PAI 705 McPeak Lecture 13

#### **Evaluation Research**

- Research undertaken for the purpose of determining the impact of a given intervention.
  - O Has the intervention produced the intended results?
    - Use of social research procedures to systematically investigate the effectiveness of social intervention programs.
  - Used to study, appraise, and help improve programs.
  - So not just to say 'has it worked' but also at times 'what could be done to make it work better in the future'.
  - Also can be important to identify not just 'did it work' but also identify unintended consequences.
  - It is a rapidly growing field.

I am going to provide an overview first based on the chapter in the Babbie text, then we will revisit this topic with the World Bank discussion

Morra-Imas, L. G., Morra, L. G., & Rist, R. C. (2009). The road to results: Designing and conducting effective development evaluations. World Bank Publications.

US federal demand for this research. US federal funding for this research.

- Evidence based policy making.
- https://results.usaid.gov/
- http://betterevaluation.org/resources/guide/dfid appraoch to value for money

## Topics for Evaluation Research:

- Needs assessments. Studies to determine the existence and extent of problems. Can be targeted to distinct subpopulations.
- Cost benefit studies. Looking at the present value of benefits compared to the present value of costs. Looking at flows over time and discounting to state in Net Present Value. Cost benefit ratio, IRR. Discounting is a key element.
  - MCC <a href="https://www.mcc.gov/our-impact/err">https://www.mcc.gov/our-impact/err</a>
- Monitoring a steady flow of information about the object of the research, to report on the attainment and status of the activity. M&E. Are you doing the meetings you promised you were going to do?

**Table 1:** Programme M&E Framework

Outcome	Indicators	Base Situation	Expected End Point	Information needed	Methods/Data Collection	By whom	When
Vulnerable	1. Improved	Nil re: DCF support	Survey of	Understand	Resilience	DCF field staff	Baseline resilience
communities in 3	resilience linked to	but other ongoing	individuals with	community	assessments	w. Animateurs	assessment June –
Circles and 4	support from DCF	interventions may	improved	perception of			end Nov 2015;
Departments in	(disaggregated	affect benchmark	resilience in	climate change,	Focus group		7 localities
Mali and Senegal	quantitative		relevant domains	stresses and	discussions		
improve their	indicator KPI4)	Baseline resilience	(see KPI 4	resilience			Follow on 600
resilience to		assessment	methodological	strategies			households by Dec
climate extremes			note – Annex 4)	employed			2015.
				Deeper analysis of	Household Surveys	Survey	Then annual (end
				climate challenges	600 households	enumerators	of milestone 2 and
				and intra family			final evaluation).
				responses by agro			
				zone & livelihood			
				types			
	2. Use of climate	Use of climate	All LA are making	Type of	TAMD Scorecards	DCF Field Staff	Annual.
	information, to	information at	use of climate	information	Indicators 1 & 5	with support for	
	inform adaptation	local authority	information to	judged likely to be	(use of climate	analysis M&E staff	
	responses	level low	inform local	useful; capacity for	information and		
			development	analysis and use of	integration into		
			planning	this within LA	planning)		
Outputs	Indicators	Base Situation	Expected End	Information	Methods/Data	By whom	When
			Point	needed	Collection		
1. Devolved	1.1 Number of	Nil devolved	Fund placed at	Lessons to be	Ongoing survey &	DCF M&E	Quarterly from
finance and	devolved climate	climate funds.	region level Mopti	drawn from	mapping of	staff	start up Yr 1
planning	adaptation		with 3 Cercle	current dispersal	contexts		
mechanisms are	financial	Unclear to date	specific funds	of climate funds			
established and	mechanisms	what part of other	operational (Mali)				
functional in three	established with	existing funds					
Cercles (Mali) and	local authority	currently reach	Fund potentially	Agreements and	MOU		
four départements	partners,	local level	housed within	delivery of these			
(Senegal) to	transparently	structures in	PNDL at national				
support	managed and fully	target areas: 6	level with 4 funds	As DCF are	Internal	Regional fund	
community-	accountable	finance sources 6		operationalized,	monitoring system	managers;	

