

EFFECTS OF CLIMATE CHANGE ON ECONOMIC AND ENVIRONMENTAL ACTIVITIES IN MACHAKOS COUNTY



Climate has a key role in socio-economic development and environmental activities. It is a determinant on the space-time distribution of the world's resources. About 90 per cent of all natural disasters world-wide are climate-related. About 10 per cent of the disasters often emanate from geological, biological and anthropogenic activities. Climate change is a serious threat to sustainable development globally. In Kenya, as in other regions worldwide, climate change and variability are driving weather pattern changes, and causing seasonal shifts. Impacts of climate change have been experienced in many sectors such as environment, health, agriculture, trade, water, energy, transport and physical infrastructure. Climate change impacts are specific to local areas like in Mwala in Machakos County. Therefore climate change impacts adaptation methods which are well applicable to a given local perspective. Climate change impacts are disastrous to communities for it causes a disruption to their functioning; widespread human sufferings, material, economic or environmental losses which exceeds their ability to cope up with the impacts.

According to Wayua Ndumu a poultry farmer in Bishop Ndingi, in Mwala, she says; unreliable rainfall in some seasons has led to reduced agricultural activities thus food insecurity, reduced incomes from food sales, increased poverty, and scarcity of water due to drying up of water sources. Sustaining livelihood in her family has been a challenge because her and her husband has been depending on agriculture and because of the changes in climate their life changed, she says. Wayua and other women in the village decided to keep poultry as their source of livelihoods, she says the demand is high and they cannot meet it and she desires to increase the numbers to enable her cater for the needs of the family; pay school fee, buy clothing, food, medical fee among others. Like in every other business or project, challenges are inevitable; poultry sickness, costly feeds caused by droughts she appeals for interventions from the county government or any partner who is willing to support them achieve their dreams and more so reverse the impacts of climate change.



Boniface Musau Mutisya another farmer in Mwala, Kibauni location, who for the past years has been depending on horticulture farming. He says he grows kales, spinach, tomatoes, sweet potatoes and he does tree seedlings which comprises of fruit trees. He has been using water from a pan which was done by the government, however from the month July he has faced water scarcity after the pan dried up which led to drying up of the plants at the stage of maturity, this left Mr. Musau with much losses after much investments. He transferred some seedlings to his home where he could water them using rain harvested water to at least save part of his efforts. He is currently having about 20,000 seedlings

of citrus and mangoes, which he confirms that it creates employment for youths in the village when transplanting from the seedbed to the bags. He estimates an income of about Kes 250,000 on lower side on selling the seedlings, thus encouraging the villagers and more especially the youths to engage themselves in similar project which have no limits in terms of markets.

Mr. Musau calls for civil education for the members of communities to learn the importance of tree planting saying it is the only way to reverse the adverse impacts of climate change, which comprises of droughts, water scarcity, food insecurity, unemployment, poor health, conflicts over resources among others. In conclusion on behalf of the community he is appealing to the governments, Non-governmental organizations among other partners to consider water harvesting and conservation as the key cry from the communities; particularly points out on rehabilitation the existing water sources, increase water reservoirs, provide subsidies or provide tanks at households level for rain water harvesting..