THINK NAMIBIA

POSTER 3:

CLIMATE SMART AGRICULTURE IN NAMIBIA

In Namibia, agriculture and forestry contribute 5.1% to the Gross Domestic Product (GDP). Livestock alone contributes 3.5% which is a contribution of 68.63 % to the Agricultural GDP. In addition to this, agriculture plays a critical role in the formal and informal economy supporting 70% of the population directly or indirectly through employment and income generation.

Agriculture is extremely vulnerable to climate change. Negative impacts of climate change are already being felt, in the form of reduced yields and more frequent extreme weather events. Substantial investments in adaptation will be required to maintain current yields and achieve the increases that are needed.

While there is significant variation across crops, regions and adaptation scenarios, the majority of models predict a yield reduction of more than 5%, and around 10% of projections expect yield losses of more than 25%. Agriculture is also a major part of the climate problem. Globally, it currently generates 19 – 29% of greenhouse gas (GHG) emissions. Without action, that percentage could substantially rise.

THE CHALLENGE FOR NAMIBIA

Crop production activities in Namibia are limited, mainly due to the arid climate and low rainfall patterns. Small-scale farmers use traditional methods of agricultural production. These methods are characterised by low productivity. This weakens the food security of the population and the dependence on rain-fed agriculture increases the vulnerability of farming systems and predisposes rural households to food insecurity and poverty.

It is projected that the reduction in crop yields will have devastating impacts on food security at both national and household levels. Under the current conditions in 2015, the agriculture sector in Namibia needs to grow by 4% a year to meet the food requirements for the expanding population.

CLIMATE SMART AGRICULTURE

Climate Smart Agriculture (CSA) is not a set of practices that can be universally applied, but rather an approach that involves different elements embedded in local contexts. CSA integrates the three dimensions of sustainable development (economic, social and environmental) by jointly addressing food security and climate challenges. Climate Smart Agriculture is composed of three main pillars:

PILLAR 1

SUSTAINABLY INCREASING AGRICULTURAL PRODUCTIVITY AND INCOMES

Namibia needs to produce more food to improve food and nutrition security and boost the incomes of 70% of the Namibian population who rely on agriculture for their livelihoods.

PILLAR 2

ADAPTING AND BUILDING RESILIENCE TO CLIMATE CHANGE

There is need to reduce vulnerability to drought, pests, disease and other shocks; and improve capacity to adapt and grow in the face of longer-term stresses like shortened seasons and erratic weather patterns.

PILLAR 3

REDUCING AND/OR REMOVING GREENHOUSE GASES EMISSIONS, WHERE POSSIBLE

There is need to pursue lower emissions for each calorie or kilo of food produced, avoid deforestation from agriculture and identify ways to absorb carbon out of the atmosphere.

TAKING ACTION

These are some climate smart practices that can be adopted in smallholder agriculture production in Namibia:

CROP MANAGEMENT	LIVESTOCK MANAGEMENT	SOLID AND WASTE MANAGEMENT	AGRO FORESTRY
• Intercropping with legumes • Crop rotations • New crop varieties (e.g. drought resistant) • Improved storage and processing techniques • Greater crop diversity	• Improved feeding strategies • Rotational grazing • Fodder crops • Grassland restoration and conservation • Manure treatment • Improved livestock health • Animal husbandry improvements	• Conservation agriculture (e.g. minimum tillage) • Contour planting • Terraces and bunds • Planting pits • Water storage (e.g. water pans) • Dams, pits, ridges • Improved irrigation (e.g. drip)	• Boundary trees and hedgerows • Nitrogen-fixing trees on farms • Multi - purpose trees • Improved fallow with fertiliser shrubs • Woodlots • Fruit orchards

For more information, visit: www.enviro-awareness.org.na

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