



Some use of M&E in The Sustainable Tree Crops Program

And the role of Monitoring and Evaluation

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Background to STCP

- Concept in 1999, active 2003
- Work on:
 - how to bring efficient ‘technical transfer’
 - building Farmer Organisations
 - develop ‘enabling’ policies for government
 - preventing damage to environment
 - promoting appropriate social conditions
- Ways of Working:
 - Help develop all the above together with local institutes, whom will then carry on...
- Where: Ivory Coast, Ghana, Nigeria, Cameroon, Liberia, others



Background to STCP

- Funds:
 - 1 mio/yr USAID
 - 1 mio/yr Industry
 - up to 1 mio/yr Govt or project funds
- Organisation:
 - steering committee
 - IITA scientists in key functions
 - few but powerful local staff
 - cocoa network representation
- Result:
 - a very complex program, with lots of Monitoring and Evaluation work to keep developing better approaches
 - no 'single donor satisfaction' but needs to satisfy group of stakeholders



STCP and M&E

- STCP is heavy on M&E
 - it is part of the intended ‘learn and feedback loop’, but STCP also has to satisfy ‘different customers’, such as industry, donors as well as the scientific community
- STCP can do this because
 - it is the part of the project and an IITA mandate
 - it is not ‘donor driven’ and has its’ own success indicators
 - it is a ‘medium or long term’ program
 - it has human resources allocated to M&E
- The STCP project is very good, and it’s M&E activities get a lot of attention - but is it perfect?



STCP - base line data

Base line data - even surprised 'experts'

Information leads to identification of challenges, opportunities

Agronomic Indicators of Cocoa	Cameroon (n=845)	Cote d'Ivoire (n=1188)	Ghana (n=900)	Nigeria (n=1070)
Productivity and System Sustainability				
Mean productive cocoa area per household (ha)	4.6	4.3	4.9	3.9
Mean young cocoa area per household (ha)	0.50	0.86	1.10	0.26
Proportion of young cocoa (%)	10%	6%	5%	16%
Mean cocoa yield (kg/ha)	350	393	257	475
Fertilizer use (% of households)	1%	14%	2%	3%
Mean no. of years since farm establishment	30	21	13	25
Mean of shade index (1=none, 4= heavy)	2.65	2.12	2.07	2.50
Proportion of farms with no shade	8%	28%	28%	3%
Proportion of farms sharecropped	23%	30%	22%	69%
Household size	12	10	9	10
Household Cocoa Sales in 2000				
Gross Revenues per household US\$)	976	916	256	1069
Per Capita Gross Revenues (US\$)	82	88	27	105
Per Capita Share in Gross Revenues (%)	50%	51%	56%	67%
Mean quantity marketed in 2000 (kg)	1492	1668	943	1734
Mean farm gate price (US\$/kg)	0.65	0.55	0.27	0.62

STCP - regional differences



Same interventions, different countries: what is most effective?

Estimated changes in mean income among program farmers selling collectively and having participated in FFS training in Cameroon and Cote d'Ivoire	Cameroon, 2004	Cote d'Ivoire, 2004
Area in production (ha)	3.64	4.16
Average yield control group (kg/ha)	175	205
Average yield following FFS (kg/ha)	247	245
Difference in yield between control farmer vs FFS farmer (kg/ha)	41%	20%
Total production FFS participants (kg/ha)	899	1020
Price individual sales (FCFA/kg)	564	329
Price collective sales (FCFA/kg)	648	344
Difference in price between individual and collective sales (FCFA/kg)	15%	5%
Gross revenues with collective sales following FFS (FCFA)	582,604	351,025
Additional labor costs following FFS ICPM (FCFA)	12,886	4,675
Additional marketing cost of grouped sales (FCFA)	12,587	0
Gross revenues less collective sales and ICPM cost (FCFA)	557,131	346,350
Gross revenues of the mean control farmer (FCFA)	359,268	280,500
Difference between Gross Revenue for farmers with FFS and collective sales vs individual farmer (FCFA)	55%	23%
Net addition to household income (FCFA)	197,863	65,850



STCP - example of survey data



Some Good Information

Table 1. Estimated Costs of Implementing ICPM for the Control of Blackpod Disease in Cameroon

<i>Management practice</i>	<i>Estimated mean expenditure per farm</i>		<i>Change in cost (n=90)</i>
	<i>Pre FFS</i>	<i>Post FFS</i>	
	<i>2002</i>	<i>2004</i>	
Pruning labor	15	30	15
Phytosanitary harvest labor	8	14	6
Labor for shade adjustments	3	15	12
Spraying labor	58	36	(22)
Subtotal labor	83	95	12
Fungicide expenditures	74	46	(29)
Total	157	140	(17)

