Climate Change Vulnerability and Adaptation Assessments in Swaziland

Abstract

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Swaziland has been experiencing consecutive drought seasons over a continuous period of five years since the 2001/02 rainfall season to present, with a forward shift on the start of the season and spatial distribution of the rainfall, resulting in an abnormal condition becoming normal. Households in the rural Lowveld have since stopped farming and are solely dependant on social interventions such as food aid. A dependency syndrome has since been developed, making these households even more vulnerable as external assistance is shrinking.

Household livelihood vulnerability baseline surveys conducted in 1998, 2002 and 2006 show that the Lowveld zone is more vulnerable to the effects of drought compared to the other three ecological zones. There has been a sharp decline in crop production levels and crop diversity which doesn't auger well for the Swazi economy as it is highly dependant on agriculture. Due to the drought, there has been an almost total failure in the cotton industry in the Lowveld region of the country coupled with a decline in global cotton prices. This has left most of the cotton farmers in the Lowveld, Lubombo and Dry Middleveld regions indebted as they had over the years taking huge loans from banks for cotton farming purposes.

Climate Change / Variability effects manifest through drought have resulted in the deterioration of livelihood for most people living in the Lowveld zone of the country, forcing some to move to cities in search of jobs and as a consequence are then exposed to the increasing HIV / AIDS pandemic.

Overview

Swaziland has been a middle-income country for a while since before the lifting of economic sanctions against South Africa and the independence of Mozambique. The country has since experienced a sharp decline in GDP over the years due to the failure of the agriculture sector as consequence of drought together with factory closures which were providing employment to a majority of the migrated unskilled labour.

Except from the climate change scenario development work done during the first communication to the conference of the parties, there has been no monitoring of the projected changes on a regular basis. Vulnerability assessments which have been inclined towards livelihood have since been dominant in the country, driven by the donor community which needed to know the level of vulnerability at community level. Most of these donor communities were more interested in food security indicators rather than climate change indicators.

With reference to the hierarchy of needs one can understand why they were interested in the food security situation more than the climate change situation, as food is the first requirement before security in the form of shelter. From the assessments it transpired that climate change effects were more pronounced in more than half of the country as a consequence of drought – lack of useful rains. The Lowveld zone was the more vulnerable to effects of drought than the rest of the zones, as observed during the 1991/92 drought season, where about 91,000 herds of cattle died as a result.

Monitoring of the recent rainfall seasons has shown that there is an inclination towards drier conditions on a season to season basis, thus maintaining abnormal conditions over a long period of time. These abnormal conditions have since become the new normal, as people have been nursing the false hope of the conditions improving and returning back to the normal they are used, but that has not happened as yet.

Sustainable adaptation measures need to be investigated for the vulnerable communities to develop resilience to these abnormal effects – climate change. Current adaptation measures though useful at the moment they are not sustainable, as the vulnerable communities have since developed a dependence syndrome, which is a very dangerous situation as external assistance seems to be shrinking by the day. If not substituted with a community driven sustainable adaptation measures, it would result in a major human catastrophe.