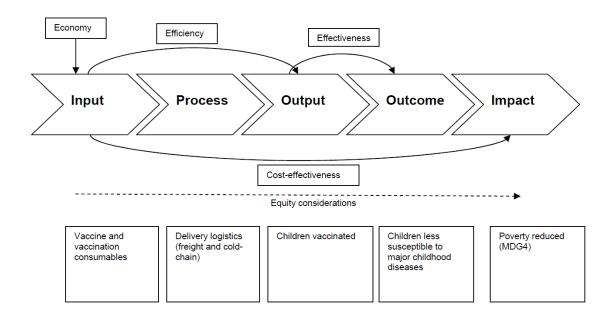
prioritized investments in public goods that build climate resilience.		/ programme funds named in Mali; NIE expedites adaptation finance in Senegal <sup>i</sup>	at department level (Senegal)	monitor agreed performance criteria such as: * Nos. of grants * Value of awards * Duration of cycle application to completed implementation	of public investments funded through DCF	Monitored by government audit process and DCF M&E Staff	
	1.2 Number and type of public good investments responsive to community prioritisation, demonstrating social and gender inclusion	Range of strategies in use to plan locally for climate adaptations <sup>ii</sup> Assessment of women / youth concerns & inclusion in these mechanisms is made as part of in resilience assessment	Communities manage fund investments to implement projects.  Community members, including those from more vulnerable categories, are supported within the range of public investment activities chosen	Monitor number of projects proposed, implemented.  Scope community priorities  Monitor the range of public goods investments  Assess how effectively full inclusion is delivered within responses selected by community, process to be established	Monitor finalization of projects.  Monitor grants made against community mapping of priorities.	DCF M&E staff  DCF staff lead commune level monitoring group to track locally	Quarterly from grant making start up: Yr2
	1.3 Number of local governments using TAMD Track 1 as part of planning & Track 2 indicators as part of performance monitoring processes	Participatory capacity assessment of LA mandate and systems made using TAMD adapted scorecard – low capacity in several areas	LA improve capacity to monitor impact from funding public goods	What tools or processes used by LA to review development plans in general; climate adaptation specifically	TAMD Scorecards	DCF M&E and Field Staff	Quarterly from start (Q2)

	1.4 Proportion of LA with improved capacity for CRM	Output from participatory capacity assessment of LA provides basis for ranking	Local Authorities (LA) rate self improvement in their capacity to respond to CC	How do leaders and officials deliver against their responsibility and need to respond to CC	Capacity checklist TAMD indicators 2 to 4	DCF M&E and Field Staff	Quarterly from start (Q2)
	1.5 Number of individuals trained to manage the devolved climate adaptation financial mechanisms, that rate the trainings positively	Nil before trainings	A majority of participants rate the trainings positively	Assess the rate of participant's satisfaction concerning the trainings	Training assessment by each participant at the end of the sessions.	DCF M&E and Field Staff	Quarterly from start (Q2)
Outputs	Indicators	Base Situation	Expected End Point	Information needed	Methods/Data Collection	By whom	When
2. Vulnerable communities in three Cercles (Mali) and four Départements (Senegal) benefit from public good investments that build resilience and reflect community priorities	2.1 Number of people directly accessing initiatives funded by climate resilience investments in the Cercles and Départements (disaggregated by gender and age)	Nil by definition KPI 1  PDP report on knowledge and Past adaptation projects, notes poor considerations of gender involving women in community decision-making	Numbers of communities and groups from 8 communes (Mali) and 24 (Senegal) whose members are direct beneficiaries of DCF public investments	KP1 monitoring  How many individuals access public investments funded via DCF	Baseline resilience assessments set range of community priorities  Grant awards from regional fund  Group level info on membership and impact	DCF staff  DCF staff & IIED facilitation	Quarterly from YR1

- Program evaluation, outcome assessment, impact evaluation.
  - Were people made better off by attending the meetings.
  - o In what domains?
  - o In the ways you predicted ex ante?
  - o In ways that you did not predict ex ante?

## Formulating the Problem.

- Issues of measurement.
  - O What was the intended result of the intervention?
  - To what extent is it measurable?
  - To assess, we need to operationalize, observe, and recognize whether the intended result is present or absent following the intervention.
    - How can it be quantified?
    - Can it be converted into a cash value?
  - Can go at times to things like the mission statement.
     The donor intent. The project proposal.
  - This is where the program management class links up with the ideas of this course.



## Specifying outcomes.

- What is the response variable? What were we trying to change or have an impact on?
- What are different ways of measuring this outcome?
   Consider different approaches and make sure the consumers of your evaluation product are in agreement both with your definition of the response variable and the means to operationalize the question.

#### Measuring experimental contexts.

 Not just the experiment has happened in the time under study, but other 'all else equal' factors have changed as well. Need to control for this. Classic response is to have

- treatment and control. In addition, not just looking at the outcome in question but other conditioning variables that may explain differential impact within the treatment group if it exists.
- How do we measure the intervention? What was the stimulus, and how can we measure the degree of the stimulus? She went to one training, he went to three, control went to none..... The extent and quality of their participation in the trainings can be measured. What if the trainers differed, and some are more effective at conveying the skill set than others? You would want to track this.

# Specifying the population.

 Who is the relevant population for the treatment? How closely matched to them are the population of the control? If the control is of the same population type, why were they not treated as well?

# New versus existing measures.

 To what extent to you take questions used in other surveys for similar objectives? To what extent do you adapt them to the specific context and purposes of your objective?

