



Evaluating the nutritional impact of agricultural programmes: why and how?

Jef Leroy

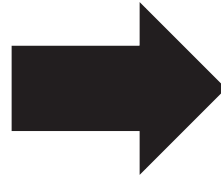
Research Fellow, IFPRI

This presentation

- Why evaluate?
- How to evaluate?

Why?

A short story...



A short story... (cont'd)



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A short story... (cont'd)



A short story... (cont'd)



- Did you get what you paid for?
- Did your uncle get what he paid for?
- What would you do differently the next you have the workman over in your house?
- Should the neighbors use the same workman?
- What recommendations do you have for the neighbors who want a new shower?

Why evaluate?


Three general reasons to evaluate:

1. Establish whether the program or intervention works;
2. Understand how and why the program works really well, not so well, not at all;
3. Generate useful evidence

Why evaluate?

3. Generate useful evidence:

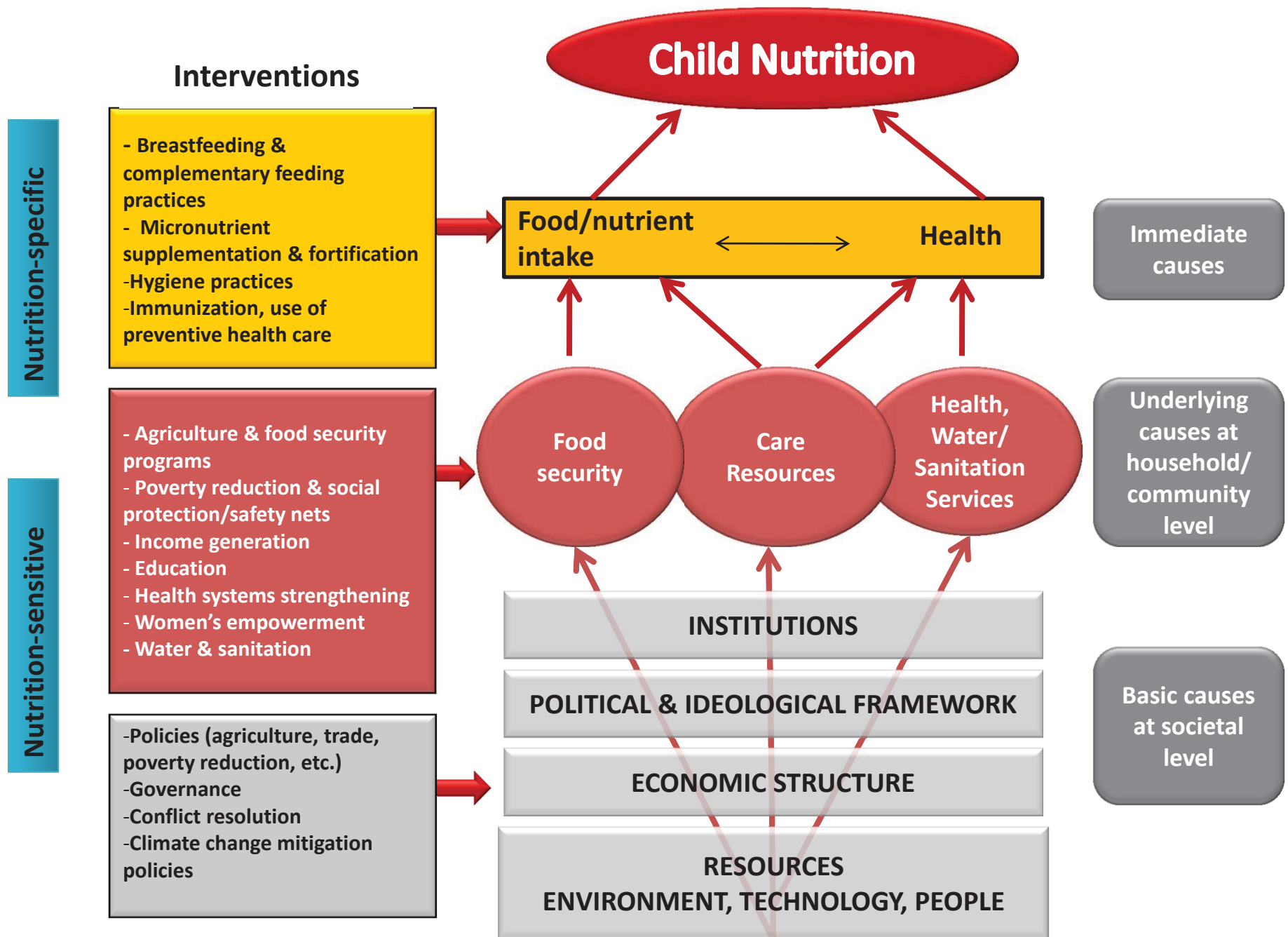
- For continued funding;
- For scaling up;
- For implementation in a different context.



