

# MONITORING AND EVALUATION of adaptation options



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# M&E in the NAP Process



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Guidelines of the NAP process recommend that Parties should undertake a regular review, at intervals to

- (a) Address inefficiencies, incorporating the results of new assessments and emerging science and reflect lessons learned from adaptation efforts into their development planning processes
- (b) Monitor and review the efforts undertaken, and provide information in their national communications and other reporting processes on the progress made and the effectiveness of the national adaptation plan process.

# M&E in the NAP Technical Guidelines

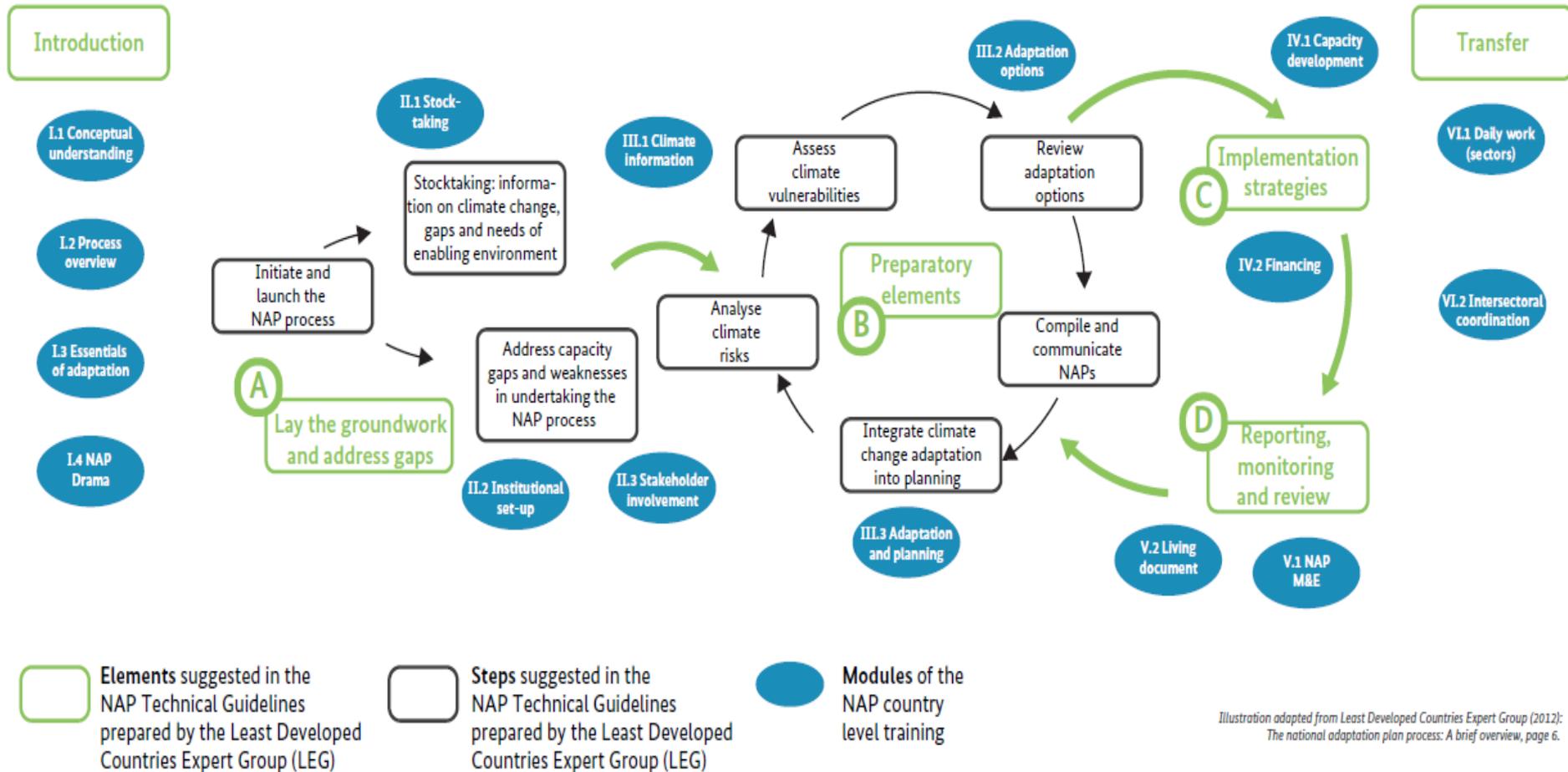
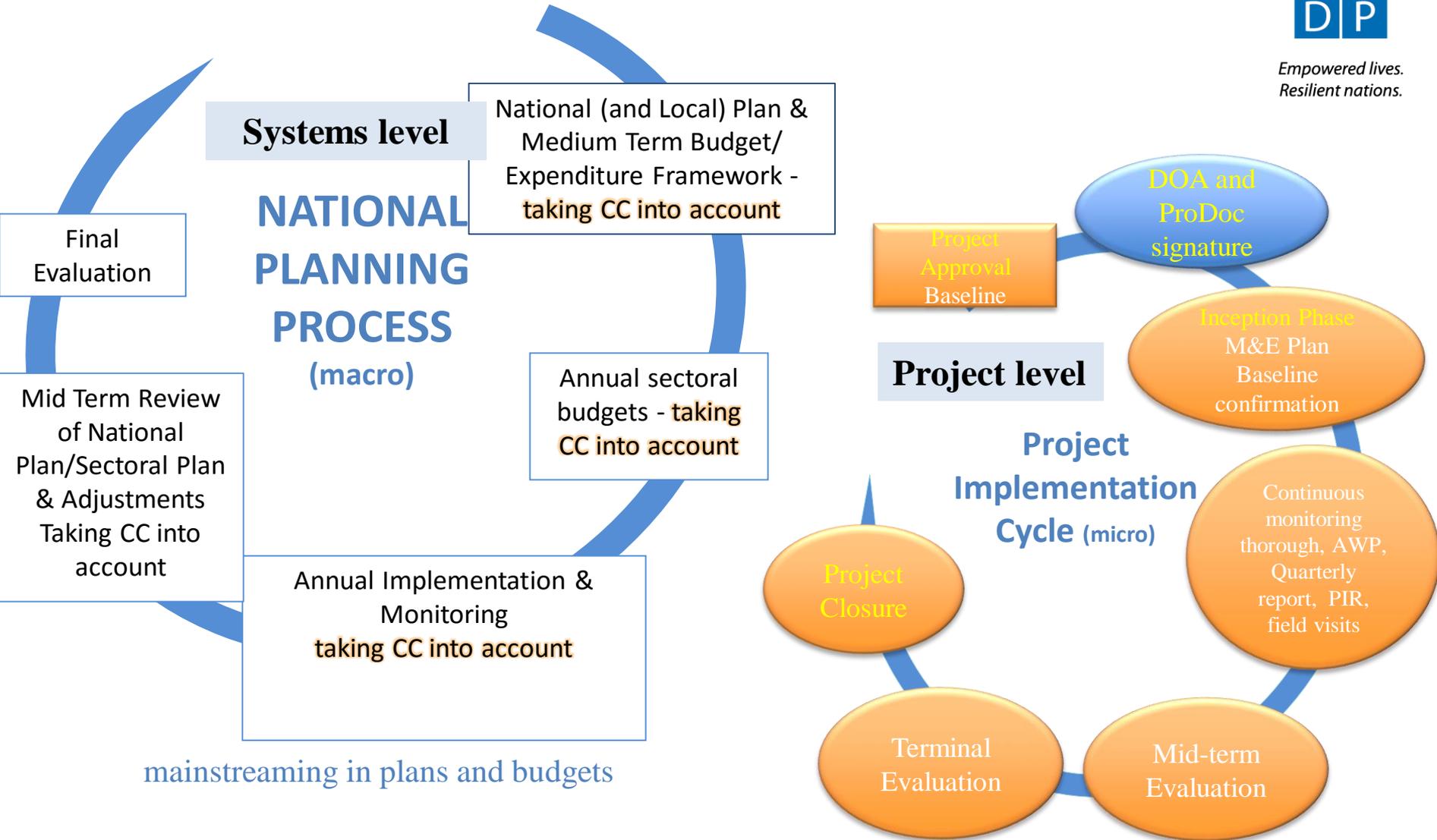