Source: IITA/STCP adoption survey 2004

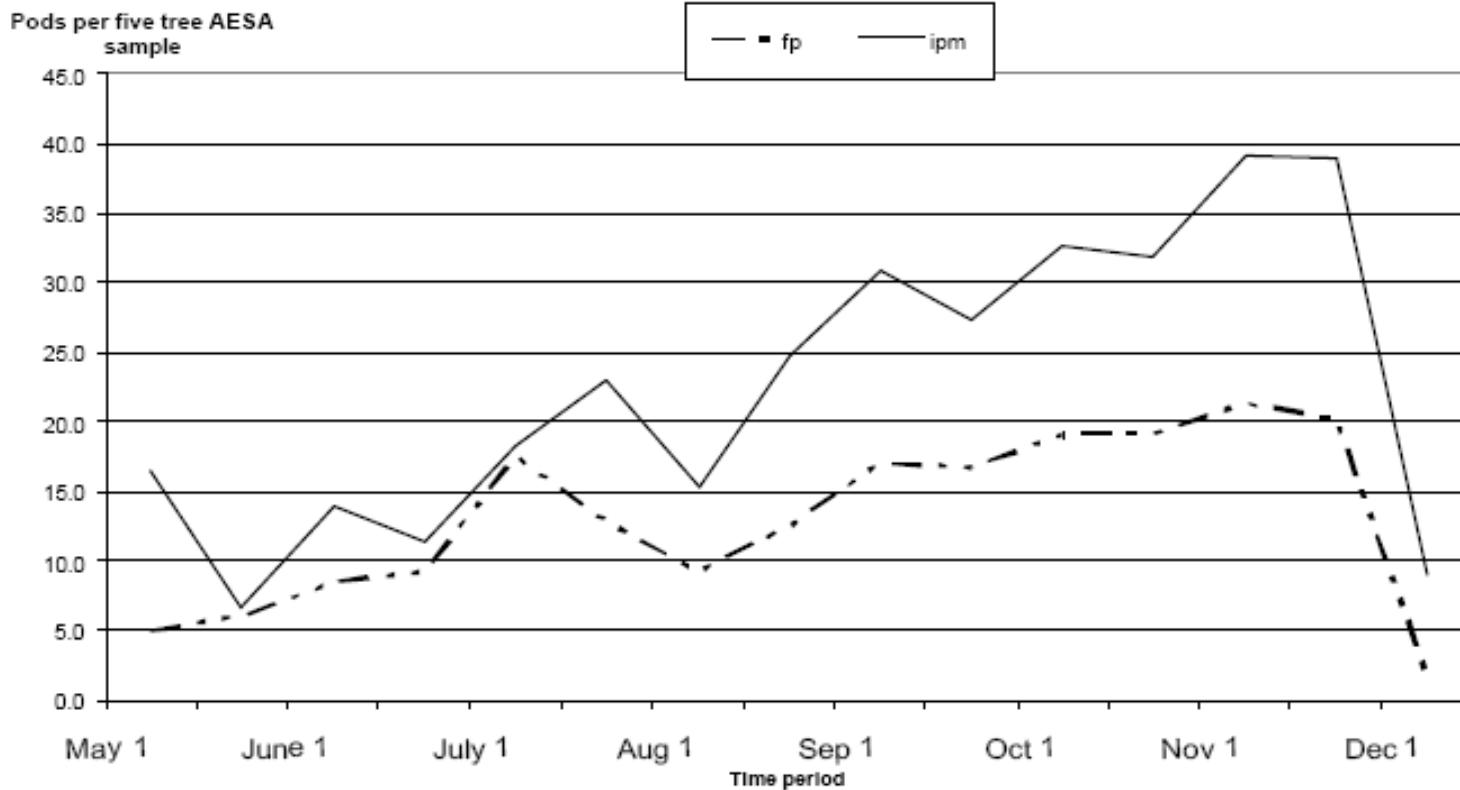
Table 2. A Comparison of Yields, Agrochemical Use and Extent of Cocoa Hybrids in Atwima District, Ghana

<i>Variables</i>	<i>FFS participant (n=90)</i>	<i>Non-participant (n=30)</i>
Yield per ha	102.0	80.7
Kg of fertilizer per ha	15.1	3.4
Number of fungicide sprayings	0.6	0.4
Number of insecticide sprayings	1.5	1.3
Proportion of farm planted to hybrids	0.2	0.1

STCP - example of monitoring



More good information



Source: 2004 FFS participants Ghana

STCP - FFS parameters monitored and evaluated



Part I: Technical bulletins for trainers

Black pod disease
Swollen shoot virus
Mirids
Stem borer
Termites
Rodents
Mistletoe
Rational pesticide use
Farm maintenance
Pruning
Farm sanitation
Applying fertilizer to cocoa trees
Rehabilitating, regenerating and renewing a cocoa farm
Harvesting, pod storage and breaking
Fermentation
Child labour in cocoa production

