## HOW TRAININGS ON INTEGRATED FARMING AND TECHNOLOGY TRANSFORMED A SOCIETY

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'Necessity is the mother of all inventions' the saying goes and this is what compelled the residents of Kahuruko village in Kianjagi location Chogoria to come together and form a group. "We lacked a good form of income generation to support both our families and our communities and we thought of coming together to reason and embark on a comprehensible idea of income generation and tree planting idea was born.



A member of Kahuruko Welfare Group displaying a Gravellea species seedling in their nursery

In 2005, the group embarked on the venture and included both the indigenous and the exotic varieties at least to meet the local market demand. Ones up, the venture really helped them financially as they not only managed to educate their children but also provide food and better housing to their families.

At some point, some challenges emerged as the venture was bordering the forest and due to lack of an electric fence on the forest, the tree seedlings were attacked by wild animals a thing that compelled them to relocate to another venue. Even with the challenges, the venture thrived and the group went ahead and was awarded contracts with the Kenya Forest Service and the Greenbelt Movement that bought their tree seedlings in bulk and paid them well until the lady who was steering the Greenbelt Movement (The late professor Wangari Maathai) passed on and the venture collapsed. With no other venture that they had embarked on they had to get back on the drawing board this time more careful not to embark on only one venture and that diversification was imminent. Several ideas were discussed and among the priority were avocado farming among other horticultural farming activities and since then the group has not looked back.

Though the group started with the local variety of avocado, they later upgraded to the grafted variety due to the high yields, a ready market that has a high demand both locally and internationally. With no single regret on the venture individual members embarked on the venture and today, the venture has not only sufficiently provided for their families but also enabled them to diversify their income generating activities that include; butter nuts, pawpaw, livestock keeping, fish rearing, horticultural farming and they even went ahead and embarked on table banking among other ventures.

Meet Dickson Mawira a forty year old gentleman and a member of the group who is a reflection of the group different endeavors. His two acre farm is an empire tucked with different varieties of food crops that not only feed him but also provides him with some source of income and offers him a job. Mawira grows: butternut, sweet potatoes, tomatoes, arrowroot, grafted avocadoes maize, beans, cabbages and other kale varieties where he has subdivided into small manageable blocks where he grows different varieties of food crops and maintains them in different stages to ensure a stable supply of nutrients throughout the year.



Mawira admiring avocadoes fruits from high yielding hass variety

Mawira attests to employing the latest technology once learnt, "In every training I attend on farming from GRADIF-K and DETRA I try and implement it and I don't regret the decisions and the transformation on my farm is evident. I practice organic farming, employ mulching to help conserve soil moisture and I have also embraced the newly introduced method of farming

arrowroot such that I don't have to grow them on a marshy area along the streams.



For the sweet potatoes I ensure that the land is well cultivated and is rich enough in terms of nutrients and I also ensure that it's a bit raised to ensure proper drainage especially during the wet season. All this knowledge he attests to GRADIF-K and DETRA which he says has taught him to farm small manageable blocks so as to pay serious attention to the crops of the farm. On a good season, Mawira attests to pocketing on average Ksh 60,000.

The group has currently embarked on Giant Bamboo farming courtesy of GRADIF-K where the organization provided them with the Giant bamboo trees and established a greenhouse for them so that they can learn and have the bamboo stems grow at a fast rate. The main reason the group is really excited about the venture is due to the numerous advantages associated with the tree; one the trees help increase water at the water source, it attracts rain, reduces air pollution and is also used as feed for both animal and human beings, bamboo trees are also used for construction

of houses among other uses.



Members attribute the success of the above ventures to the numerous trainings that GRADIF-K and DETRA has offered from integrated farming that assures farmers of a continuous supply of yields and farm income to the adaptation of new technologies that help members survive and outdo the harsh climatic conditions. "Out of the new technologies, we can now grow food crops that are not only meant for the local consumption but international: grafted avocadoes, we have also embraced the arrowroot technology that sees us farm arrowroot on dry land thus providing us with food throughout the year," attests Lyford Kaburu the group secretary.