The image shows a screenshot of a Google search results page. The search bar contains the text "Oportunidades Mexico". Below the search bar, the word "Recherche" is displayed in red, followed by the text "Environ 60 000 000 résultats (0,35 secondes)". A red circle highlights the number "60 000 000". On the left side, there is a vertical menu with the following items: "Tout", "Images", "Vidéos", "Actualités", and "Plus". On the right side, there are two search results. The first result is titled "SEDESOL - Oportunidades, página principal" and includes the URL "www.oportunidades.gob.mx/". The second result is titled "Oportunidades - Wikipedia, the free encyclopedia" and includes the URL "en.wikipedia.org/wiki/Oportunidades".

Why evaluate the nutritional impact of agricultural programmes?

- Agricultural programs have a great potential to improve nutrition



Why evaluate the nutritional impact of agricultural programmes?

- Agricultural programs have a great potential to improve nutrition
- Multiple hypothesized pathways of impact:
 - (1) food production for own consumption;
 - (2) increased income from sale of agricultural commodities;
 - (3) women's empowerment;
 - (4) lower food prices resulting from increases in food supply; and
 - (5) macroeconomic effects of agricultural growth.

Why evaluate the nutritional impact of agricultural programmes?

- Great potential,
but very few rigorous impact evaluations!
- We don't know:
 - How much does or can agriculture contribute to improved nutrition?
 - How does agriculture contribute, i.e. what are the exact pathways of impact?

Why evaluate the nutritional impact of agricultural programmes?

In conclusion

Rigorous evaluations of agriculture programs are urgently needed to understand:

- The real potential of agriculture to improve nutrition;
- The mechanisms by which this impact is achieved;
- The contextual factors that may enhance or inhibit this impact.



How?

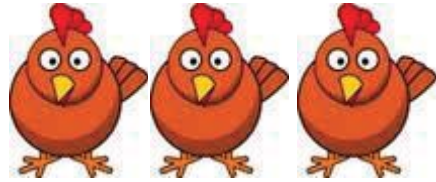
How?

Some guiding principles:

1. Valid comparison/control group
2. Follow study groups over time
3. Choosing the right indicators
4. Time to and timing of follow up
5. Documenting the pathways
6. Operations research
7. Work with experts

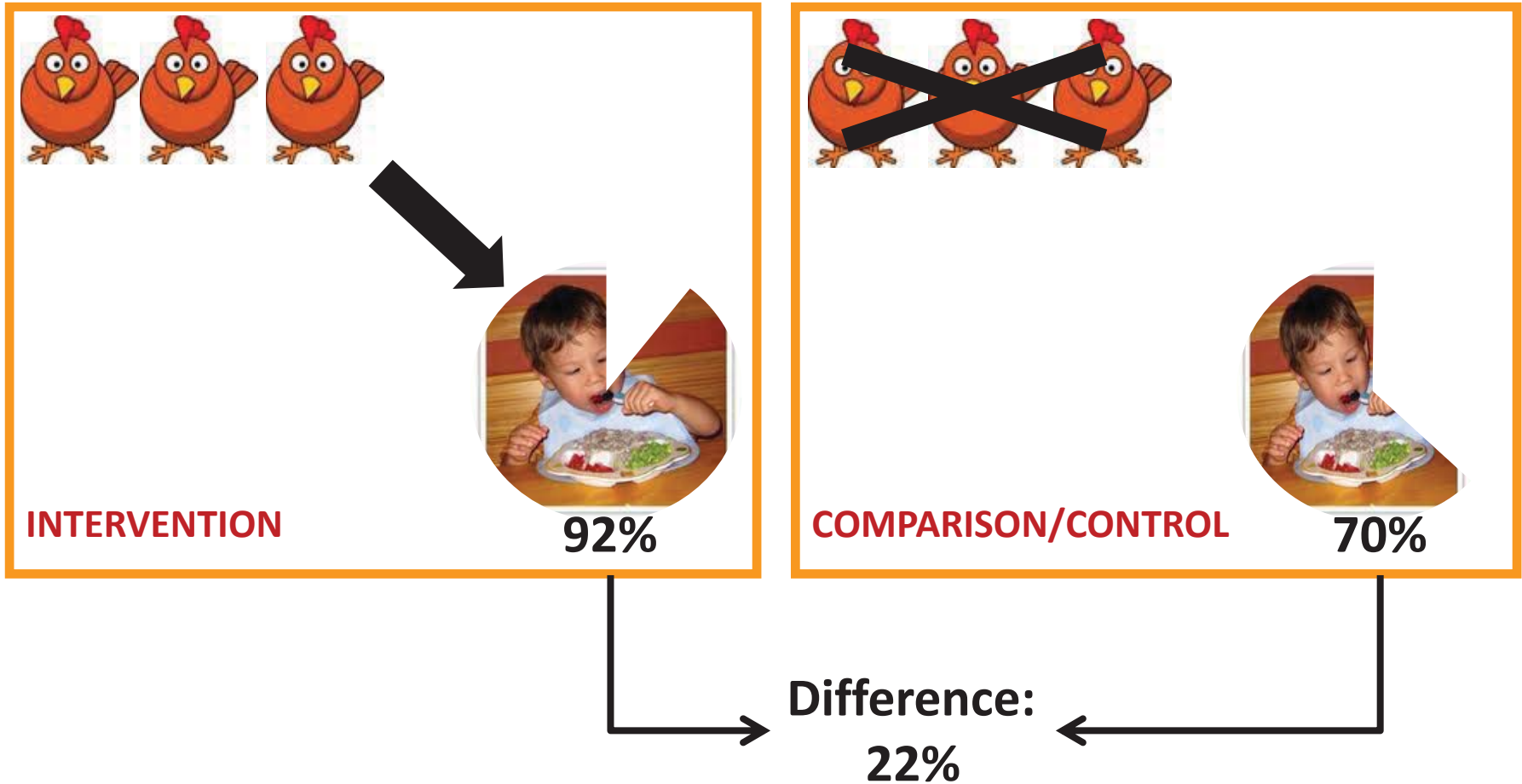
How?