Illustration adapted from Least Developed Countries Expert Group (2012):  
The national adaptation plan process: A brief overview, page 6.

# The different levels of application of M&E systems their iterative, continuous nature & their purpose



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# Why do we care about a stronger M&E?

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- Anecdotes or stories from a few successful individuals are equally important
  - But planners and policy makers do care about the impact from a \$1 investment
    - “Should we invest our resources on strengthening climate resilient agriculture? Or on malaria? Or on education?”
- Anecdotes don't help much in determining the best value for money

# An Example from Cambodia: Rainfall patterns and agricultural activities - **Types of assessments**

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## 1. **Process assessments**

*e.g. "How is the early warning information disseminated to farmers and how are they used?" "Do farmers respond to the warning of MoWRAM? If no, why?"*

### Rationale

By looking at the process, we gain better understanding of the process and identify areas of improvement

## 2. **Impact assessments**

*e.g. "How is the dissemination of the early warning information translating into the behavioral change (planting timing, patterns, etc) and into better harvest?" "Do farmers actually increase their harvests by following the warning?"*

# Case 1

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A project team was working in village A, B and C

Using the project fund of \$1 million, they provided adaptation investments through a “one-village” approach. Through this approach, they provided

- a) Access to resilient rice variety;
- b) Rehabilitation of community ponds; and
- c) Resilient extension services;

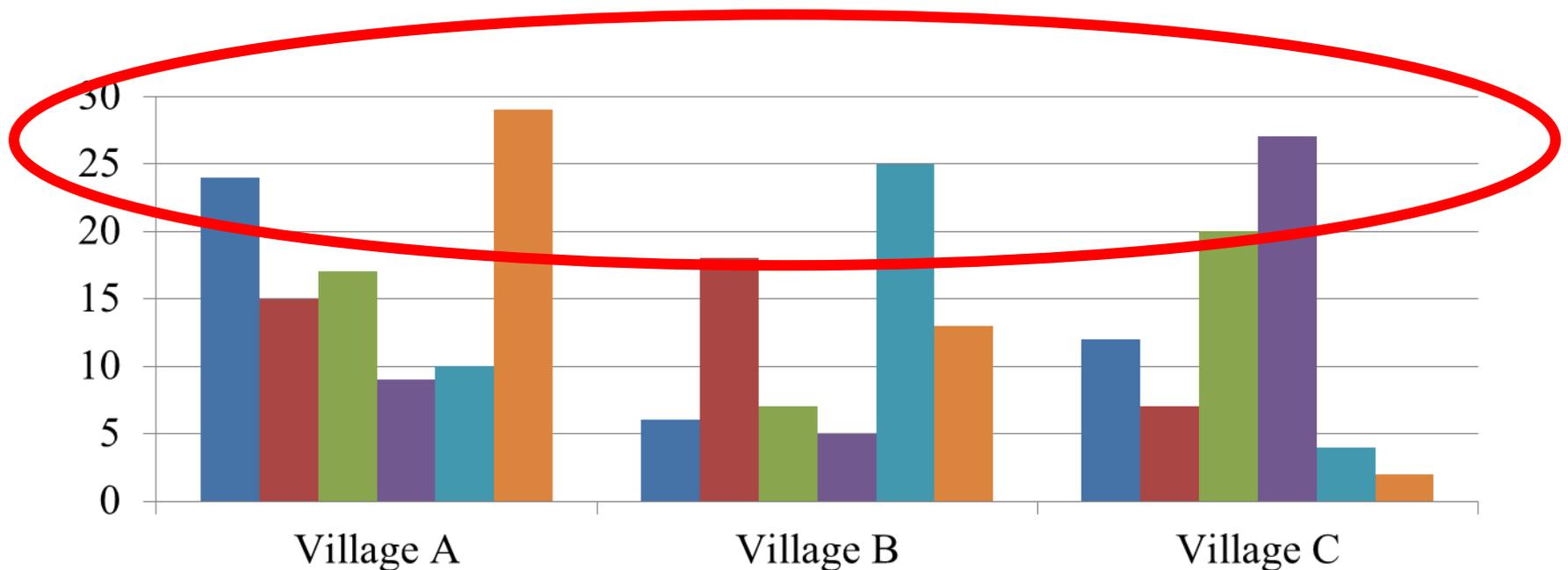
At the end of the project, the project team administered a terminal evaluation survey and the Project Manager decided to select those beneficiaries who performed particularly well in the project, and asked the following questions: *How much did your harvest increase compared with 4 years ago?* On average, beneficiaries said the difference in yields before and after the project was 20kg/ha, so the project team concluded that 20kg/ha was the impact of the project.