#### PERCEPTIONS OF TENURE SECURITY

#### HOUSEHOLD/WIVES SURVEYS

#### **FARMLAND**

within your extended family will take over the use of this	I=Very Likely	PRADD,
	2=Likely	TGCC, CFP
field/plot without your household's permission/agreement?	3=Neutral	
	4=Somewhat unlikely	
.	5=Very unlikely	
	888=Don't know	
	999=Prefer not to reply	
	I=Very Likely	PRADD,
	2=Likely	TGCC
	3=Neutral	
	4=Somewhat unlikely	
	5=Very unlikely	
	888=Don't know	
9	999=Prefer not to reply	
	I=Very Likely	PRADD
local government authorities will take over the use of this	2=Likely	
field/plot without your household's permission?	3=Neutral	
	4=Somewhat unlikely	
.	5=Very unlikely	
	888=Don't know	
	999=Prefer not to reply	
In the next 5 years, how likely do you think it is that the	I=Very Likely	PRADD
local government authorities will take over the use of this	2=Likely	
field/plot without your household's permission?	3=Neutral	
	4=Somewhat unlikely	
.	5=Very unlikely	
8	888=Don't know	
5	999=Prefer not to reply	
In the next I-2 years, how likely do you think it is that	I=Very Likely	PRADD, CFP
	2=Likely	
	3=Neutral	
	4=Somewhat unlikely	
	5=Very unlikely	
	888=Don't know	
•	999=Prefer not to reply	

In the next 5 years, how likely do you think it is that	I=Very Likely	PRADD
private investors will take over the use of this field/plot	2=Likely	
without your household's permission?	3=Neutral	
	4=Somewhat unlikely	
	5=Very unlikely	
	888=Don't know	
	999=Prefer not to reply	
The boundaries of my {farmland} are clear and respected	I=Strongly Agree	PRADD
by people in this village.	2=Agree	
	3=Neutral	
	4=Disagree	
	5=Strongly Disagree	
	888=Don't Know	
	999=Refuse to answer	
I am confident that a government/investor cannot take any	I=Strongly Agree	PRADD
of my {farmland} without negotiation and fair	2=Agree	
compensation.	3=Neutral	
	4=Disagree	
	5=Strongly Disagree	
	888=Don't Know	
	999=Refuse to answer	
In the next 3 years, how likely do you think it is that	I=Impossible/would never	CFP, HH and
people from a neighboring village will encroach/cross-over	happen	Wives
to use this field?	2=Highly Unlikely	
	3=Unlikely	
	4=Unsure/Don't know	
	5=Likely	
	6=Highly Likely	
	7=Happening right now	
	888=Don't know	
	999=Prefer not to respond	
How likely do you think it is that other households within	I=Very Likely	TGCC, CFP
	2=Likely	
your village may try to cross-over your boundaries (step		
your village may try to cross-over your boundaries (step on your side) and take or use some of this field in the next	3=Neutral	
on your side) and take or use some of this field in the next I-3 years?	3=Neutral 4=Somewhat unlikely	
on your side) and take or use some of this field in the next		
on your side) and take or use some of this field in the next	4=Somewhat unlikely	
on your side) and take or use some of this field in the next	4=Somewhat unlikely 5=Very unlikely	
on your side) and take or use some of this field in the next	4=Somewhat unlikely 5=Very unlikely 888=Don't know	TGCC
on your side) and take or use some of this field in the next I-3 years?  How likely do you think it is that other households within	4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply	TGCC
on your side) and take or use some of this field in the next I-3 years?  How likely do you think it is that other households within your village may try to crossover your boundaries (step on	4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply I=Very Likely	TGCC
on your side) and take or use some of this field in the next I-3 years?  How likely do you think it is that other households within your village may try to crossover your boundaries (step on your side) and take or use some of this field beyond 4	4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply I=Very Likely 2=Likely 3=Neutral	TGCC
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on your side) and take or use some of this field in the next I-3 years?  How likely do you think it is that other households within your village may try to crossover your boundaries (step on your side) and take or use some of this field beyond 4 years from now?	4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply I=Very Likely 2=Likely 3=Neutral 4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply	
on your side) and take or use some of this field in the next I-3 years?  How likely do you think it is that other households within your village may try to crossover your boundaries (step on your side) and take or use some of this field beyond 4 years from now?  How likely do you think it is that elites/big people may take	4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply I=Very Likely 2=Likely 3=Neutral 4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply I=Very Likely	TGCC, CFP,
on your side) and take or use some of this field in the next I-3 years?  How likely do you think it is that other households within your village may try to crossover your boundaries (step on your side) and take or use some of this field beyond 4 years from now?  How likely do you think it is that elites/big people may take this field without your household's permission/agreement	4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply I=Very Likely 2=Likely 3=Neutral 4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply I=Very Likely 2=Likely	
on your side) and take or use some of this field in the next I-3 years?  How likely do you think it is that other households within your village may try to crossover your boundaries (step on your side) and take or use some of this field beyond 4 years from now?  How likely do you think it is that elites/big people may take	4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply I=Very Likely 2=Likely 3=Neutral 4=Somewhat unlikely 5=Very unlikely 888=Don't know 999=Prefer not to reply I=Very Likely 2=Likely 3=Neutral	TGCC, CFP,
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Operationalizing Success / Failure.