1. Valid comparison/control group



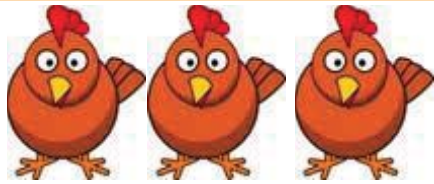
How?

1. Valid comparison/control group



How?

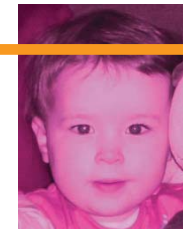
1. Valid comparison/control group



INTERVENTION



COMPARISON/CONTROL



How?

1. Valid comparison/control group



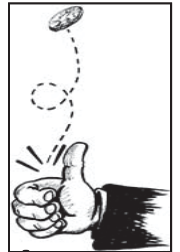
A valid comparison or control group (also called “counterfactual”) should be **IDENTICAL** to the intervention group, except for not receiving the intervention

How?

1. Valid comparison/control group

In summary:

- Evaluations require a valid comparison or control group
- The “gold standard” is to randomly assign individuals, households or communities to the intervention or control
- BUT: A randomized (or experimental) design is very often not possible for practical or political reasons!



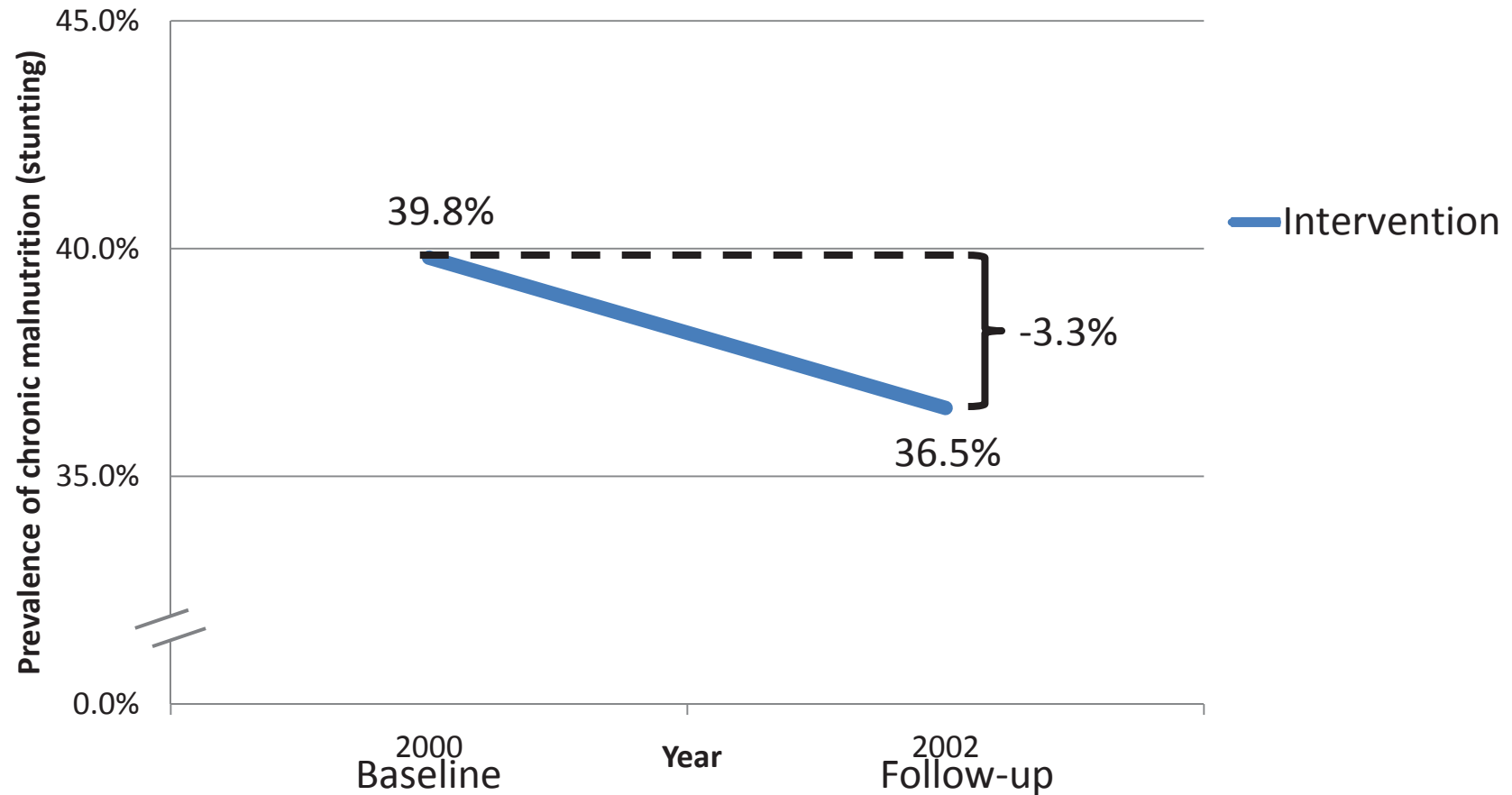
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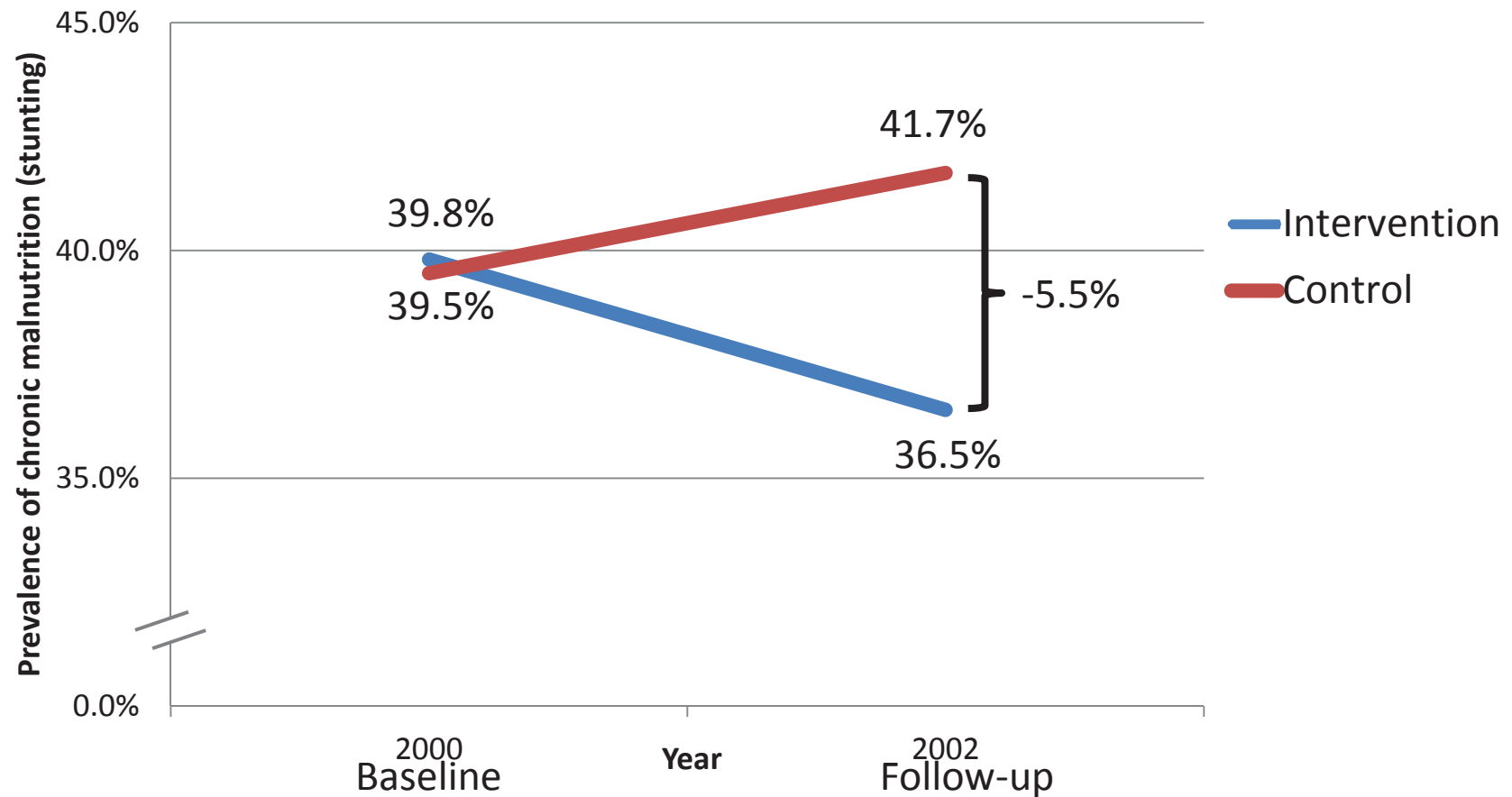
How?

