



USAID | LIBERIA
FROM THE AMERICAN PEOPLE

CROP DIVERSIFICATION TRAINER'S MANUAL

PEOPLE, RULES, AND ORGANIZATIONS SUPPORTING
THE PROTECTION OF ECOSYSTEM RESOURCES
(PROSPER) PROJECT



APRIL 2015

This publication was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech.

This report was prepared for the United States Agency for International Development, Contract No. AID-669-C-12-00004, People, Rules, and Organizations Supporting the Protection of Ecosystem Resources (PROSPER) Project.

Principal contacts:

Paul Meadows, Chief of Party, Tetra Tech ARD, Monrovia, Liberia,

Paul.Meadows@tetratech.com

Vaneska Litz, Project Manager, Tetra Tech ARD, Burlington, Vermont,

Vaneska.Litz@tetratech.com

Implemented by:

Tetra Tech ARD

People, Rules, and Organizations Supporting the Protection of Ecosystem Resources
(PROSPER)

19th Street and Payne Avenue, Sinkor

Monrovia, Liberia

Tetra Tech ARD

P.O. Box 1397

Burlington, VT 05402

Tel: 802-495-0282

CROP DIVERSIFICATION TRAINER'S MANUAL

LIBERIA PEOPLE, RULES, AND ORGANIZATIONS
SUPPORTING THE PROTECTION OF
ECOSYSTEM RESOURCES (PROSPER)
COMPONENT 3

APRIL 2015

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

WHAT IS CROP DIVERSIFICATION?

The word Diversification can be used in various fields of study/or practices. In a simple general term, it applies to the use of different practices or methods to achieve a given result. In agriculture, we see Crop Diversification as a farming practice that involves the growing/cultivation of different crops throughout the year in forms of intercropping or mixed cropping.

WHY CROP DIVERSIFICATION?

We do Crop Diversification for many reasons:

- It minimizes the risks of complete crop failure as a result of disease infection, pests' infestation, or drought. In other words, if one crop fails, the farmers can still depend on the other crops for food and income generation.
- Over 80% of rural dwellers depend on farming as their main source of livelihood activity.
- The growing population puts pressure on the farmers to make the best choices of crops to grow in a more sustainable way to respond to market demand.
- Consumption of diverse diets has an evident of health associated benefits.
- Vegetables, Cereals and legumes in a cropping system can help break disease pathogen cycle when crop rotation is well carryout.
- It promotes best agronomic practices and helps farmers understand crops related family.
- It improves soil fertility by the growing of leguminous crops like beans and groundnuts.
- It minimizes the practice of shifting cultivation by promoting and adopting crop rotation.
- It helps farmers understand the practices and adoption of Farming as a Business (FaaB) concept considering crop selection based on market demand.
- It gives farmer the ideas/skills (best production practices) of growing other crops; farmer production skills can be diversified.
- It contributes to food security as well as the availability of nutritional food crops for the farmer's family consumption and income.

WHAT ARE THE ADVANTAGES OF CROP DIVERSIFICATION?

There are many advantages that come with Crop Diversification:

- It reduces farmers over-dependency on one crop for income
- It ensures the continuous generation of income year round
- It increases farmer marketing skills to be able to interact with crop-specific customers/buyers
- All farm lands becomes useful; when the land is not good for one crop, other crops can grow there.
- Intercropping with legumes under a very low soil Nitrogen conditions can contribute up to 25 % of Nitrogen that is require for main crop

