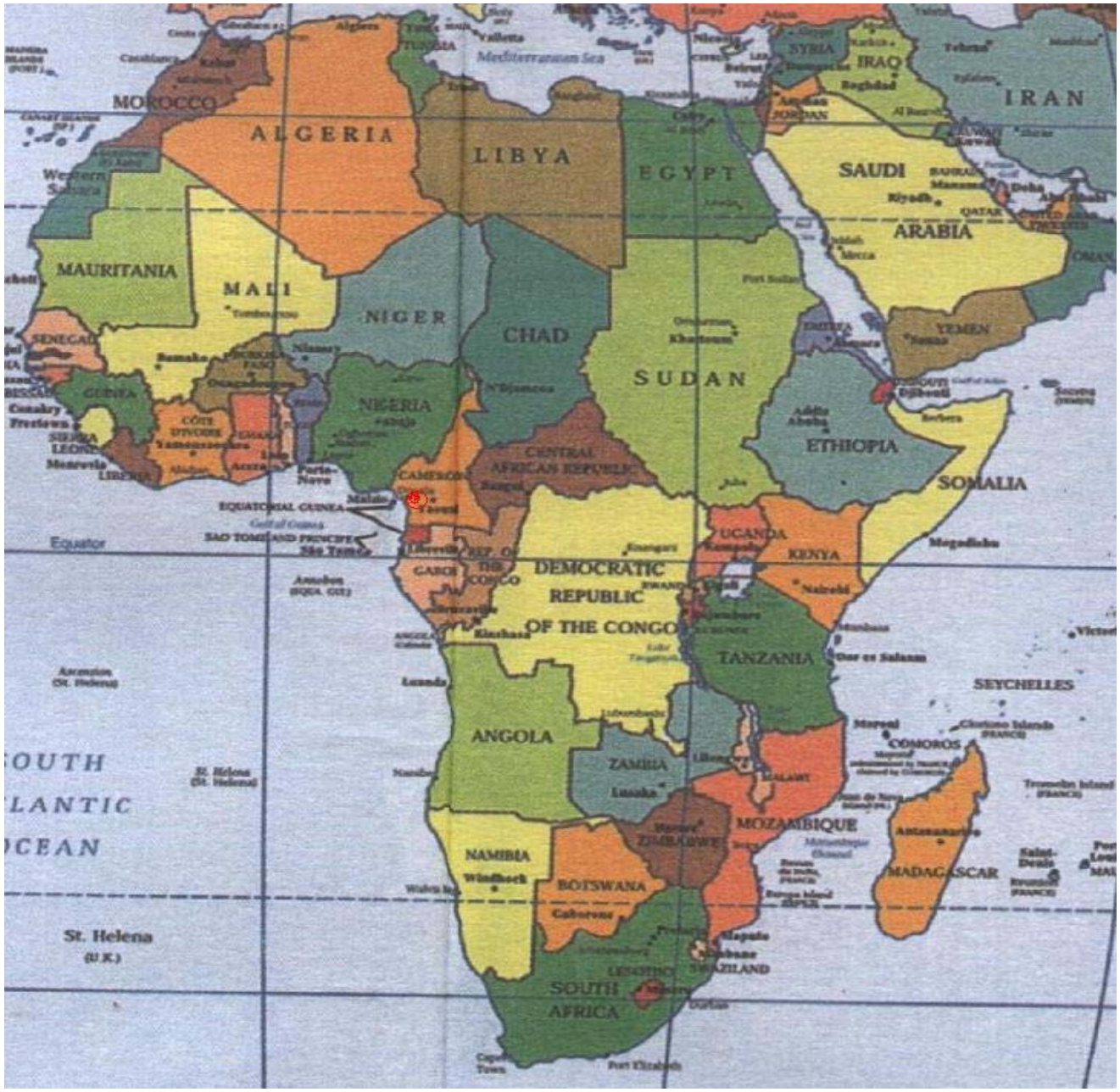
TITLE

Household – level composting: Linking urban and peri-urban Agriculture to medicinal plant cultivation and Environmental Sanitation. An Experimental study carried out in Fako Division South West Province, Cameroon

BY:

Dr. NDJOMGUEM TUMA Clement-Pierre
Agrobiologist
Researcher
Director “NGO” ‘SAVE THE NATURE’
P. O. Box 51 Buea S.W.P – Cameroon
Tel: 00 (237) 77 92 01 90
Email: savethenature_cam@yahoo.com
ndjomguemtcp@yahoo.com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SOUTH ATLANTIC OCEAN

INTRODUCTION

- With a sustained population growth, Sub Saharan African Cities now face the headache of urban pollution and waste disposal.

- The Sub Division head towns of Fako Division (Buea, Limbe, Muyuka and Tiko); South West Province of Cameroon, are no exception to this rule.

Backyard littered waste disposal

Street littered waste disposal with a warning pin board from the local council

THE GOAL

- The goal of this project is to use the already decomposed solid waste to develop urban and peri-urban agriculture and promote the cultivation of anti malarial herb (Artimisia annual).

OBJECTIVES

- The major main objective of this project is to support the member of the study communities in becoming more active in environmental protection.

RESEARCH APPRAOCH

- The Research Project was implemented using participatory action research (PAR) approach.

- The first phase consisted of an orientation and familiarization survey of the four selected urban and peri-urban villages (Buea, Limbe, Muyuka, Tiko)

- The second phase consisted of a household survey in which semi structured interviews were used to collect data on household waste, sanitation health and agricultural practices in each of the towns.

- The third phase was exclusively practical: participants at the workshop learned how to select and recuperate the organic manure from the decomposed solid waste

Already decompose littered waste with a warning pin board from the delegate of urban affairs.

Selection and recuperation of organic manure from the decompose littered waste

- For use in the nursery and in the cultivation of the anti-malarial herb (Artemisia) and vegetable crops.

- The forth phase consisted of teaching the population how to process and use the anti-malarial Artemisia tea.

- The fifth phase consisted of demonstration of new composting methods: barred composting, vermin composting and use of brick-built composting and compost tumbers.

PLASTIC: A CASE OF LOW BIODEGRADABILITY

- The rising quantities and proportion of plastics within domestic waste reduces the effectiveness of appropriate natural decomposition.

- Conversely source of plastic are being sough because fossil fuels will eventually run out. A bacterium, Alcaligenes entrophus, has the ability to produce groundnuts of a plastic called: Polyhydroxybuytyrate (PHB) and store them in the cytoplasm.

RESULT

- A total of 25 brick built compost bins and 15 compost tumblers were distributed at prominent strategic points
- Five tons of Artemisia tea were distributed and consumed by the communities over period of 6 months.
- Malaria-induced death receded by 90%.

Filling of the plastic bags with manure

ARTEMISIA plant in the nursery