2. Follow study groups over time



How?

2. Follow study groups over time



How?

2. Follow study groups over time

In summary:

- It is important to follow both groups over time;
- Following the control over time provides information about changes unrelated to the program that nevertheless may affect the outcome of interest.

How?

Some guiding principles:

1. Valid comparison/control group
2. Follow study groups over time
- 3. Choosing the right indicators**
4. Time to and timing of follow up
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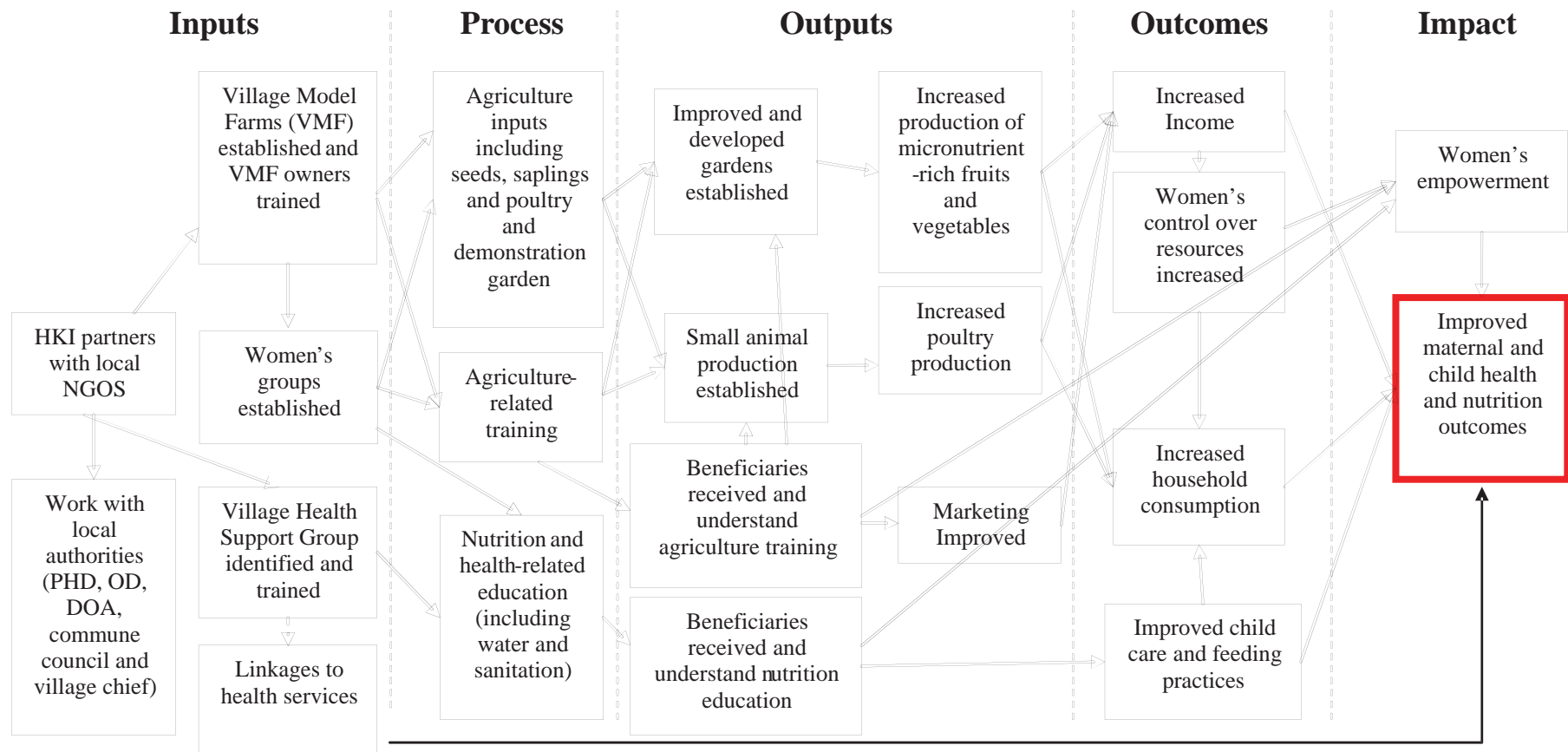
How?