Later, an M&E expert said this was not a good idea. Why?

# Case 1 – Issues with selective sampling

What the project team is capturing is ...

There is a serious risk that we are **overestimating** the impact if the project talks only with “good beneficiaries”





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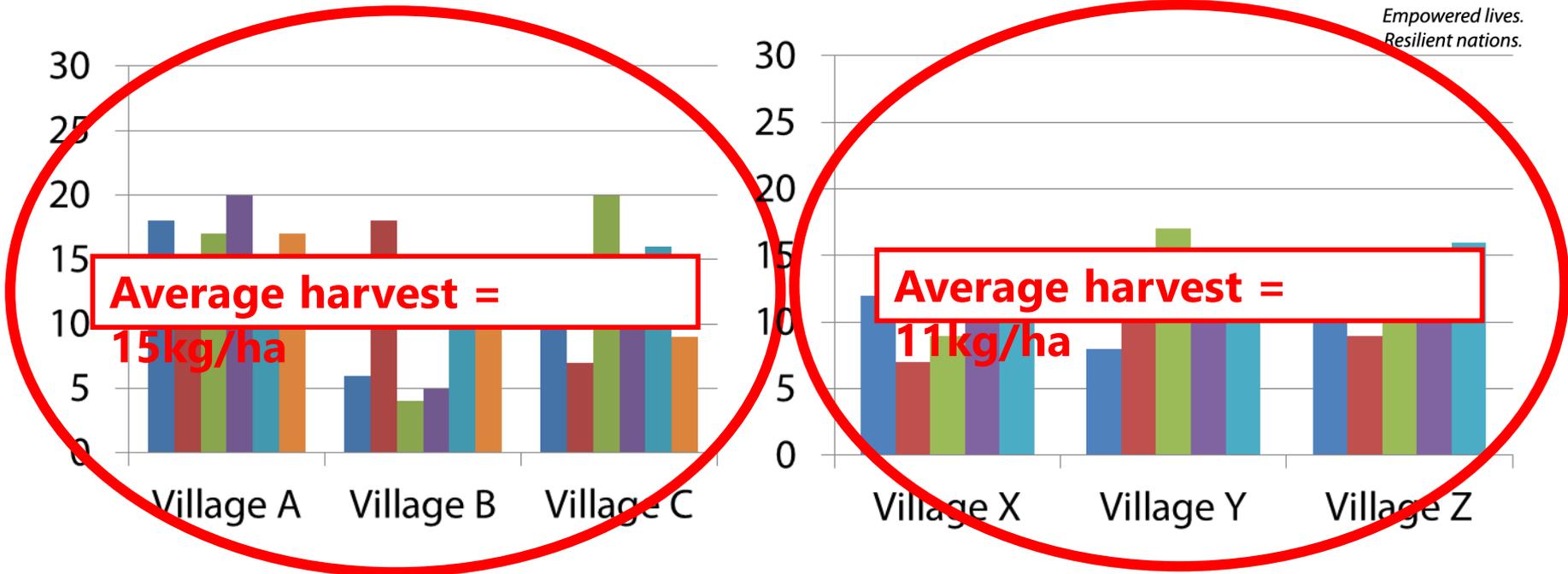
## Case 2

