).PNG

**Farmer to Farmer East Africa**

**Volunteer Assignment Scope of Work**

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| **Summary Information** | |
| Assignment Code | KE28 |
| Country | Kenya |
| Country Project | Horticulture Country Project |
| Host Organization | Good Neighbors Community Project (GNCP) |
| Assignment Title | Macadamia trees grafting technologies |
| Assignment preferred dates | April – June, 2015 |
| Assignment objectives | 1. Building capacity of GNCP on macadamia tree grafting technologies 2. Development of a step by step guide on Macadamia grafting techniques |
| Desired volunteer skills/ expertise | Tree grafting expert with experience on new grafting technologies especially of macadamia trees |

1. **Background**

The Farmer-to-Farmer (F2F) East Africa program leverages US volunteer’s expertise to assist small holder farmers and small scale processors in East Africa to improve their business practices through volunteer assignments conducted with host organizations. Through F2F, CRS will improve the livelihoods and nutritional status of significant numbers of low income households by: i) broadening their participation in established commodity value chains as producers and service providers; ii) strengthening community resilience to shocks such as droughts, that adversely affect livelihoods; and iii) preserving/enhancing natural resources upon which most rural communities depend. As an important corollary result, through the program CRS will also increase the American public’s understanding of international development programs and foster increased cross-cultural understanding between host countries and US volunteers.

Macadamia (Macadamia spp.) is considered the world’s finest dessert nut because of its delicate taste and numerous health benefits. It is grown in Kenya both as a cash crop and foreign exchange earner with Kenya producing about 10% of the world’s total production. Macadamia has great potential for poverty reduction due to the high value of its products and its low requirement for external inputs. Although the crop has been grown in the country for over 5 decades, the growth of the industry is not commensurate with the demand and market potential that exists[[1]](#footnote-1). The macadamia industry in Kenya faces several challenges the biggest of which is the lack of quality seedlings due to limited expertise in propagation (nursery management and grafting)

GNCP is working in the Rift Valley, Nyanza and Western regions of Kenya. It is a women-run community based organization in Naitiri, Bungoma North. It was established in 2004 on the premise that if neighbors learned from each other, together they could address poverty and rampant food insecurity in the area. Through this approach, GNCP has managed to convert many subsistence maize farmers into commercial growers who have ventured into the high value horticulture value chains. To further increase the household incomes of the people in Bungoma County, GNCP introduced macadamia farming in the region. GNCP has an established macadamia nut nursery from which their members and other farmers can access the seedlings. This has been through the support the USAID funded Kenya Horticultural Development Project (KHCP), the Bungoma County department of Agriculture and the Kenya Agriculture and Livestock Research Organization (KALRO). GNCP has continued to provide training and technical assistance to farmers who purchase macadamia seedlings from the nursery.

The organization would like to expand and further develop the macadamia nuts production in Bungoma County and therefore has contacted the CRS Farmer to Farmer Program and requested a volunteer technical expert on grafting technologies

1. **Issue Description**

Macadamias are easily grown from seed, but the resulting seedlings take between 7 to 12 years to bear a crop and the quality of the nuts is unpredictable. Grafted trees take 2-3 years to start bearing fruits and the quality is good and uniform. Grafting of the seedlings is the only option for the production of seedlings that have vigour and ability to produce high quality nuts in an economical manner. The wood of almost all macadamia species is hard and requires the propagator/grafting expert to have experience in macadamia seedling production to make this assignment successful. Lack of this expertise in Bungoma County as in other parts growing macadamia in Kenya has made the survival rates of the grafts to be very low thus affecting the productivity of this high value nut. GNCP currently has the success rate of their grafts at 20% which is extremely low compared to the industry standard of 90%.

It is for this reason that Good Neighbors’ Community Project has requested CRS Farmer to Farmer project for a volunteer expert on this highly specialized field of macadamia grafting to training their TOTs on grafting of macadamia seedlings,.

1. **Objectives of the Assignment**

The assignment will have two objectives:

1. To build the capacity of 60 GNCP farmer trainers through a Training of Trainers mechanism (TOT) on grafting of macadamia seedlings. These farmer trainers will be drawn from 30 farmer groups comprising of 40 members each.
2. To develop an illustrated Step by Step guide on Macadamia grafting techniques to be used by GNCP

**The specific activities will include:**

* Visit GNCP nursery and demonstration farm and review current knowledge and practice on macadamia propagation.
* Develop a trainer’s guide
* Provide training of trainers training on the following:

1. Modern/improved grafting technologies for macadamia

* The importance of grafting vs. direct seeding
* Improved Macadamia grafting techniques suitable for the region
* Management of macadamia grafts

Each of the 60 farmer trainers will be required to train at least 10 members from the group s/he is representing. During the assignment, the volunteer will also identify other gaps for future F2F intervention, particularly on management of the macadamia trees in field. At the end of the assignment, the volunteer will conduct a presentation for a larger audience on the importance of modern macadamia grafting technologies in increasing the grafts’ survival rates and thus increasing production and farmers’ income

**Host contribution**– Good Neighbours Community Project will organize the train the trainer sessions to be conducted by the CRS F2F volunteer. Also GNCP staff will be available to help with training in addition to working closely with the volunteer during preparations. GNCP will ensure trained TOTs continue training their respective farmer groups on Macadamia grafting technologies. The organization will also provide the training venue as well as meeting the participants travel and other related training costs.