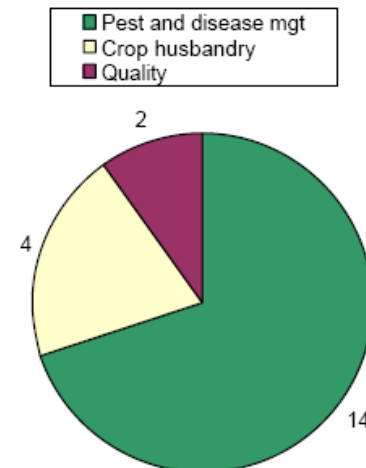
Part II: Discovery learning exercises

Starting FFS
Cropping calendar
Nine dot game
Ballot box
Agro-ecosystem analysis
Agro-ecosystem concept illustration
Agro-ecosystem analysis
Crop husbandry
Canopy shade management
Pruning older trees
Deciding whether to rehabilitate or replant a cocoa farm
Managing cocoa diseases and pests
Impact of humidity and the role of diseased pods in spreading black pod
Cocoa disease infection study
Cocoa quality
Impact of harvesting time on fermentation and cocoa quality
The role of soil in the spread of black pod
Black pod disease zoo in the field
Insect zoo I- symptom development
Insect zoo II-symptom development
Insect zoo-predation exercise
Insect zoo-life cycle development
Determining mirid damage threshold for essential insecticide application
Rational pesticide use
Calibration and performance of sprayers
Improved spraying practice for mirid control
Pesticide specificity test
Spray dye exercise
Botanical pesticide screening
Pesticide resistance role-play
Cocoa quality
Impact of harvesting time on fermentation and cocoa quality
Drying cocoa on raised, covered platform
Economic analysis of cocoa production and FFS evaluation
Estimating the profitability of new ICPM practices
FFS impact evaluation
Social topics
Introduction to child labour issues
Children carrying heavy loads in cocoa production
The use of pesticides and chemicals by children in cocoa farms
The use of sharp farm tools by children in cocoa cropping activities
Raising awareness about HIV/AIDS
HIV/AIDS risk map

Part III: Guides for implementing field activities

Sanitary harvesting
Removing chupons
Removing moss and epiphytes
Removing mistletoes
Where to apply ground fertilizer
Making compost
Post-harvest activities

Great
Information
but not
for general
consumption



Number of protocols in STCP cocoa FFS curriculum by topic

STCP - what do data mean? Success or not?



Survey Data

Topics	% who mentioned the topic was covered in FFS	% who acquired new knowledge on the topic
Quantity of pesticides to use and proper mixing of chemicals	64	63
Spraying method	72	63
Spraying fungicide only as needed	39	88
Protection while spraying	44	75

This is probably very good information, but without knowing details on how data were collected, who/what is in or is out, it is open to interpretation

Good communication is not easy -

- scientist to layman, public sector to private sector
- civil society organisations to industry

The data must be scientifically correct, but need to be communicated in a language that the target audience can comprehend - a professional job...

STCP: Needed to satisfy the steering committee



Participation rates of children living in household of :

Under pressure from US government (Harkin/Engel) a lot of work is done on:

- (worst forms of) child labor, slave labor etc. but
- survey results on WFCL don't show a huge problem with forced labor but rather with dangerous activities. Farmers don't see the problem, not in their needs assessment. Western Civil, Political perception on African environment?

STCP was the only program 'in the field' and thus must work on these issues

- Good or bad use or abuse of program (which is participative)?
- And how to include these activities in M&E?

Is M&E 'trying to make the most of it' but data not good?

STCP has to work on activities that are not a natural fit, and it has to respect steering committee's demands. What is the situation for single donor projects?

6 to 8 years	83.70%	82.40%	0.825
9 to 11 years	62.80%	54.50%	0.375
12 to 14 years	44.80%	27.70%	0.023
All cohorts	65.30%	53.00%	0.005



Conclusion on M&E in STCP



- Great M&E in base-line surveys, impact of technical interventions, adoption rate.
- Interventions are based on need assessment, field and scientific information
- Interventions are tested before becoming part of standard training
- Very good 'feedback loop', use newly learnt information to improve interventions
- Information from M&E robust: buy-in from local governments, and many donors from USA, EU, Japan etc.

But also STCP has Challenges:

- Many different data and 'facts' are (must be) considered, many published...
 - **risk of: paralysis through analysis** (borrowed from Nic)
 - **efficiency: better approximately right than precisely wrong** (Nic again)
- Confusing or Ambiguous information - or confusing reporting?
 - **But who is to say what is right/wrong, publish/not publish?**
- Why is this happening?
 - Donor, Steering committee push?



Thank You