A NEED FOR CROP CLASSIFICATION

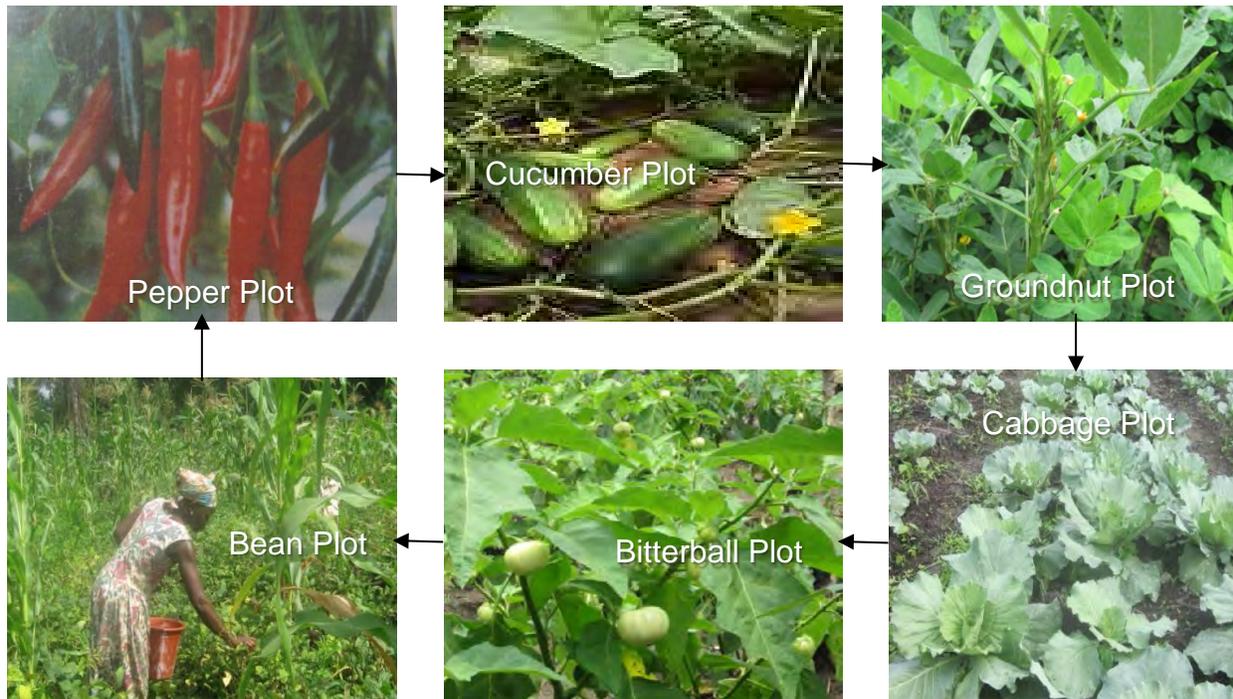
In order for a farmer to plan their crop diversification activities, it is important to know the family relationship of some of the commonly known crops that are diversified. It helps the farmer understand that:

- You don't rotate crops that are in the same family
- Crops of the same family share common diseases and pests
- Rotating with different family crops will help break disease pathogen and pests cycles

COMMON CROP FAMILIES: A FARMER GUIDE WHEN PLANNING CROP ROTATIONS:

SOLANACEAE	CUCURBITS	BRASSICACEAE	LEGUMINOCEAE
Pepper	Pumpkins	Cabbage	Beans
Bitterballs	Cucumbers	Collard Greens	Groundnuts
Eggplant	Watermelon		
Tomatoes			
Potatoes			

A SIMPLIFIED CROP ROTATION GUIDE



A farmer may have an acre of farm land and decide to carry out crop diversification activities/practices. The farmer can decide to divide the one acre into six plots with a well-planned crop rotation guide as simplified above. A well-planned crop rotation strategy will avoid the rotation of crops that fall in the same family.

CROP DIVERSIFICATION AND THE REDUCTION OF THREAT TO BIODIVERSITY:

To practice crop diversification and at the same time reduce threat to biodiversity, it is important to know that:

- The farmer needs not to travel into the forest to make a farm, but can have his/her farm close to the town to reduce the travelling time and spend the rest of the time on the farm in production and managing the farm.
- The farmer should begin with small land area/plot and effectively manage that plot of land
- The farmer should practice soil management techniques through composting, application of manure, and plant leguminous cover crops to enrich the soil
- Practice crop rotation and mixed-cropping as explained above

U.S. Agency for International Development
Liberia Mission
502 Benson Street
Monrovia, Liberia