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Based on the feedback from the M&E expert, the project team decided to speak with everyone in the target villages A, B and C and ask the same question: *How much did your harvest increase compared with 4 years ago?* After taking into account everybody's performance this time, the average increase was 15kg/ha. So the project team proudly concluded that the impact of the project was 15kg/ha.

But later, the M&E expert told the team that the approach was better than the last time but still not good enough. Why?

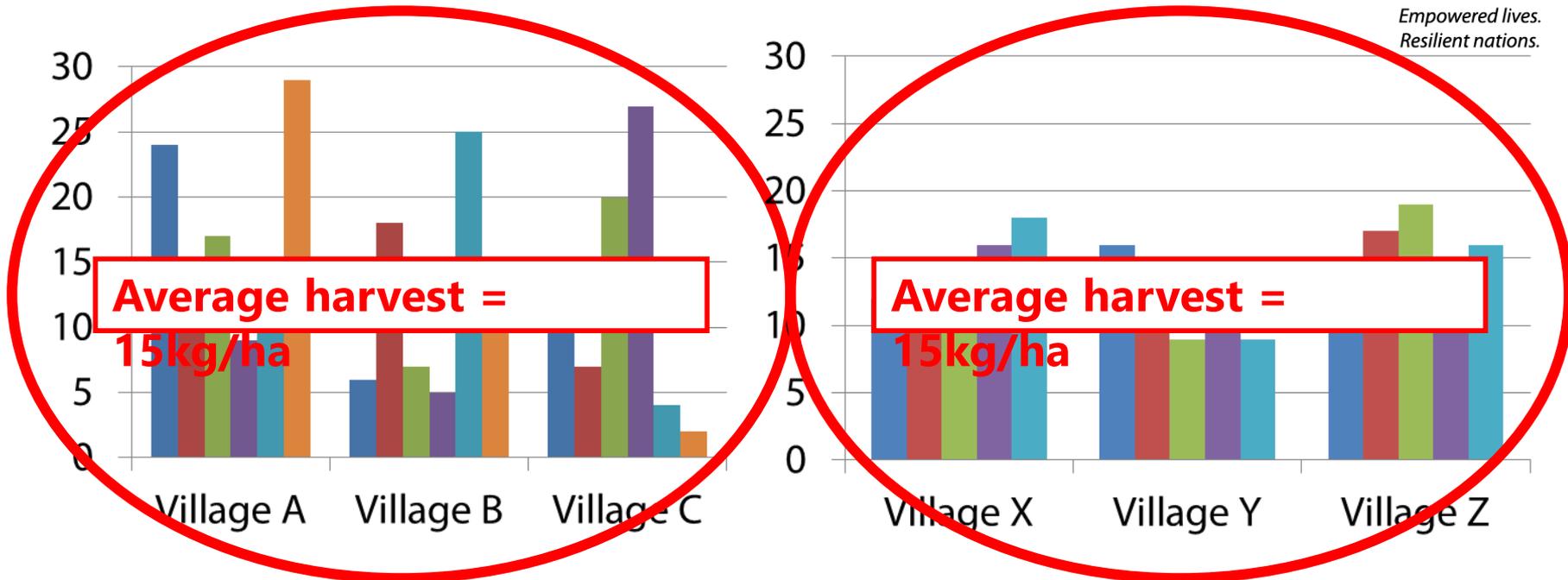
# Case 2 – Issues with the lack of a comparison



Imagine there are Villages X, Y and Z that are **not** part of the project. And in fact, the change in the harvest in the last 4 years has been 11kg/ha. (15-11 = 4 Kg/ha)

Then, there is a possibility that the project team is **underestimating** the impact of the project

# Case 2 – Issues with the lack of a comparison



Imagine another situation where the average change in the harvest in Villages X, Y and Z in the last 4 years is in fact 15kg/ha as well.

