


Site: USAID/Rwanda Pyrethrum Program (Pyramid II)

Abakundibireti Cooperative

Location	Musanze
Contact	<ul style="list-style-type: none"> Jean-Paul; 0788568513 Isa Gisagara, Technician & Factory Manager
Sector	Agriculture
Background	<p>A few types of Chrysanthemum flowers, but especially <i>Chrysanthemum cinerariifolium</i> naturally contain a mixture of six chemicals (pyrethrins) that are toxic to insects, acting on their nervous systems. They also often have a repellent effect even in less-than-fatal concentrations. Pyrethrins are specifically contained in the seed cases of the flower. Extracting the pyrethrins involves a process of drying, grinding to powder, and (usually) extraction with solvent, and then dilution to a level of 25% or 50% pyrethrin active ingredient. This resulting product is called <u>Pyrethrum Pale Extract</u>.</p>  <p>See pyrethrum factsheet & pyrethrum extract MSDS in session 4 materials.</p>
Project briefing	<p>Project began in June 2012 and ends June 2015</p> <ul style="list-style-type: none"> Farming <ul style="list-style-type: none"> Pyrethrum rotated with Irish potato Farmers were given plots by the government in the 1970's Farmers located on volcanic soil fertile belt Don't use any synthetic pesticides/chemicals (pyrethrum is natural pesticide) Each farmer has around .2 ha of land Land has been reduced due to population growth Issues: <ul style="list-style-type: none"> Fungal growth a problem during high rains Need concrete flooring under drying racks so they don't lose flowers Buffalo ruining some crops Pyrethrum growing cycle is February-February <ul style="list-style-type: none"> Planting from March-April Harvesting from August/September until January/February (every 2 weeks) February begin prepping for planting again 30,000 farmers in 7 cooperatives <ul style="list-style-type: none"> Every cooperative has 200-300 members (not every farmer is member) Cooperatives receive management training Membership fee: 10,000 RWA (one-time payment) Member benefits:

	<ul style="list-style-type: none"> ▪ Best practice training ▪ Inputs (fertilizers and seeds for free) ▪ Cooperative helps may medical insurance every year ▪ Provides small loans without interest (mostly for children's school fees) ▪ Cooperative provides driers <ul style="list-style-type: none"> • Non-members use mats to dry, which worsens quality • Cooperative buys flowers from farmers at 1085 RWA/kilo <ul style="list-style-type: none"> ○ Cooperatives buy from farmers at 1012 RWA/kilo, so they make a margin of 42 RWA/kilo • Farmers harvest flowers every 2 weeks <ul style="list-style-type: none"> ○ Horizon/Sopyrwa picks up dried flowers from cooperatives and brings to processing plant <ul style="list-style-type: none"> ▪ 2 metric tons collected every 2 weeks • Processing: <ul style="list-style-type: none"> ○ Flowers are not stored long (receive and process every 2 weeks) ○ Flowers are grinded into Glist powder (some powder sold to Agropharm) ○ Power goes through channel to refinery, where it is mixed with solvents (either exon or methanol) <ul style="list-style-type: none"> ▪ Quality increases up to 70% ○ Buyers buy product at 50%, so concentration needs to be reduced ○ After refinery, oil is extracted, the solvent is recaptured, and concentration is reduced to 50% • Market <ul style="list-style-type: none"> ○ Some oil sold to Agropharm ○ Most buyers are from the US ○ Some Asian buyers (Korea, India)
Cooperative visited	<p>Abakundibireti, 12 km from Musanze in Kinigi</p> <p>President: Phil Belt</p> <p>Gender Program</p> <ul style="list-style-type: none"> • Composting • Empowerment/Capacity building • Women gather in the evenings to discuss issues and collect funds to distribute as needed to each other

(see photos next page)

Photos