3. Choosing the right indicators

- Measure and evaluate what the program is intended to change:
 - Short story, what would you measure?
 - Workman came on time every morning?
 - Or
 - Do I have a shower in working condition?
 - Presentation Charlotte Dufour:
 - Difference between food security and child malnutrition
 - Presentation Richard Anson:
 - results focused approach

How?

3. Choosing the right indicators



How?

3. Choosing the right indicators

In summary:

- Measure and evaluate what the program is intended to change!
- Measure and evaluate what the program is intended to change!

How?

Some guiding principles:

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How?

4. Time to and timing of follow-up

- “1,000 days”, between a woman’s pregnancy and her child’s 2nd birthday
 - Critical for the child’s health, nutrition and development;
 - The right nutrition during this window can have a profound impact on a child’s ability to grow, learn, and rise out of poverty.
 - The largest impact will be found in children who were exposed to the intervention during the entire 1,000 day period.
- Seasonality: to avoid confounding due to seasonality, baseline and follow-up should be ideally conducted at the same time of year

How?

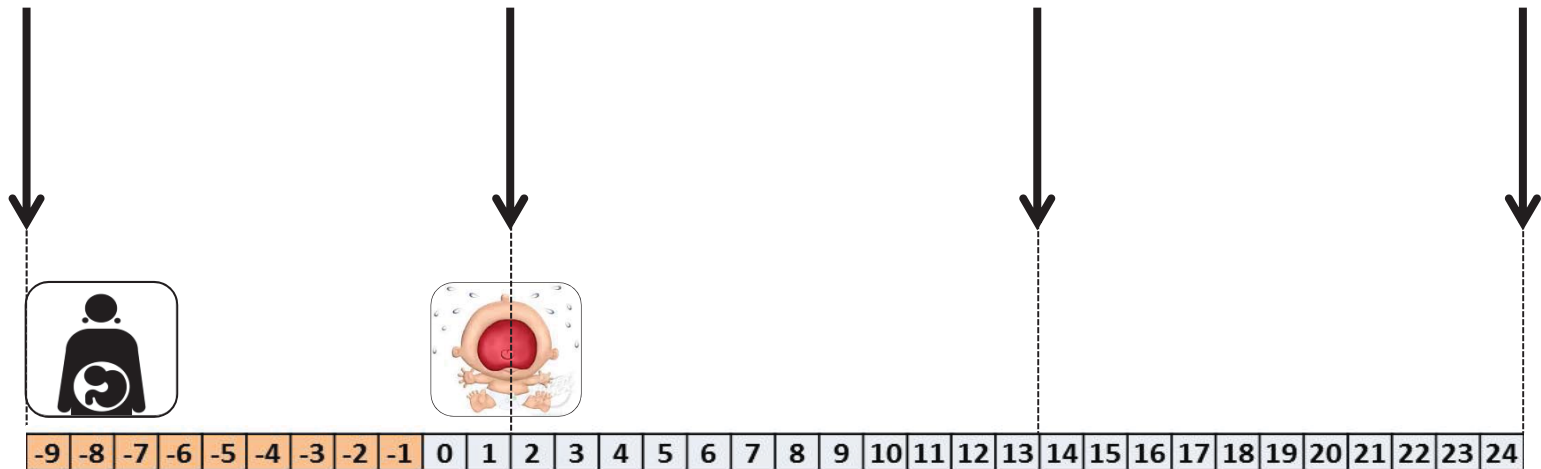
4. Time to and timing of follow-up

Feb 2012
Program start

Jan 2013

Jan 2014

Nov 2014



How?

4. Time to and timing of follow-up

In summary:

Allow enough time for program to have an effect before measuring impact

How?