1. **Anticipated Results from the Assignment**

The anticipated results from this assignment are:

* At least 60 GNCP farmer trainers trained on Macadamia grafting technologies. It is anticipated that each trainer will train at least 10 farmers from their respective groups
* An illustrated guide showing the step by step procedures of the macadamia grafting techniques.

**E. Deliverables from the volunteer assignment include:**

* Trainings conducted and people trained
* a simple illustrated guide on Macadamia grafting developed
* Presentation on Macadamia grafting techniques
* Debriefing with USAID and in country group presentations after assignment
* Volunteer feedback
* Field trip report written, outreach activity conducted in Kenya and outreach in the US (press release and media event).

1. **Schedule of Volunteer Activities in Kenya**

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| Day | Activity |
| Day 1 | Leave US |
| Day 2 | Arrival into Kenya. The volunteer shall be met by a cab driver CRS uses, who will have a placard bearing **CRS logo**, and who will wait at the arrivals section with the placard displaying the volunteer name. The volunteer will be driven to **Wasini Hotel in Westlands** or another hotel to be communicated prior to arrival. |
| Day 3 | Briefing meeting at CRS offices with CRS F2F staff and become fully briefed on logistics and itinerary of trip. Discuss anticipated outcomes and work plan, prepare any handouts |
| Day 4 | Travel to Bungoma – Naitiri |
| Day 5 | Introduction of the volunteer by CRS staff to GNCP management and staff.  Review the main objectives of the assignment and adjust the agenda for the coming days. |
| Day 6 | Visit GNCP demonstration farm, review current knowledge and practices in Macadamia grafting and identify general challenges faced by the organization as far as Macadamia propagation is concern. |
| Day 7 | Day off |
| Day 8 | Visit selected farmers / farmer groups and review their knowledge and skill gaps in Macadamia tree management. |
| Day 9 | Develop training schedule based on the gaps identified. |
| Day 10, 11, 12 & 13 | Training of selected GNCP farmer trainers on grafting technologies |
| Day 14 | Day off |
| Day 15 & 16 | Field visit with selected farmer trainers to carry out demonstrations on Macadamia grafting  Development of a simple illustrated guide on Macadamia grafting  Discuss and review the graft guide with GNCP management |
| Day 17 | Review the guide as per the discussion with the GNCP management and finalize the guide |
| Day 18 | * Exit meeting between GNCP management and CRS F2F staff. * Presentation on Macadamia grafting technologies to a wider audience. * Present the final illustrated Macadamia grafting guide to GNCP |
| Day 19 | Travel to Nairobi |
| Day 20 | Debriefing at CRS office with USAID Mission and CRS staff.  Complete Trip Report (TR), Complete feedback from, Travel expense report  Volunteer departs for USA |

# Desirable Volunteer Skills

The volunteer must have the following qualifications and competencies:

* Extensive knowledge and experience in commercial grafting of nut trees with familiarity of Macadamia nuts
* Experience in development of training materials and Step by Step guides
* Excellent- hands-on training skills to an adult audience
* Good writing and analytical skill as well as good communication skills

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1. **Accommodation and Other In-Country Logistics**

While in Nairobi, the volunteer will stay at Wasini hotel http://wasinihotel.com/ or any other hotel identified by CRS and communicated to the volunteer prior to arrival. While in Bungoma, the volunteer will stay at a guesthouse that will be identified by the host organization

CRS will pay for hotel accommodation, and provide volunteer with per diems to cater for meals and other incidentals. The volunteer may get an advance which has to be liquidated before departing Kenya. For more information, please refer to country information that will be provided.

**G. Recommended Assignment Preparations**

* The CRS-F2F Program designs assignments with the assumption that some pre-departure preparation by the volunteer will be necessary. Actual preparation time will vary based on the experience of the volunteer, as well as informational or training resources the volunteer has readily available. CRS relies on the volunteer to assess the tasks outlined in this SOW and to use his or her own judgment about how much and what kind of preparation is needed prior to arriving in Kenya.
* The volunteer should prepare materials for handouts, which can be printed at CRS office in Nairobi before commencement of the assignment. Flip charts, markers, masking tape can be obtained at the CRS office. Depending on the training venue the volunteer may use a laptop and projector for PowerPoint presentations. But if the training venue is in the community, it might be difficult to use PowerPoint.
* CRS recommends that the volunteer become familiar with CRS programs in Kenya -- the horticulture project description and other information in the briefing pack before arrival to Kenya

1. **Key Contacts**

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1. Status of macadamia production in Kenya and the potential of biotechnology in enhancing its genetic

   improvement [↑](#footnote-ref-1)