

C.I.M.S.

**HANDBOOK
FOR
DATA COLLECTION**

**HOT PEPPERS
2006**

**Prepared by: Caribbean Institute for the Mathematical Sciences
(CIMS)**

for

St. Lucia Agricultural Diversification Agency (SLADA), and

Ministry of Agriculture, Fisheries and Forestry of St. Lucia

GENERAL INSTRUCTIONS

- ?? Form (1), “Planting Details”, is to be filled out once for each planting of a plot. The remaining forms are to be filled out once per week, and returned to Mr. Soeren Hofdahl.**
- ?? A new set of blank forms should also be picked up from Mr. Hofdahl each week. Since it might be necessary to occasionally update the structure of the data collection forms, it would be best to get a new set each week.**
- ?? The data collection procedure consists of three types of simple tasks:**
- (i) measurements of the marked samples in the plot**
 - (ii) records of labour, of technological and climatic inputs and of economic costs**
 - (iii) a minor harvest, restricted to the marked samples**
- ?? The measurements to be taken are listed on forms (2) – (4), and are to be recorded on those forms as soon as they are executed. Measurements may be carried out in either the metric system, or the anglo-american system of “feet” and “inches”. Thus, for example, height may be measured in either “meters” and “centimeters”, or in “feet” and “inches”, according to preference or custom. It is however important to chose one of the two systems from the outset, and to stick with it throughout.**
- ?? Weekly records of labour expended, of technological and climatic inputs, and of economic costs are to be filled in on their respective forms, (5) – (7).**

?? The weekly minor harvest consists of harvesting the selected samples, in precisely the manner employed for a normal harvest. Two containers are to be used to harvest each sample. In one container, labeled A, are placed the peppers harvested from the sample to be sold to Rive Dore, and in the other container the remaining peppers, for sale to other customers. Thus for a minor harvest, while harvesting sample 5, into container A we place those peppers from sample 5 which we will sell to Rive Dore. Into container B we place those of the peppers harvested from sample 5, to be sold to others.

?? The number of peppers in each container is to be counted immediately after harvesting the plant, and recorded on the forms (2) – (4). We then move to harvest and count on the next sample.

?? The major harvest would consist of harvesting all plants in the plot, with the exception of the marked samples.

?? One might think of the data collection procedure as simply harvesting in two stages: a minor harvest, followed by a major harvest on harvest day. We then take measurements on all the samples on a chosen day of the week after the harvest. Thus, if on a given farm, harvesting is normally done on Monday, the minor harvest, counting and recording would be done first, say early Monday morning, followed by the major harvest that very day. The measurements on the samples should be done on the earliest day possible that week, following the harvests. An example of a good rythm might be:

MINOR HARVEST	and	COUNTING	-----Monday morning
MAJOR HARVEST			-----Remainder of Monday
MEASUREMENTS			-----Wednesday

?? Should the weather or other events prevent data collection on the chosen day in any week, the data collection should be done on the earliest day possible, and the “rithym” of the data collection procedure resumed the following week.

**GUIDE FOR FILLING OUT THE FORM 2,
CROP DEVELOPMENT / PESTS AND DISEASES**

Colour

- 0 – mostly brown leaves**
- 1 – mostly yellow leaves**
- 2 – mostly green leaves, with possibly some yellow or brown**
- 3 – completely green**

Flowers

- 0 – no flowers on the plant**
- 1 – appearance of the first flower(s) on the plant, since planting**
- 2 – the plant continues to bear flowers**

Fruit

- 0 – no fruit on the plant**
- 1 – appearance of the first fruit(s)**
- 2 – the plant continues to bear fruit**

Pests and Diseases

An “X” indicates that the sample has the particular disease or pest infestation. A “0” indicates that there is no visible trace of the particular disease or pest on the sample.

GUIDE FOR FILLING OUT FORM – 3, LABOUR

There are nine (9) categories of labour specified on the form. For each category, for each day of the week, fill in the amount of labour applied for the cultivation of hot peppers, on the particular plot corresponding to this form.

For each category of labour, for each day of the week, there is a table with four entries to be filled out as follows.

- ?? The two rows correspond to your own labour, O, and to the total employed labour, E, respectively
- ?? The two columns correspond to the total man-hours applied, H, and to the total cost paid, C, for the designated amount of labour.
- ?? The costs for vehicles and petrol should be included in the costs for transportation

As an example, suppose that on a particular Tuesday (after harvest), three hours of your own labour were spent transporting the harvest to market, together with five hours of employed labour: if the cost for the employed labour were \$30, and the cost for the vehicle and gasoline were \$40, then the form would be filled out for that week as follows.

Plot	Crop	Mon		Tue		Wed		Thu		Fri		Sat		Sun	
		H	C	H	C	H	C	H	C	H	C	H	C	H	C
Transportation															
	O			3	x										
	E			5	90										
Pruning															
	O														
	E														
Fertilizing Plot															
	O														
	E														

It is not necessary to fill in the cost for your own labour.

<p style="text-align: center;">GUIDE FOR FILLING OUT THE FORM - 4, TECHNOLOGICAL / CLIMATE INPUTS</p>
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Rainfall

- 0 – completely dry**
- 1 – no significant rainfall on that day**
- 2 – significant rainfall on that day**
- 3 – flooding and waterlogged fields**

Sunlight

- 0 – totally overcast, with or without rain**
- 1 – mostly overcast, with some clear sky**
- 2 – clear with scattered clouds**
- 3 – completely clear, with no clouds**

Fertilizers

For each day of the week, fill in the total amount of each specific fertilizer used on the entire plot.

Pesticides / Herbicides

For each day of the week, fill in the total amount of each specific pesticide / herbicide used on the entire plot

Water

For each day of the week, fill in the total amount of water applied to the entire plot, along with the numeral corresponding to the manner of application, in the column to the left.

- 1 – watering can**
- 2- bucket**
- 3- hose**
- 4- sprinkler system**
- 4 – drip system**

For automated systems, the amount should be given in terms of the total number of hours (and minutes) for which the system was switched on. The rate of the system is to be determined separately.