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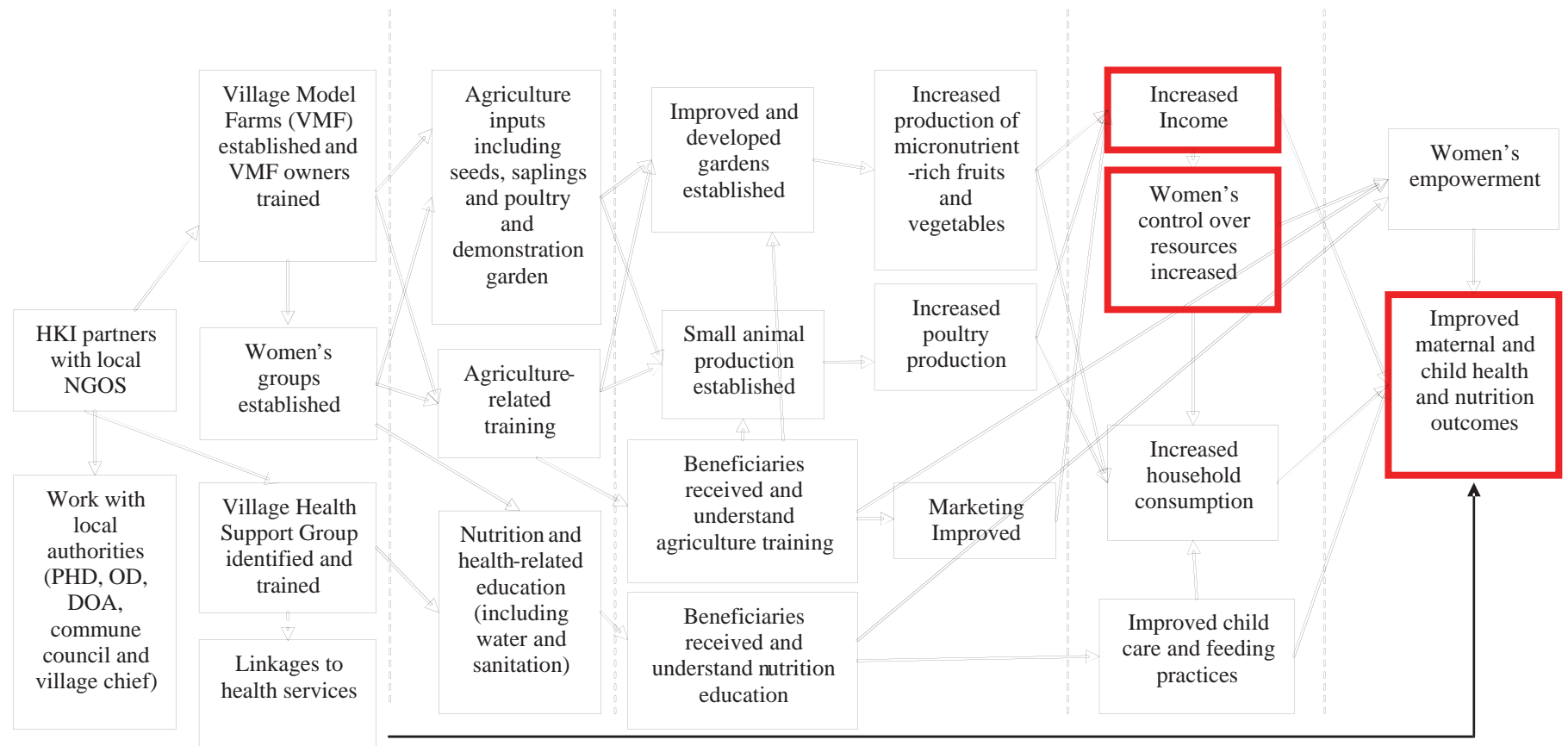
How?

5. Documenting the pathways

- Pathways tell us how the impacts are achieved
- Why important?
 - Identify bottlenecks;
 - Keep and strengthen components that work;
 - Drop components that do not or cannot work;
 - Identify what is needed to scale up and to adapt the program for implementation in other settings.

How?

5. Documenting the pathways



How?

5. Documenting the pathways

In summary

- Open the “black box”;
- Measure the intermediary outcomes, linking the program to the outcomes of interest.

How?

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How?

6. Operations research

- What?

Assess the quality of implementation and of service delivery

- Why?