There is a possibility that the assessment concludes that the project actually had no impact, once again underestimating it.



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## Case 2– Issues with the lack of a comparison

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- Ultimately, we don't know what has been happening in non-target villages
- There may have been unknown factors that affect the harvest in all villages, such as a large-scale government irrigation program or reduction in fertilizer prices that increase the productivity of farming, irrespective of the project

## Case 3

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Based on the lessons from the previous cases, the team understood that they needed good comparison villages to determine the impact of the project. So at the time of the final evaluation, the team selected Villages X, Y and Z (non-target villages), which share similar socioeconomic/environmental characteristics with project villages A, B and C. The survey result showed the following:

	Average increase in harvest
A, B and C	20kg/ha
X, Y and Z	5kg/ha
<b>Difference</b>	<b>15kg/ha</b>

For some reasons, non-target villages also increased their harvest by 5kg/ha. But our project villages saw an increase of 20kg/ha. So now, the project team can determine the impact of the project...?

## Case 3 – Issues with unknown biases in selection of villages

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- Why have villages A, B and C been selected as a project target in the first place?
  - Because they are located closer to the main road and hence easier logistical access for the project team?
  - Because the government partners have a good working relationship with villages A, B and C?
  - Because village A, B and C are more disadvantaged?

These are all unknown factors, but potentially impact the ultimate result we are interested in = harvest from paddy fields

- Proximity to road → More economic advantage for marketing and accessing production inputs → Higher income → Higher productivity
- Good relationship with the government → Better knowledge or easier access to extension services
- Disadvantaged → Lower productivity



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The ultimate question is:

*"What would have happened to villages A, B and C in the absence of the adaptive measures/interventions?"*