- One basic standard is classic cost benefit analysis for an efficiency answer to the question. Do the discounted sum of benefits outweigh the discounted sum of costs?
- But what if the outcome is not easily translated into cash terms? The training improved children's test scores by 15%. So what is that worth? At times, you could look at different programs and consider the least cost way of making a given increase in test scores happen?
- As something that is obvious, but potentially overlooked, make sure you include indicators of what the planning documents of the program said they were trying to do. You need to orient yourself to the planning documents of the program to make sure you understand and measure what they said they were trying to accomplish.

Types of Evaluation Research Designs.

Experimental Designs.

Assign subjects randomly to a treatment group and a control group.

Survey baseline.

Apply stimulus.

Survey repeat.

A classic example:

http://onlinelibrary.wiley.com/doi/10.1111/j.1468-0262.2004.00481.x/abstract

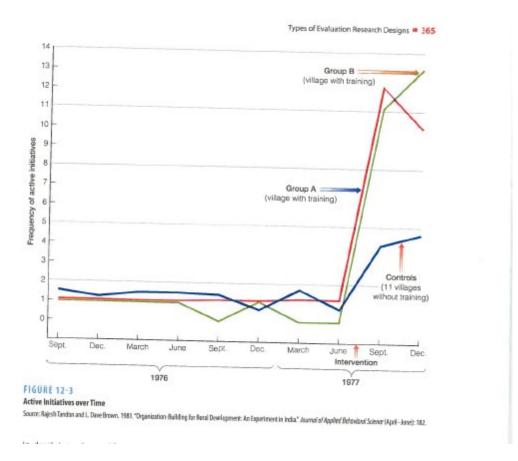
Quasi-experimental designs. Not a pure experiment, but there is something in the nature of it that you can make it 'like' an experiment.

Time series. Return to the idea of 'before' and 'after' and the contrast to 'with' and 'without'.

Add in the idea of a 'nonequivalent' control group. This is a control that is not part of the study. You try to make it 'similar' to the treated population. It is not created as a random sample. It is deliberately selected to be like your treatment sample.

Multiple time series designs. Use more than one set of time series data and contrast the patterns seen in the different data sets. There should be something comparable that makes contrasting the patterns informative.

Figure 12-3.



Note how hard it is to avoid 'contagion'.

Qualitative evaluation. Sometimes talking to people in depth gives you insight into things you would not get otherwise. The narrative explains things and how they connect.

Quantitative and qualitative often connect and complement each other. You find a pattern in the data from the quantitative side and you interpret it through a qualitative discussion. Problems encountered in evaluation research.

Logistical problems.

- Nobody has a population list from which to sample.
- People who were on the list moved away or died.
- People refuse to cooperate.
- You can't get permission to run the survey from local authorities.
- Your starting sample size was fine but by the time you get to the evaluation you have too few.
- People don't want to be control, they want to be treatment.
- Up front, you are not sure where the project will be implemented.
  - Up front, you are not sure what is the nature of the project to be implemented.

At a basic level, people don't like getting evaluated. It is not necessarily in their interest.

- Authorities may send all the lowest performers your way to undermine your research / for their own reasons (relatives).
- Authorities may send all the highest performers your way to influence your findings / for their own reasons (graduation).

Uses of evaluation findings.

Clearly, to identify success and learn.

But also keep in mind, people have agendas.

The findings will influence what is expanded, reduced, terminated.

Officials, NGO workers, all kinds of people have agendas that are going to be influenced by the findings / have reasons to embrace, selectively interpret, ignore, undermine, sabotage.

One other area to consider is Social Indicators Research.

Monitoring aggregate statistics that are reported at the population level. Birth rates, death rates, total fertility rates, maternal mortality rates.....

Increasing role of computer simulation. Can start building models with larger data sets and simulate interventions and outcomes. Appeal to large quantitative data and do *ex ante* simulation to predict impacts.

Ex ante impact evaluation as a larger idea; survey people who know something about a topic to see what they think will have the biggest impact. Can use this to prioritize and allocate funding.

Ethical issues of Impact Evaluation

The treatment may be controversial.

Omission of treatment to control population is problematic.

There may be pressure on 'treatment' sample members.

They may not have an opt out option if the treatment is at a community level (think of worms and school selection).

Biased impact evaluations may fit into somebody's agenda