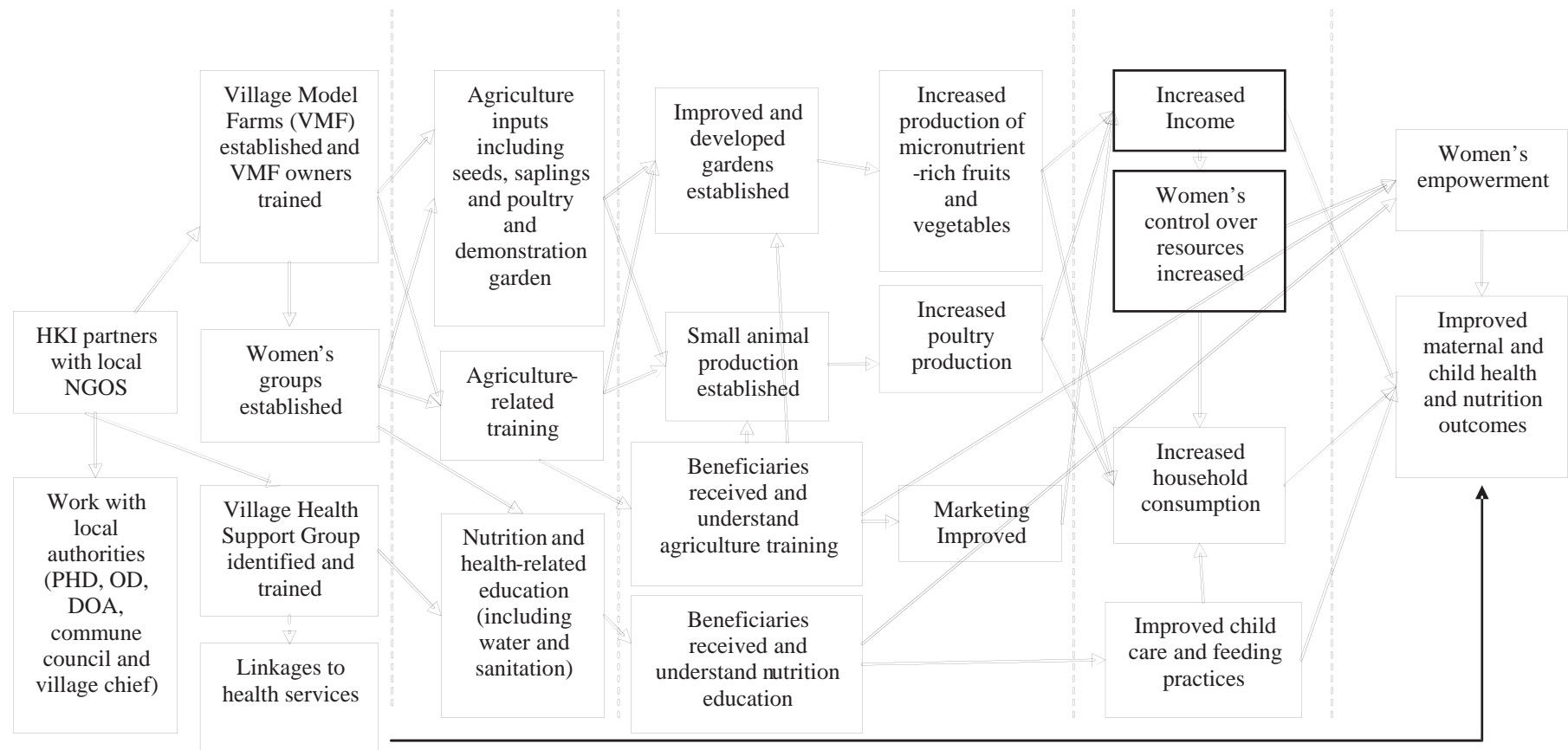
Identify operational and utilization constraints.

- How?

- The basis is the detailed program theory framework underlying the program
- The key steps along the program theory pathway are evaluated with a focus on program operations and service delivery and utilization

How?

6. Operations research



How?

6. Operations research

In summary

It is important to conduct operations research to identify operational and utilization constraints.

How?

Some guiding principles:

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4. Time to and timing of follow up
5. Documenting the pathways
6. Operations research
7. **Work with experts**

How?

7. Work with experts

- Conducting evaluations that produce useful information is challenging :
 - They need to be well integrated, from inception, into program design and implementation;
 - Requires detailed planning and very close continued collaboration between program implementers and program evaluators;
 - Start well before program is launched.

How?

7. Work with experts

- Everybody should focus on what she is good at...
 - Program implementers implement programs
 - Program evaluators evaluate programs
- Get expert help to conduct your evaluation
- Use the wealth of evaluation knowledge and expertise:
 - More reading:
 - 3ie (www.3ieimpact.org/)
 - Measure Evaluation (www.cpc.unc.edu/measure)
 - Experts from academic and research institutions:
 - Universities
 - IFPRI (www.ifpri.org)

Conclusions

- Why?
What you count, counts!
- How?
 1. Use a valid comparison/control group
 2. Follow study groups over time
 3. Choose the right indicators
 4. Foresee enough time between baseline and follow- up
 5. Document the pathways
 6. Conduct operations research
 7. Work with experts

Obrigado pela sua atenção
Merci pour votre attention!
Thanks for your attention!

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