## **...Randomized Control Assessments**

From an ex-post assessment to evidence-based advocacy

# Key steps for evidence-based advocacy

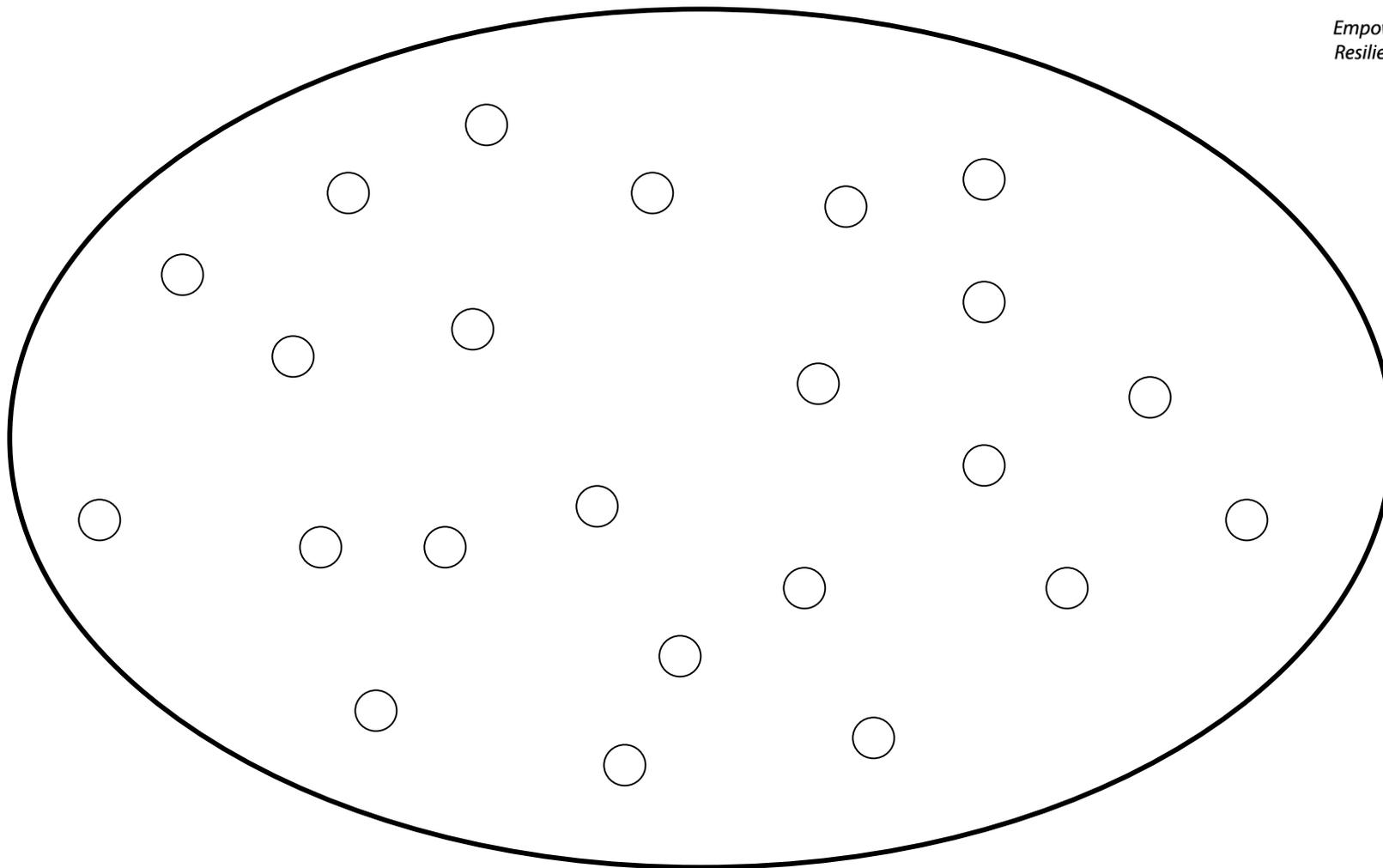
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1. A strong M&E framework begins **before** the project starts, not when the project is ending → NAP presents a great opportunity
2. Identify a list of **eligible** villages (not the final target villages)
3. **Randomly** select 50% from the eligible list
4. But administer surveys for **all eligible villages** at the regular interval

# Pool of **eligible** villages



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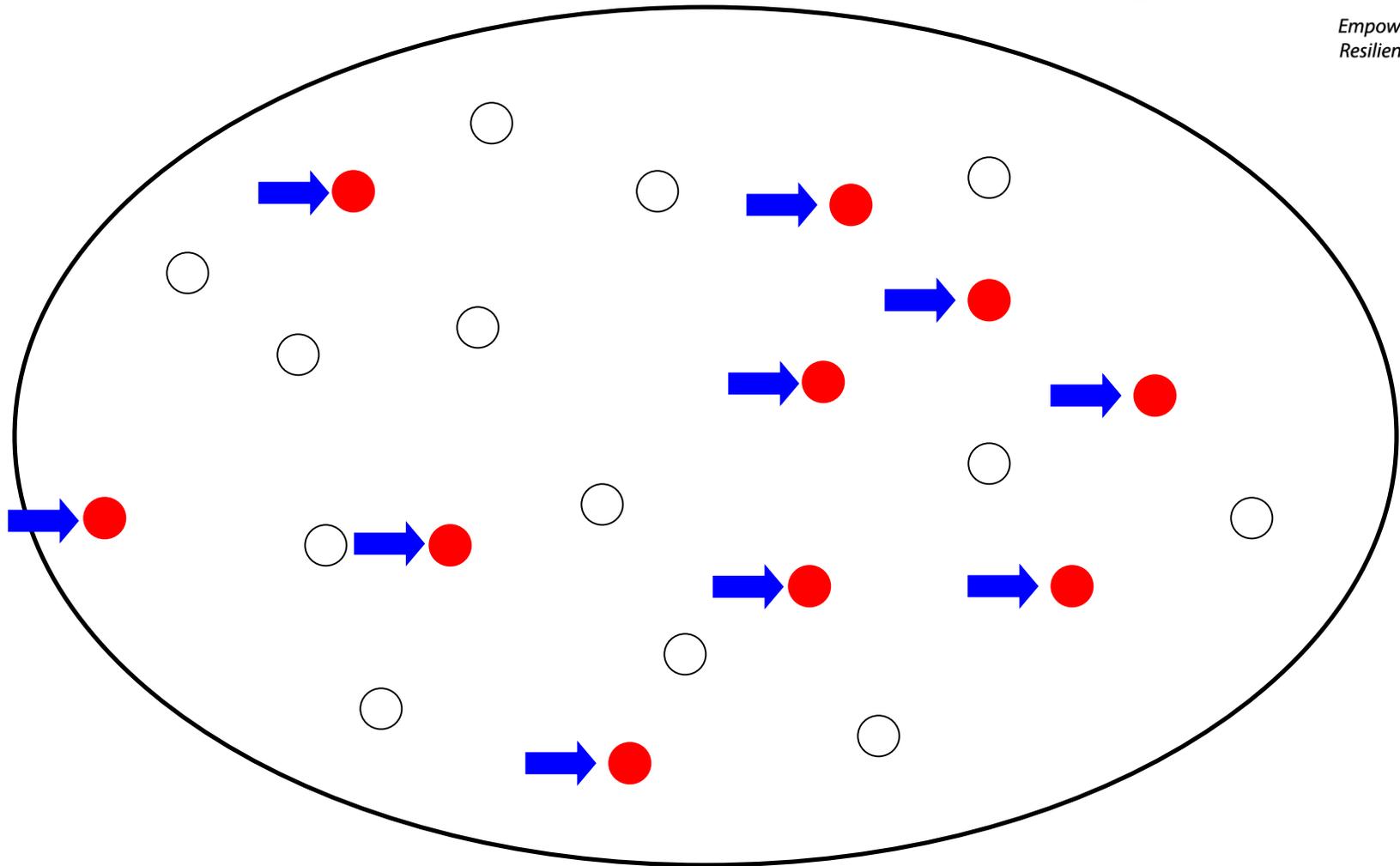


Pool of **eligible** villages

- Targeted villages
- Non-targeted



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# Take-home messages

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- **Clarify purpose**: be clear about what M&E is done for (purpose), how its results should be used and by whom
- Define **methodologies** and bring them (e.g. result chain, randomized assessments) in line with purpose and define indicators, baselines and data to be collected
- Be **country specific**. There is no one-size-fits-all solution
- Designate **clear responsibilities** for collecting data, analysis and reporting\*
- **Limit complexity** of your indicator system: focus on those areas which you consider most relevant
- **Integrate** M&E process into existing frameworks
- Set realistic **timelines** and **resources** for the development of M&E system.
- Ensure M&E results are reflected at **policy** and decision-making level (iteratively).

# Take-home messages

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*“It is impossible to fully understand and predict how complex social - ecological systems will change over time. Knowledge gaps will always be found during the (...) process and many assumptions must be made (...). **Lack of full knowledge, or over-bold assumptions, should not become reasons to do nothing**”.*

*“Even in the best-studied and –understood regions, knowledge will always be incomplete and will always need to evolve as the system changes over time. **In fact, knowledge gaps and assumptions should be viewed as reasons to act**”.*

(Ref: SCIENTIFIC AND TECHNICAL ADVISORY PANEL – STAP. DESIGNING PROJECTS IN A RAPIDLY CHANGING WORLD Guidelines for embedding resilience, adaptation and transformation into sustainable development projects)



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THANK YOU

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